



Family interdependencies

Partnerships, parenthood and well-being in context

Sean de Hoon

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Family interdependencies

Partnerships, parenthood and well-being in context

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Partnerrelaties, ouderschap en welbevinden in context

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Dankwoord

'*It was the best of times, it was the worst of times*' zo begint A Tale of Two Cities, de beroemde roman van Charles Dickens. Die zin beschrijft perfect mijn gevoel als ik terugdenk aan de vier jaar waarin ik promoveerde. Ik heb genoten van de vrijheid die ik had bij het schrijven van mijn proefschrift, maar ik ben mezelf ook talloze keren tegengekomen. Ook in de familiesfeer was het een periode van hoge hoogten en enkele diepe dalen. Tel daar de talloze projecten bij op die ik zowel in mijn werk als daarbuiten heb gedaan en het is een wonder dat het af is. Dat ik dit proefschrift nu kan gaan verdedigen heb ik niet alleen aan mijzelf te danken, maar zeker ook aan de geweldige mensen die ik om mij heen had.

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Contents

List of Figures

List of Tables

Chapter 1.	The necessity of studying family interdependencies	13
1.1	Family interdependencies and social inequality	14
1.2	Understanding how family interdependencies influence well-being	16
1.3	The life course perspective	16
1.4	Research objectives	19
1.5	Empirical studies	19
Chapter 2.	The male marriage wage premium in cross-national perspective	25
2.1	Introduction	26
2.2	Country context and the male marriage wage premium	27
2.3	Method	30
2.4	Results	36
2.5	Discussion and conclusion	41
Chapter 3.	The marriage-health nexus: examining selection and causation in and across 30 countries	45
3.1	Introduction	46
3.2	Background	47
3.3	Present study	50
3.4	Data	50
3.5	Results	52
3.6	Conclusion	56
Chapter 4.	The influence of motherhood on income: do partner characteristics and parity matter?	59
4.1	Introduction	60
4.2	The Dutch context	61
4.3	Partner characteristics	62
4.4	Parity	63
4.5	Method	64
4.6	Results	68
4.7	Discussion	71
Chapter 5.	Examining the relation between part-time work and happiness in dual-earner couples from a life course perspective	75
5.1	Introduction	76
5.2	Theoretical framework	77
5.3	The present study	82
5.4	Data and method	83

5.5	Results	89
5.6	Conclusions	94
Chapter 6.	The impact of family interdependencies on different indicators of well-being and the role of country context	99
6.1	Family interdependencies and well-being from a life course perspective	100
6.2	Summary of the main findings	101
6.3	Substantive contributions	103
6.4	Methodological contributions	106
6.5	Limitations and avenues for future research	107
6.6	Policy suggestions to reduce inequality	109
	Summary	111
	Samenvatting (Summary in Dutch)	123
	References	135

List of Figures

Figure 1.1. Conceptual model.	20
Figure 2.1a. Crude marriage premium across countries.	37
Figure 2.1b. Marriage premium controlled for human capital variables.	37
Figure 3.1. Random and fixed effects of marriage across countries.	54
Figure 3.2. Random and fixed effects of widowhood across countries.	55
Figure 3.3. Random and fixed effects of divorce/separation across countries.	56
Figure 4.1. The separate and combined effect of the birth of a first, second and third child on a woman's earnings.	69

List of Tables

Table 2.1.	Pooled descriptive statistics for individual-level variables across 29 countries.	33
Table 2.2.	Descriptive statistics of country-level variables across 29 countries.	35
Table 2.3.	Multilevel regression results analyzing men's hourly wages across 29 countries.	38
Table 2.4.	Multilevel regression models including cross-level interactions with country conditions.	40
Table 3.1.	Descriptive statistics for the analytical sample.	51
Table 3.2.	Random and fixed effects models estimating the association between marital status and health.	53
Table 4.1.	Descriptive statistics for the variables used in the analyses, NKPS wave 1 – 3.	67
Table 4.2.	Fixed effects regressions predicting changes in women's monthly earnings (logged).	70
Table 5.1.	Descriptive statistics for the variables used in the analyses.	87
Table 5.2.	Hypothesized happiness advantages and disadvantages and the support we find for them.	89
Table 5.3.	Multilevel regression models predicting women's happiness among women with and without children.	92
Table 5.4.	Multilevel regression models predicting men's happiness among men with and without children.	93



CHAPTER 1

The necessity of studying family interdependencies

1.1 Family interdependencies and social inequality

The study of social inequality is one of the classic pursuits of sociological research (Engbersen & De Haan, 2006) and reducing social inequality is an important policy objective at the national level in the Netherlands (Kremer, Bovens, Schrijvers, & Went, 2014) and internationally for the European Commission (European Commission, 2010), as well as the United Nations (ICSU & ISSC, 2015). Despite efforts, however, social inequality has mainly risen during the last decades.

Between 1990 and 2012, income inequality increased in half of the countries in the world and for 70.6% of the world's population (United Nations, 2013). In the United States for example, 58% of the total income growth between 1976 and 2007 was captured by the top 1% of earners (Atkinson, Piketty, & Saez, 2011). Income inequalities are in turn linked to health inequalities: across 12 European countries, low income couples were 1,5 times more likely to report poorer self-assessed health than high income couples (Mackenbach et al., 2008). Gender inequalities meanwhile cut across dimensions of health and income. Although gender differences in wages have steadily decreased over time, fulltime working women across OECD countries continue to earn 16% lower wages on average than men (OECD, 2012). Furthermore, while sex differences in longevity favor women, evidence from the US suggests that women tend to have worse self-rated health than men (Case & Paxson, 2005). The question facing both social scientists and policy makers is how these inequalities can be explained.

Traditional explanations of social inequality do not suffice (Huisjes, Van Kolschooten, & Van Maanen, 2011). These traditional explanations of social inequality revolve around differences in cultural and human capital. A human capital based explanation would suggest, for instance, that inequalities in income are the result of differences in the average level of education. Given comparable average levels of education, women's income and their economic independence should resemble men's. Yet, while women are rapidly catching up to men in terms of their level of education, their income and their economic independence continue to lag behind men's (Merens & van den Brakel, 2014). In order to explain persistent social inequalities (Huisjes et al., 2011), scholars have stressed the need to look beyond individual characteristics and take into account interdependencies in families. Family interdependencies are the linkages that people have to their parents, their siblings, and, in the nuclear family, to a partner and to their children. In contemporary society, individual life chances and well-being are not only structured by cultural and human capital, but increasingly also by partner relationships, parenthood, care obligations, and intergenerational transfers between family members (Hagestad & Dykstra, 2016). Returning to the example discussed above, the reasons for women's enduring lower income may be sought in the division of tasks in the household and the care responsibilities women have for family members, especially their children.

In this dissertation, I focus on the structuring role of interdependencies in nuclear families stemming from partner relationships and parenthood. Understanding the role that these interdependencies play as drivers of differences in well-being, specifically in income and health, as well as between men and women, is valuable from both a societal and a scientific perspective.

In spite of the significance of these interdependencies, reviewers of the literature have noted that studies linking family to well-being often focus on one individual in a family network (e.g., Carr & Springer, 2010). For example, researchers have examined how the dual responsibilities of work and parenthood shape well-being, without attending to the role of a partner (for an exception see e.g., Booth & van Ours, 2009). Concentrating on family interdependencies that arise through partnerships¹ and parenthood, my study departs from, and contributes to, earlier research in an important way. I acknowledge that household members are reciprocally connected to each other. Decisions that are made and the repercussions that they have for family members are often based on shared rather than individual circumstances. This is especially the case when it comes to the division of tasks.

Partnerships and parenthood shape individual life chances and well-being in several influential ways. Firstly, entering into -, remaining in - and exiting different types of partnerships has consequences for individual well-being. Having a spouse, for instance, seems to be beneficial: married men earn higher wages and both married men and women have better health (Umberson, 1987; Waite, 1995). Living with a partner outside of marriage also appears to be propitious, although the benefits are not as large as those linked with marriage (Cohen, 2002; Mamun, 2012; Soons & Kalmijn, 2009). Losing a partner, through divorce, separation and widowhood, has a number of adverse consequences for adults as well as their children (Kitson & Morgan, 1990; Ross, Mirowski, & Goldstein, 1990). Secondly, partnerships and partnership history are closely related to people's pathways in parenthood and employment (Dykstra & Wagner, 2007; Keizer, Dykstra, & Jansen, 2008). These pathways interact with, and affect each other, over the course of people's lives. The majority of partnered people end up having one or more children together, thereby forming further family interdependencies. Furthermore, becoming a parent has highly gendered consequences for men's and women's involvement in paid labor (Keizer, Dykstra, & Poortman, 2010; Petersen, Penner, & Høgsnes, 2014). We know for instance that women are more likely to decrease their work hours in response to these increased time demands, which lowers their earnings compared to not only their partner, but also compared to childless women (Budig & England, 2001; Sigle-Rushton & Waldfogel, 2007). In contrast, men's earnings generally rise after the transition to fatherhood (Cooke, 2014). For women, combining a career with becoming a parent is likely to induce psychological strain, as they are confronted with dual responsibilities

¹ In the remainder of the text, the terms *partner relationships*, *partner relations*, and *partnerships* are used interchangeably.

at work and at home (Hochschild & Machung, 1989). Thus, aside from the influence that having a partner has on well-being, it may also affect other life domains including becoming a parent and employment, which are in turn linked to well-being.

1.2 Understanding how family interdependencies influence well-being: the importance of the country context

The way that family interdependencies stemming from partnerships and parenthood shape individual well-being likely differs across countries. There are extensive differences across countries in terms of the institutional and cultural setting in which this relation is embedded (Mayer, 2009; Moen, Elder, & Lüscher, 1995). Unfortunately however, the vast majority of studies approach the link between partnerships, parenthood and well-being from the perspective of a single country (for notable exceptions, see for instance: Budig, Misra, & Boeckmann, 2012; Huijts & Kraaykamp, 2011; Jakobsson & Kotsadam, 2013; Schoeni, 1995). As a result, the way that family interdependencies affect well-being has largely been viewed as if it were occurring in a “state-less social structure” (Mayer & Müller, 1986, p. 217). Not surprisingly, theories and mechanisms that scholars have proposed to explain how family interdependencies affect well-being generally lack a consideration of how they may be shaped by specific country contexts. My second contribution to the literature is therefore to take into account economic circumstances, cultural climate and policies in order to provide a better understanding of the relation between family interdependencies and well-being.

1.3 The life course perspective

My research on family interdependencies is driven by taking a life course perspective. This approach is especially well-suited to study the relation between family interdependencies and well-being, and the way that they are shaped by the country context (Hagestad & Dykstra, 2016; Silverstein & Giarrusso, 2011). The life course perspective emerged as an interdisciplinary research paradigm over the course of the 20th century. It represents a major shift in how scholars across a variety of disciplines, including sociology, psychology and demography, study people’s lives. In the past, the social context was essentially viewed as a surrounding through which people pass as their lives progress (Elder & Shanahan, 2006). In contrast, the life course perspective emphasizes the interplay that occurs between the social context and individuals, and the way that this interaction shapes their lives. The life course is said to consist of a series of transitions into - and out of social roles: for example the transition from being single to being married or the transition to becoming a parent (Van Wissen & Dykstra, 1999). Transitions are embedded in long-

term trajectories and over the course of these trajectories earlier experiences may affect what happens later in life (Dannefer, 2003). Two principles that are at the core of the life course paradigm are the interplay of human lives and historical times and the principle of linked lives (Elder, 1994).

1.3.1 Linked lives

The principle of linked, or *interdependent*, lives emphasizes the idea that as people move through life, they are affected by the people around them and they in turn affect the lives of those people (Elder, 1994; Moen, 2003). Individuals, in other words, do not develop in isolation from others and people are bound to the decisions that others make and the events that take place in other people's lives (Elder, 1994). More generally, the concept of linked lives also refers to the linkages across individual life domains, especially between one's family - and work life (Hertz & Marshall, 2001).

The family interdependencies that I focus on, stemming from partnerships and parenthood, are arguably the most prominent links in people's lives. The (nuclear) family can be considered a micro social group – a collection of individuals with a shared history. With regard to partners there are several elements to consider that may impact someone's life and their well-being. First and foremost, it matters whether someone has a partner or not. As I mentioned earlier, married and cohabiting individuals seem to be better off. Several mechanisms are identified that link having a partner to greater well-being. Partnered individuals can for instance pool their incomes and they benefit from economies of scale compared to singles (Waite, 1995). Partners also represent a source of support and social control that singles lack (Umberson, 1987). Beyond having (or losing) a partner, the partner's characteristics also matter and they can shape experiences in other life domains, such as employment and parenthood. The financial resources a partner provides can for instance determine the freedom someone has to alter their employment and how this affects their well-being (Bernasco, de Graaf, & Ultee, 1998; Greenstein, 1996). Whether and how much time a partner spends on household tasks and childrearing can affect the strains someone experiences at home, as well as their work-life balance (Blood & Wolfe, 1960; Kamo, 1988). Partnerships are closely tied up with the transition to parenthood. Children increase both the financial burden and the time demands that partners face at home. Younger children seem to demand more time from their parents than older children (Monna & Gauthier, 2008), while it stands to reason that older children represent a greater financial burden. In addition, the demands placed on parents also increase with the number of children. Therefore, parenthood is closely related to people's employment trajectories and how these influence their well-being.

1.3.2 Lives in context

In modern societies that are continuously and rapidly changing, people born in different years are subject to different constraints and opportunities (Elder, 1994). The life course perspective suggests that individual life courses may well reflect these different historical contexts. Aside from the temporal aspect of historical context, one might also consider the geographical setting of the life course. Just as people born in different years may face different constraints and opportunities, so might people born in different countries. Both ideas are captured in the concept of *lives in context* (Moen et al., 1995).

This suggests that family interdependencies and their relation to well-being may not be the same in all countries. In some countries the influence of partnerships and parenthood may be greater than in others. The mechanisms linking family interdependencies to well-being may be stronger or weaker depending on the country context, but their nature might also differ between societies. Several relevant country characteristics can be identified.

First, the way partnerships and parenthood are linked to well-being may be contingent on differences in welfare state arrangements (Esping-Andersen, 1999). Some countries have tax exemptions for different types of families or provide certain family benefits, while others do not (O'Donoghue & Sutherland, 1999). As a result, the financial benefits of being in certain partnerships or family forms differ across countries. Healthcare regimes differ in terms of the method of financing (public vs. private), services provided and the level of access (Wendt, 2009). Thus, the mechanism by which additional financial resources of marriage lead to greater health, may for instance be stronger in some countries than in others. A variety of family policies are employed by countries to arrange the division of care responsibilities between families and the state (Saraceno & Keck, 2010). These policies shape family interdependencies (Leitner, 2003). In some countries partnerships and parenthood may therefore provide more of an advantage than in others. Second, the relation between family interdependencies and well-being may be shaped by the substantial cultural differences that exist between countries. Countries differ greatly with regard to what is considered acceptable behavior for men and women and in their understanding of proper family relations (Viazzo, 2010). These differences are reflected in the way that care – and financial responsibilities are divided between the government and the family (Gornick & Hegewisch, 2014; Gornick & Meyers, 2008). In some countries, traditional norms continue to identify men as the (main) providers and women as caregivers, while in more progressive countries more egalitarian ideas exist as to how men and women divide tasks within the household (Lewis, Knijn, Martin, & Ostner, 2008). Through socialization and social scrutiny, such cultural ideas have the power to shape people's lives and their well-being. Third, the relation between partnerships and well-being may be affected by differences in family formation. There are substantial compositional differences across countries in who

cohabits, who marries and who divorces, and also in the social meaning of different types of partnerships. In some countries there may be more stringent selection into marriage, based on characteristics such as earnings potential and health. Cross-country compositional differences are to some extent driven by laws, regulations and policies. In many countries, unmarried cohabitation, even when registered, does not afford the same rights as marriage (Boele-Woelki, Curry-Summer, Jansen, & Schrama, 2006). Considering the impact that policies, cultural norms and composition may have on the link between family interdependencies and well-being, it is crucial to examine these relations from a cross-national comparative perspective.

1.4 Research objectives

Utilizing the life course perspective and especially the concepts of linked lives and lives in context, I aim to answer the following central research question in this dissertation:

“To what extent, how and under which circumstances do partnerships and parenthood shape individual well-being?”

Answering this question, I aim to provide insight into the extent to which family interdependencies and well-being are linked, the mechanisms that underlie the relation between family interdependencies and well-being and the way that both are affected by country characteristics, such as cultural norms and social policies.

1.5 Empirical studies

In order to answer the central research question, four empirical studies are carried out. Figure 1.1 provides the conceptual model of the four studies and how they are related. The first two empirical studies, described in chapter 2 and chapter 3, examine the way country context shapes the relation between partnerships and well-being. In chapter 2, I pay explicit attention to the relation between marriage and men’s wages, in chapter 3 I examine the association between marital status and health. In chapter 4 and chapter 5, the emphasis is on the interrelatedness between the life domains of partnerships, parenthood and paid labor and how this affects individual well-being. Specifically, chapter 4 sheds light on how the relation between motherhood and women’s earnings is affected by characteristics of the partner and by parity. In chapter 5, I examine how the relation between work hours and happiness is affected by the partner and by parenthood in dual earner couples. The following sections discuss each of the four studies and the data that are used.

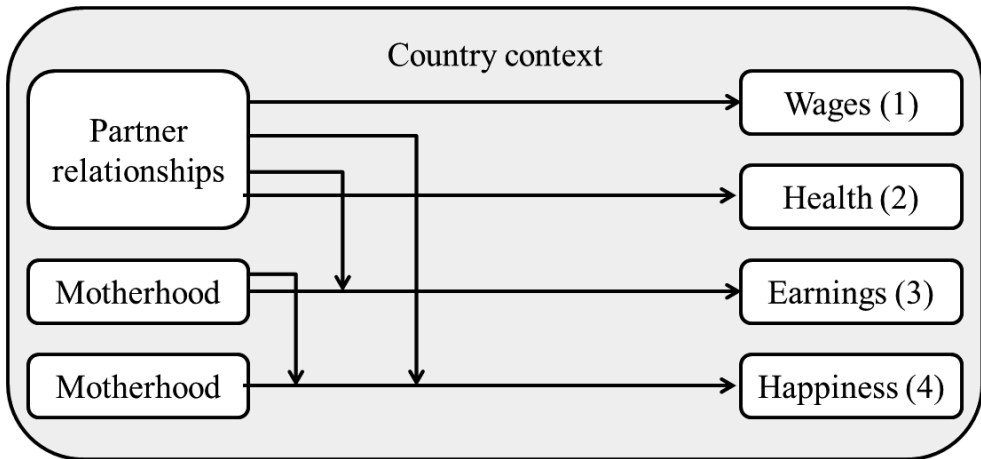


FIGURE 1.1. Conceptual model. Numbers indicate the empirical study in which the relation is addressed.

1.5.1 Study 1: The male marriage wage premium in cross-national perspective

In this study I address the way that marriage affects wages among men and how this is shaped by the country context. Married men earn more than unmarried men, a phenomenon termed the male marriage wage premium (MMWP). The extensive literature studying the MMWP has mostly done so using a single-country perspective. The limited cross-national comparative research suggests that there are substantial differences across countries in men's wage benefits associated with marriage (Schoeni, 1995). This study builds upon individual level explanations of the MMWP revolving around intra-household specialization (Becker, 1973) and married men's sense of responsibility (Bernard, 1981; Killewald & Gough, 2013; Townsend, 2002). I argue that both intra-household specialization and married men's sense of responsibility for their family are dependent on the extent to which men experience pressure to take on the role of the breadwinner. In other words, the strength of the theoretical mechanism that links marriage to men's wages is thought to be affected by the country context. I focus on four country characteristics: gender differences on the labor market, gendered cultural norms, marital stability and social protection provisions. My expectation is that breadwinner pressure and therefore the marriage benefit in men's wages is greater in countries: where men have a more pronounced labor market advantage, where gendered cultural norms are more traditional, where there more marital stability, and where there are less generous social protection programs.

The analyses in this chapter are based on micro-level data from the Luxembourg Income Study (LIS). The LIS is the largest available cross-sectional income database of harmonized micro data collected from multiple countries (LIS, 2015) and the data are commonly viewed as the best data source for comparative stratification research

(Atkinson, 2004). The analyses incorporate data from 29 countries². The selected countries, most of which belong to the OECD, are quite diverse geographically, politically and historically. The diversity of the countries ensures that there is considerable variation at the country level with respect to the characteristics of interest. The country level data come from several different sources: the World Bank (Worldbank, 2014), the United Nations (United Nations Development Programme, 1995), the World Values Survey (WVS, 2015) and the International Labour Organization (ILO, 2015).

1.5.2 Study 2: The marriage-health nexus: examining selection and causation in and across 30 countries mechanisms across countries

This study examines the relation between marital status and inequalities in health from a cross-national comparative perspective. Married individuals are healthier than their unmarried counterparts, across a range of different outcomes (Kiecolt-Glaser & Newton, 2001). I extend the literature in two ways. First, I aim to disentangle causal and selection effects at the individual level, a question that has remained open in the literature. Second, I determine whether (or to what extent) cross-national variations in the relation between marital status and health reflect differences in selection or differences in causal mechanisms. I do this by comparing random and fixed effects models. Furthermore, I distinguish between singles who have never been married and those who have gone through a marital dissolution. Doing so allows me to separately test the applicability of two explanations of the relation between marital status and health. The two explanations involve marital resources (Umberson, 1987) and the strains of marital dissolution (Amato & Booth, 1991; Williams, Takeuchi, & Adair, 1992).

In this chapter I use data from the European Union Statistics on Income and Living Conditions (EU-SILC). The EU-SILC dataset is a longitudinal sample survey across the EU member states. The data contain information on income, poverty, social exclusion and living conditions. In most countries, the EU-SILC has a rotating panel design, where respondents participate four times before they are replaced by new participants. In my study, I use data from all of the available waves from 2004 until 2012. The EU-SILC data are especially well suited for the aims of this study, as it is one of the few data sources that combine a longitudinal and a cross-national comparative design.

² Austria, Belgium, Canada, Colombia, the Czech Republic, Estonia, Finland, France, Germany, Greece, Guatemala, Hungary, Iceland, India, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, the Netherlands, Russia, Slovakia, South Africa, Spain, Sweden, the United Kingdom, the United States and Uruguay.

1.5.3 Study 3: The influence of motherhood on income: do partner characteristics and parity matter?

The third study concerns the effect of childbearing on women's earnings. The negative consequences of the transition to motherhood for women's earnings are well established. Motherhood is related to earnings inequality among women because mothers are employed less often, work fewer hours and earn lower hourly wages (Sigle-Rushton & Waldfogel, 2007). Surprisingly little research has examined factors that mitigate or aggravate the earnings disadvantage of mothers. I extend the literature by investigating how characteristics of the male partner as well as the number of children affect the earnings disadvantage of mothers. Given their importance for the division of tasks in the household, I focus on the partner's time availability (Blood & Wolfe, 1960; Kamo, 1988), his financial resources (Greenstein, 1996) and his gender role orientations (Thompson & Walker, 1989). I expect mother's earning disadvantage to be smaller if the partner: has more time available, has fewer economic resources and has more progressive gender role orientations. Furthermore, previous research has either examined the earnings of mothers versus those of childless women (Budig et al., 2012), or it has assumed that each additional child has the same consequences for women's earnings (Budig & England, 2001). I question these assumptions and argue that the reduction in income after a second or third child is less pronounced, given that major adjustments to employment take place following the birth of the first child (Abendroth, Huffman, & Treas, 2014).

The analyses in this chapter are based on data from the Netherlands Kinship Panel Study (NKPS) (De Bruijn, Hogerbrugge, & Merz, 2012). The NKPS is a large-scale panel survey that started in 2002 among a representative sample of adults between the ages of 18 and 79 residing in private households in the Netherlands. I use data from the first three waves in the analyses, waves two and three were respectively collected in 2006 and 2010. The NKPS studies family ties in the Netherlands, for which a multi-actor method was used that included questionnaires being filled out by multiple family members. The fact that data are available on both partners makes the NKPS especially suited to examine whether the partner affects the detrimental effects of childbearing on women's earnings. Moreover, the longitudinal nature of the data makes it possible to actually study how changes in the number of children affect changes in earnings.

1.5.4 Study 4: Examining the relation between part-time work and happiness in dual-earner couples: incorporating individual, couple and country characteristics.

In this fourth study I address how work hours are related to happiness in dual earner couples. Previous research has produced mixed answers to the question whether individuals are happier working part-time or fulltime: some studies find that part-time workers are happier, while others suggest that fulltime workers are better off (for a review, see Dolan, Peasgood, & White, 2008). I argue that these findings are not in

conflict with each other, but instead that the relation may depend on gender, parenthood, the work hours of the partner and the country's norms and policies. I also extend the literature by explicitly testing the mechanisms linking work hours to happiness. These explanations revolve around work-family conflict and adherence to (or deviation from) gender role prescriptions. Earlier research has rarely explicitly examined the salience of these mechanisms.

The data used for this study come from the International Social Survey Programme (ISSP) (ISSP Research Group, 2014). The ISSP is an annual effort that fosters cross-national collaboration on the collection of cross-sectional survey data covering a range of topics, which are brought together in modules. The 2012 module that I use for chapter 5 is the fourth in a series on Family and Changing Gender Roles. Topics in this module include for example attitudes towards employment of mothers and the role distribution of men and women in the household. The ISSP 2012 Family and Changing Gender Roles module is especially well-suited for the aims of this study, as it includes individual level data on both demographic characteristics, as well as more subjective information on for instance work-family conflict. Furthermore, the fact that the data are collected in a wide range of countries makes it possible to study the influence of country characteristics.

CHAPTER 2

The male marriage wage premium in cross-national perspective³

³ This chapter is co-authored by Renske Keizer and Pearl Dykstra and an earlier version was presented at the 2nd GGP User Conference in Milan in 2013.

2.1 Introduction

The starting point of this chapter is that country level conditions reproduce and reinforce inequalities linked with the distribution of paid and unpaid work. Prior research has shown, for example, that earnings inequalities between mothers and childless women can be buffered by social policies: mothers' income disadvantage is lower in countries with generous maternity leaves and publicly provided childcare than in countries with less generous public provisions for parents (Budig et al., 2012). Institutions, policies and cultural norms mold the meaning and prominence of marriage, the dominance of the male breadwinner model and the position of women in the labor market (Alwin, Braun, & Scott, 1992; Crompton, 1999; Esping-Andersen, 1999). In light of the importance of contextual conditions in shaping individual behavior, it is surprising that comparative work is almost entirely absent from the large research literature on the male marriage wage premium (hereafter MMWP) (for exceptions, see: Datta Gupta, Smith, & Stratton, 2007; Jakobsson & Kotsadam, 2013; Schoeni, 1995). The MMWP, the phenomenon that married men earn higher wages than unmarried men, has mostly been examined in a single-country framework, as if it were "occurring in a stateless social structure" (Mayer & Müller, 1986, p.217). In this chapter we focus on countries' economic, cultural and institutional conditions and how they shape the MMWP.

The limited comparative work on the MMWP suggests substantial cross-national variation in its magnitude. Analyzing data from the 1970s and 1980s, Schoeni (1995) found that in the United States married men earned 30% more than unmarried men, while in Sweden the premium was 6%. Schoeni attributed these differences to institutional and cultural factors, but did not elaborate on them. In more recent studies, women's labor market participation, divorce rates and public care provisions explained differences in the magnitude of the MMWP (Datta Gupta et al., 2007; Jakobsson & Kotsadam, 2013). This chapter builds upon earlier work in three important ways. First, we extend the theoretical framework to reach an understanding of why and how the MMWP varies across countries. While earlier work exclusively focused on intra-household specialization (Becker, 1981), we also consider married men's sense of responsibility (Bernard, 1981; Killewald & Gough, 2013; Townsend, 2002). Moreover, we argue that both are dependent on country context and the extent to which there is pressure for men to take up the role of the breadwinner. Our second contribution is that we compare the MMWP across a larger number of countries, including European as well as several non-European and less developed countries, allowing a more extensive overview of the cross-national variation in the MMWP. We are also more likely to capture differences in the strength of the mechanisms underlying the MMWP, as the contextual conditions vary substantially. Third, we employ more and more accurate country level indicators, enabling us to tap more closely into different conditions affecting the MMWP. Specifically, following from

our theoretical framework, we identify four country conditions that are likely to affect the male breadwinner role: (1) gender differences in labor market circumstances, (2) gendered cultural norms, (3) marital stability and (4) social protection provisions. These extensions of earlier work serve to better answer the two main research questions: To what extent does the MMWP vary across countries? And can variations be explained by differences in country conditions?

We use micro-level data from 29 countries gathered by the Luxembourg Income Study (LIS) (LIS, 2015). These data are coupled with macro-level information from several sources, including the Human Development Reports from the United Nations Development Programme (United Nations Development Programme, 1995-2008), the United Nations Statistics Division Demographic Yearbooks (United Nations, 2010) and the World Values Surveys (WVS, 2015). We estimate multilevel regression models to test our hypotheses.

2.2 Country context and the male marriage wage premium

Country level conditions shape the behavior of individuals in a number of ways. Institutions and policies serve as frameworks that impose structure in people's lives, and they have intended as well as unintended consequences (Leisering, 2004). The structuring of lives is at times very direct and visible, as is the case with the introduction (or expansion) of compulsory education or the declaration of war (Mayer & Schoepflin, 1989). Other policies have a more indirect effect, such as when they strengthen autonomy versus interdependence in families (Hagestad & Dykstra, 2016). Economic circumstances create or diminish opportunities for leaving home, entering the labor market, having children, and so forth. Their effects tend to cumulate over time (Dannefer, 2003). The cultural context prescribes life paths and behaviors for both men and women. While adherence to cultural norms leads to societal acceptance, those who do not abide by them can face rejection or even hostility (Liefbroer & Billari, 2010).

In the literature on the MMWP, contextual dependencies have largely remained unexamined. Explanations have revolved around micro-level determinants. In what follows, we argue that the importance of these determinants might vary, depending on country-specific conditions.

Broadly speaking, micro-level explanations for the MMWP fall into two categories. The first is the selection perspective, which posits that men with a higher earnings potential are more likely to marry (Becker, 1981; Keeley, 1977; Nakosteen & Zimmer, 1987). According to this perspective, marriage does not actually influence men's wages. Empirical evidence suggests that selection only explains part of the MMWP (De Linde Leonard & Stanley, 2015; Ribar, 2004). In this chapter, we use cross-sectional data,

which makes it difficult to adequately examine selection processes. Therefore we will only account for them by including control variables at the individual and the country level, instead of also developing hypotheses on cross-national variation in selection. The second set of explanations assumes that men's wages are affected by marriage. Positive discrimination of married men by employers (Hill, 1979) belongs in this category, but because discrimination is notoriously difficult to examine outside of an experimental setting, we refrain from pursuing this issue. Instead, we focus on two theories that link marriage to men's productivity.

The specialization hypothesis (Becker, 1981) is employed most often to explain how men's wages are affected by marriage. According to this perspective, the MMWP is a result of intra-household specialization. Married men become more productive than unmarried men because they have a spouse who performs household activities, which enables them to more strongly focus on gainful employment. A second theory, which has recently grown in popularity, links the MMWP to married men's sense of responsibility. Supposedly, marriage instills men with a sense of responsibility to provide for their family, especially financially (Killewald & Gough, 2013; Townsend, 2002), making them more focused and more productive at work, compared to their unmarried counterparts. The two explanations are not incompatible. Intra-household specialization may strengthen men's sense of responsibility to provide for their family, while at the same time a sense of responsibility may lead men to specialize in gainful employment. Given our cross-national comparative focus, the question of which perspective better explains the MMWP is beyond the scope of the current chapter. Both revolve around the social pressure for married men to be the breadwinner. Country level conditions impose stronger or weaker pressure to be the breadwinner, and thus larger or smaller MMWPs.

2.2.1 Gender differences in labor market circumstances

In general, men are more often employed, work more hours and earn more than women, but there are considerable differences across countries in men's advantage on the labor market. In countries where men have a stronger labor market position, wives are more financially dependent on their husbands, and thus there exists a greater pressure for married men to be the breadwinner. We therefore hypothesize that the MMWP is greater in countries where men's labor market advantage is more pronounced (H1).

Jakobsson and Kotsadam (2013) tested a similar hypothesis by comparing countries with high to those with low female labor force participation. They found a greater premium in countries where women are less often employed. Yet, their approach is questionable. First, dividing countries into two groups leads to a loss of information and, as the authors themselves indicate, complicates the interpretation of the results. Dichotomization of countries may be linked with the omission of national characteristics, obscuring the true origin of differences in the MMWP (Jakobsson & Kotsadam, 2013).

Second, female labor force participation rates may not tell the whole story. Differences in labor market standing also extend, among others, to education and the number of management positions held by men and women.

2.2.2 Gendered cultural norms

Gendered cultural norms shape expectations about “appropriate” behavior for men and women (Connell, 1987; Ridgeway, 2008; Ridgeway & Correll, 2004). According to Connell’s gender relations theory, an important gendered cultural norm ties masculinity to the responsibility for breadwinning. There are considerable differences in gender traditionality across countries, however. For example, whereas the male breadwinner ideology has remained relatively strong in the Netherlands and Germany, it has become weaker in Scandinavian countries (Lewis et al., 2008). In countries where cultural norms are more gender-traditional, married men will be subjected to greater pressure to be the male breadwinner, and marriage will likely increase men’s productivity more. Therefore the MMWP is expected to be greater in more gender-traditional countries (H2).

In line with this hypothesis, Datta Gupta and colleagues (2007) argue that differences in cultural norms may explain why the MMWP in Denmark is smaller than in the United States. In Denmark, norms are less traditional, as evinced by more female labor force participation and a more equal division of household labor. Yet, due to the two-country comparison that the authors make, they are unable to pinpoint the mechanisms underlying the differences in the MMWP, and other explanations cannot be ruled out.

2.2.3 Marital stability

Another factor at the country level that may affect the MMWP is marital stability. Men’s traditional role as the breadwinner is based on the notion that couples stay together. High levels of marital instability weaken the pressure to be the male breadwinner role for two reasons. First, specialization becomes a risky strategy, especially for women (Iversen & Rosenbluth, 2010). Second, partners may feel less responsible for one another when there is a reasonable chance they divorce. In countries with higher marital instability, i.e. a higher divorce rate, we therefore expect that the MMWP will be smaller (H3).

To test this hypothesis, Jakobsson and Kotsadam (2013) distinguished countries with high and low divorce rates. They found a lower marriage premium in countries with high divorce rates, but the difference was not statistically significant. As noted earlier, the procedure of splitting countries into two groups is questionable. Other supporting evidence comes from Gray and Vanderhart (2000) who compared the MMWP across American states and found that the premium was smaller in states where divorce was easier (and more common) due to less strict legislation.

2.2.4 Social protection provisions

The pressure to be a breadwinner depends on the extent to which countries provide their citizens with a social safety net (Gornick & Meyers, 2008). In countries with less social protection, families are more or less left to their own devices to care for children, the sick and frail older adults. As a result, specialization between spouses in unpaid caring tasks and breadwinning will be greater. In countries with more generous social protection programs, families have the government to fall back on and pressure on wives to be carers and husbands to be breadwinners is weaker, leading to a smaller MMWP (H4).

The abovementioned finding by Datta Gupta and colleagues (2007) that the MMWP is smaller in Denmark than in the United States might be attributable to differences in public care provision between these two countries. In Denmark, the state provides extensive care for the young, the elderly and the sick, relieving families of some of the associated burden and lowering breadwinner pressure. Once again however, their two-country comparison makes it impossible to rule out other explanations.

2.2.5 Confounders

There are several country level conditions that may impact the MMWP, without impacting breadwinner pressure. First, the country's level of wealth may be important. Wealth is not only related to each of the contextual conditions described above, but also to people's income levels and the likelihood of marriage. Therefore, accounting for a country's wealth is crucial to obtain an unbiased estimate of the interaction between marriage and contextual conditions in relation to earnings. Income inequality is another possible confounder that needs to be accounted for. Several scholars have argued that the MMWP is likely to be larger in countries with more income inequality, simply because differences in earnings are greater in these countries (Cooke, 2014; Petersen et al., 2014). As mentioned, selection is one mechanism underlying the MMWP and there may be differences in selection into marriage across countries. These differences in selection can be accounted for by controlling for the percentage of people who are married, as selection is more stringent in countries where marriage is less common (Datta Gupta et al., 2007; Huijts & Kraaykamp, 2011b).

2.3 Method

The micro-level data come from the Luxembourg Income Study (LIS), the largest available cross-sectional income database of harmonized micro data collected from multiple countries over a period of decades (LIS, 2015). The LIS data are commonly viewed as the best data source for comparative stratification research (Atkinson, 2004). In the current paper we use data from Wave VII that were collected in or around 2007,

which we supplement with data from Waves V (1990s and 2000), VI (2004) and VIII (2010) in order to be able to examine as many countries and contexts as possible. The 2007 wave was selected because it was the most recent wave with data from a large number of countries. The analyses are based on data from 29 countries: Austria, Belgium, Canada, Colombia, the Czech Republic, Estonia, Finland, France, Germany, Greece, Guatemala, Hungary, Iceland, India, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, the Netherlands, Russia, Slovakia, South Africa, Spain, Sweden, the United Kingdom, the United States and Uruguay. These are the countries for which information on hourly wages was available directly or where it could be calculated based on income and the number of hours worked. The selected countries, most of which belong to the OECD, are quite diverse geographically, politically and historically. The diversity of these countries ensures that there is considerable variation at the country level with respect to the characteristics of interest.

We restrict the sample to employed men between the ages of 20 and 60. The selection of employed men may result in a slight underestimation of the MMWP, as married men may be more likely to be employed than unmarried men. The selected age range roughly represents the dominant period of working life for men.

2.3.1 Individual-level variables

Our dependent variable is the log of hourly wages. In all countries except Belgium, France, India, Italy, Mexico, Russia and Uruguay, these are gross rather than net levels, corrected for purchasing power parity in 2011 US dollars. Extensive checks were undertaken to ensure that the net-gross measurement difference does not affect our results (results available upon request). Analyses revealed no systematic relation between the way in which wages were measured and the MMWP, although obviously reported wages are lower in countries where net levels were reported. The wages were log transformed to account for the skewed distribution of the original values. Transforming the values has the added benefit that exponentiated coefficients can be interpreted as percentages. Across all countries, 28% of employed men did not report their income and these respondents are excluded from the analyses. Imputation of these values is unfeasible due to the fact that it is unlikely they are missing at random (Allison, 1999).

The main independent variable in the analyses is marital status. Marital status is a dummy variable indicating whether the respondent is married or cohabiting without being married. The reference category pertains to those who are unpartnered and have never been married. We excluded divorced and widowed men (6.6% or 8,847 cases), because losing a partner, whether through separation or death, involves dynamics that are beyond the scope of this chapter. For instance, divorce and widowhood are often accompanied by depressive symptoms, which can in turn affect work and income. We would have liked to distinguish marriage and cohabitation (cf. Mamun, 2012). Unfortunately, in most

countries the distinction was not included in the original questionnaire. Less than one percent (0.22%) of the employed men did not report their marital status.

We also included several individual-level control variables to account for selection of men with a higher earning potential into marriage: age, age squared and level of educational attainment. Level of educational attainment is measured with three dummies indicating low, middle or high education, with is adapted from the ISCED 1997 classification. Across countries less than one percent (0.5%) of employed respondents did not report their educational attainment. Other authors have included additional controls. Jakobsson and Kotsadam (2013) for instance included measures of health and the presence of underage children, which we feel is problematic, given that a large body of research shows that health is positively affected by marriage (Waite & Gallagher, 2000), as is the presence of children (Balbo, Billari, & Mills, 2013). Furthermore, a harmonized measure of health was not available in the dataset. Alternative analyses in which we accounted for the presence of children under 18 produced the same substantive results.

Additional controls for occupational status and sector were included in separate analyses, based on the notion that the marriage premium is partly due to married and unmarried men choosing different occupations and industries (Petersen, Penner, & Hogsnes, 2006). Occupational status is based on the ISCO 1988 classification and consists of three dummies for (1) managers, (2) other skilled workers and (3) laborers. This measure is not available for Canada and Japan. In the other countries 3% of employed respondents did not report their occupational status. Occupational sector is based on the ISIC 3.1 classification and consists of three dummies for those employed in (1) agriculture, (2) industry or (3) services. The measure is not available for Sweden and in the other countries around 4% of employed respondents did not report the sector in which they worked.

The selection criteria yield a sample of 124,251 respondents across the 29 countries. Pooled weighted descriptive statistics for the individual level variables are reported in Table 2.1. Descriptive statistics for each of the countries separately are available upon request.

TABLE 2.1. Pooled descriptive statistics for individual-level variables across 29 countries (N = 124,251).

Variable	Mean	SD	Min.	Max.
Log of hourly wages	2.10	1.05	-5.55	9.05
Hourly wages (ppp)	12.49	29.96	0.00	8508.68
Married	0.76		0.00	1.00
Single (never married)	0.24		0.00	1.00
Age	40.86	10.12	20.00	60.00
Low education	0.26		0.00	1.00
Middle education	0.45		0.00	1.00
High education	0.29		0.00	1.00
Managers ^a	0.23		0.00	1.00
Other skilled workers ^a	0.67		0.00	1.00
Laborers ^a	0.10		0.00	1.00
Agriculture ^b	0.06		0.00	1.00
Industry ^b	0.39		0.00	1.00
Services ^b	0.56		0.00	1.00

Note: Statistics are weighted with probability weights provided by the LIS. ^a Not measured in Canada and Japan: $N = 110,871$. ^b Not measured in Sweden: $N = 109,227$.

2.3.2 Country level variables

At the country level, we used five measures to test our hypotheses. To examine the effect of gender differences in labor market circumstance, we used two measures. First, in order to be able to compare our results with those of earlier comparative work (Jakobsson & Kotsadam, 2013) we incorporated female labor force participation. The information for each of the countries is based on data from the World Bank (World Bank, 2015a) and reflects the employment rate of females aged 15 and over for the year of survey. Second, we incorporated the multidimensional Gender Empowerment Measure (GEM) from the United Nations Development Programme's Human Development Reports. The GEM is a composite index including, among others, the ratio of estimated female to male earned income, the percentage of seats in parliament held by women, and the percentage of female legislators, senior officials and managers. The original metric of the index is between 0 and 1, where 1 indicates that men and women are entirely equal. The original metric was rescaled to range from 0 to 100. The GEM measure is matched to the year of survey. Data on the GEM was unavailable for Guatemala, India, Luxembourg and South Africa.

Our hypothesis concerning the influence of gendered cultural norms was tested using data from the World Values Surveys (WVS, 2015). The selection of countries restricts the possibilities with regard to the items that can be used to measure the normative climate. Only one relevant item was available for a substantial number of countries: "Husband and wife should both contribute to income". Responses ranged from 1 = strongly agree

to 4 = strongly disagree. Responses were recoded and rescaled so that the measure ranges from 0 to 100 and the aggregate mean served as the country indicator. A higher score on the resulting measure indicates a more gender-traditional normative climate. We used data from the WVS wave that most closely matched the year of survey for each of the countries. Data on the normative climate were not available for Guatemala and Israel.

Information on divorce rates comes from the United Nations Demographic Yearbooks (United Nations, 2010). In case information was missing, other data sources were utilized. We employ the number of divorces per 100 marriages instead of the crude divorce rate. The crude divorce rate is lower in countries with higher rates of unmarried cohabitation and may therefore obscure actual underlying mechanisms. Divorce rates were unavailable for India and Uruguay.

Finally, we used public social protection expenditure, as a percentage of the GDP. The information comes from a variety of sources such as the International Monetary Fund and Eurostat and was gathered by the International Labour Organization (ILO, 2015). The measure encompasses social benefits and transfers in cash or in kind to households and individuals with the aim to relieve them of the burden of risks and needs related to healthcare, disability, old age, parental responsibilities, loss of a spouse or parent, unemployment, housing and social exclusion (Eurostat, 2015).

In addition, we included four country level control variables. The first is GDP per capita provided by the World Bank (World Bank, 2015b). The second is a measure of income inequality, the GINI, also from the World Bank (World Bank, 2015c). GINI scores range from 0 to 100, with a higher score indicating greater wage inequality. The GINI was not available for Luxembourg. The last country level control is the percentage of married people to account for the selectivity of marriage. This measure was aggregated directly from the LIS micro-level data, prior to our sample selection.

Table 2.2 shows descriptive statistics for the country level variables across the 29 countries, as well as selected country averages of individual-level variables.

TABLE 2.2. Descriptive statistics of country-level variables across 29 countries.

Country	% Women working	GEM	Gender-traditional norms	Divorce rate	Social Protection Expenditure	GDP per capita	GINI	% Married
Austria	50.40	77.00	33.20	50.80	20.33	37695	30.04	75.12
Belgium	43.60	72.50	30.50	59.80	18.75	34633	33.14	73.95
Canada	61.90	82.00	32.20	46.80	10.30	37056	33.90	58.96
Colombia	50.70	49.60	20.90	8.70	12.65	3755	58.88	43.02
Czech Rep.	50.60	58.60	20.70	64.30	9.31	12529	26.95	73.96
Estonia	54.40	63.70	29.80	54.20	19.90	12443	31.25	58.07
Finland	57.60	88.70	36.30	44.80	21.33	42307	38.20	62.54
France	49.90	71.80	26.90	55.60	21.33	34880	31.69	62.98
Germany	52.00	83.10	31.90	50.70	19.34	37202	31.83	68.86
Greece	42.40	62.20	23.30	21.20	15.34	24306	33.96	83.75
Guatemala	47.30	-	-	2.60	2.93	2288	54.89	64.18
Hungary	42.80	56.90	21.10	61.60	18.10	11627	28.30	70.27
Iceland	71.40	86.20	43.90	30.00	10.00	61662	29.32	62.59
India	36.30	-	26.60	-	10.00	6873	33.38	96.45
Ireland	54.10	69.90	32.70	16.20	13.00	52923	31.73	50.08
Israel	51.10	62.20	-	27.70	11.40	22107	41.18	86.13
Italy	38.50	69.30	32.20	22.00	18.78	32270	35.43	84.96
Japan	48.50	55.70	46.80	34.40	15.25	36817	32.11	66.07
Luxembourg	47.00	-	42.10	56.20	14.29	86127	-	62.51
Mexico	40.80	56.30	20.10	12.30	4.28	7687	46.05	76.12
Netherlands	58.50	85.90	54.40	45.00	14.17	44401	30.31	69.43
Russia	57.10	48.90	30.80	53.90	8.66	6310	39.27	77.65
Slovakia	50.40	63.00	21.60	44.40	11.06	13973	27.71	91.45
South Africa	46.70	-	24.30	15.50	4.81	5757	67.40	50.91
Spain	48.20	79.40	28.30	63.00	16.40	27660	62.65	78.66
Sweden	58.60	75.70	18.70	67.00	25.79	32477	25.54	75.77
UK	55.10	78.30	40.30	52.50	14.50	41567	38.07	58.70
United States	58.30	76.20	36.70	49.30	9.30	45417	41.64	60.80
Uruguay	52.50	51.10	23.90	-	12.85	4861	47.13	66.50

2.3.3 Analytic strategy

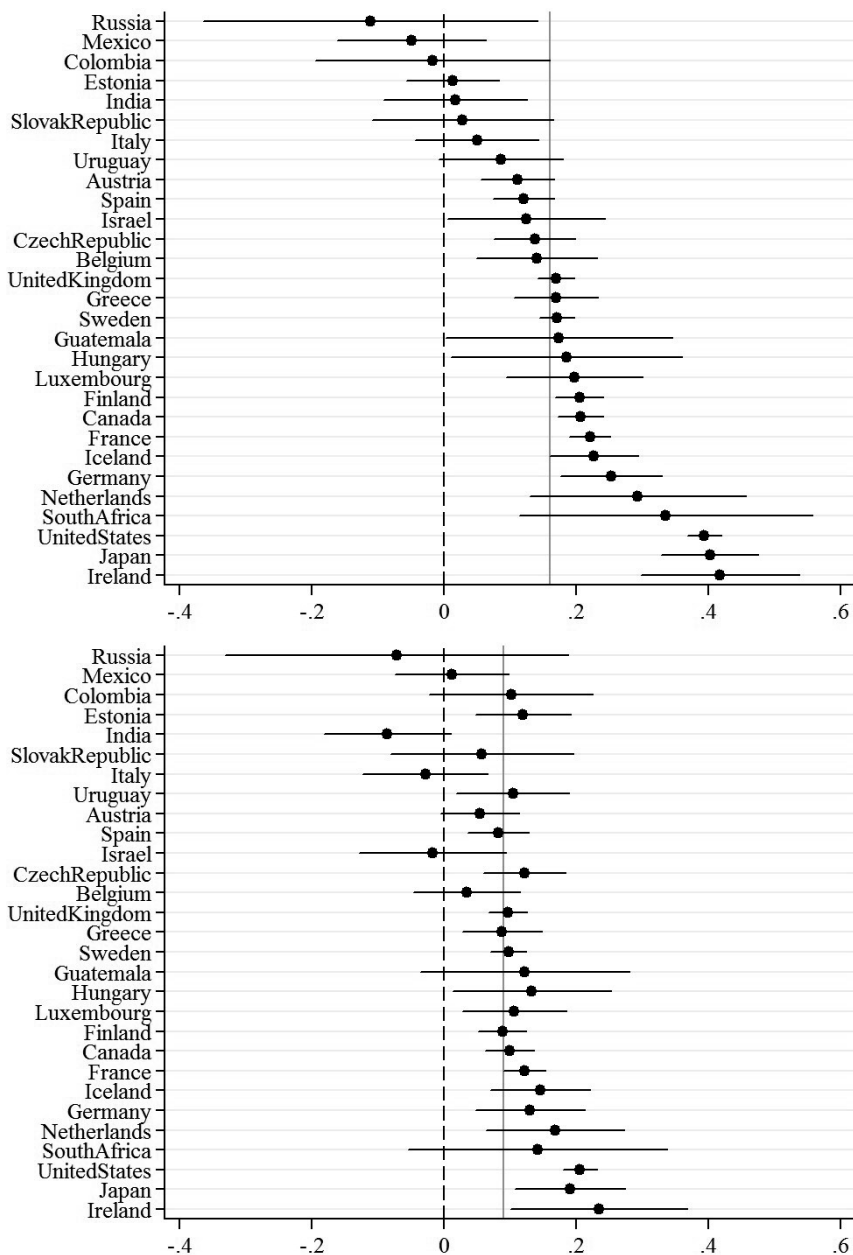
The analyses proceeded in two steps. First, regression models were estimated for each of the countries separately to provide an overview of MMWPs. The results are depicted in Figures 1a and 1b. Full regression results are not presented here, but they are available upon request. Second, a set of multilevel regression models was estimated. The first model, examining the crude marriage premium across countries, incorporated only marital status as a predictor and did not account for human capital differences, i.e. selection into marriage. The second model included the human capital variables,

educational attainment and age in order to control for selection. A random slope for marital status was added in the third model to assess the degree of country variation in the effect of marriage on hourly wages. The fourth model introduced cross-level interactions between marital status and the country level variables to test the hypotheses about the influence of contextual conditions on the MMWP. Finally, several additional analyses were performed to assess the robustness of the results. Each regression model included the individual-level sampling weights provided by the LIS.

2.4 Results

2.4.1 Results from single country analyses

Figure 2.1a plots the crude effect of marriage on hourly wages across the 29 countries. The estimates of the marriage premium range from a low of -0.11 (or -10.5%) in Russia, indicating a penalty although it does not seem to be significant, to a high of around 0.40 (or 52%) in Ireland. On average there is a crude premium of around 0.16 (or 17%) across the countries. This implies that married men across the countries earn on average 17% higher wages than unmarried men, not accounting for confounders. The 95% confidence intervals overlap with zero in 8 out of the 29 countries, indicating there is no clear evidence of a MMWP in these countries. Figure 2.1b plots the effect of marriage after controlling for age and educational attainment. The figure clearly shows that human capital differences between married and unmarried individuals account for a considerable part of the difference in hourly wages between married and unmarried men. The average MMWP across countries now drops to 0.09 (or 9%). In 11 of the countries, the 95% confidence intervals now overlap with zero, indicating that clear evidence is lacking for a MMWP once human capital variables have been controlled for. Ireland continues to be the country with the highest MMWP, although it drops to 0.23 (or 26%). In a third set of analyses we controlled for occupational status and sector, resulting in a rise in the number of countries without clear evidence of a remaining MMWP from 12 to 26 (as mentioned above, three countries had no information on occupational status and sector). The average MMWP was 0.07 (or 7%) and the Netherlands had the highest premium: 0.20 (or 22%). Apparently, controlling for occupational status and industry further diminishes the average MMWP, but not to the point that a premium no longer exists in any country. Thus, this study provides additional evidence that the selection hypothesis alone does not fully explain the MMWP in all countries.



FIGURES 2.1A AND 2.1B. 1a (top): Crude marriage premium across countries and 1b (bottom): Marriage premium controlled for human capital variables. Gray vertical lines represent the average premium across countries.

2.4.2 Multilevel results

As Model 1 of Table 2.3 shows, the average crude premium is estimated at 0.19 (or 20%) across the 29 countries. This is somewhat higher than the average of 0.16 (or 17%) that the single country analyses produced. The difference is attributable to the influence of several countries with large sample sizes and a relatively high MMWP.

The controls for educational attainment and age introduced in Model 2 partly explain, as we saw earlier, the difference in wages between married and single men. Specifically, the estimate of the marriage premium drops by more than a third, from 0.19 to 0.11 (or 12%). Educational attainment, not surprisingly has a positive effect on men's wages and so does age. Age squared has a negative relation to wages, indicating that the positive effect of age diminishes as men become older.

Model 3 assesses country variation in the magnitude of the effect sizes by introducing a random slope for the effect of marriage on men's wages. It also controls for the undue influence of larger sample. A likelihood ratio test reveals that including the random slope significantly improves the model fit, compared to the model where it is not included.

TABLE 2.3. Multilevel regression results analyzing men's hourly wages across 29 countries.

	Model 1	Model 2	Model 3
Married	0.189*** (0.021)	0.108*** (0.014)	0.095*** (0.015)
Middle education		0.280*** (0.045)	0.283*** (0.045)
Highly education		0.609*** (0.059)	0.613*** (0.059)
Age		0.006*** (0.002)	0.006*** (0.002)
Age squared		-0.000*** (0.000)	-0.000*** (0.000)
Constant	1.799*** (0.188)	1.619*** (0.195)	1.623*** (0.191)
<i>Variance components</i>			
Constant	1.039 (0.299)	0.866 (0.249)	0.784 (0.237)
Married			0.012 (0.004)
Residual	0.311 (0.030)	0.262 (0.026)	0.261 (0.025)
(pseudo) loglikelihood	-27951.9	-25104.1	-25022.3
N(countries)	29	29	29
N	124251	124251	124251

Note: Standard errors in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

In the next set of models, we include cross-level interactions between the country level variables and the marital status dummy variable. We tested the cross-level interactions in separate analyses, as including them all at once is likely to lead to severely biased results (Stegmueller, 2013). Each of these models was also re-estimated using the different country level control variables. Only GDP per capita significantly affected the estimates of the MMWP, which is why we only report the results of the models including this control variable. For the sake of brevity, we only report the main effects of interests and the cross-level interactions in Table 2.4; the estimated effects of the individual level control variables are available upon request.

Two of the five cross-level interactions between the marital status dummy and the country-level variables are significant. There is no clear evidence that female labor force participation, the normative climate and the social protection expenditures are related to the magnitude of the MMWP, although all effects are in the expected direction. The results suggest that GEM has the expected negative effect on the MMWP: the wage advantage of married men is smaller in countries where men and women have more equal rights, responsibilities and opportunities. The interaction effect size is estimated at -0.004 (or -0.4%), meaning that in countries with a 10-point higher gender empowerment score than average, the effect of marriage on men's wages is around 4% less. A decrease to almost half of the average estimated premium of 0.08 (or 9%) is quite substantial. The divorce rate also has a negative effect on the MMWP. In line with our hypothesis, the wage advantage is smaller in countries where marriages are less stable. The interaction effect size is -0.002 (or -0.2%), meaning that in countries with a 10 percent higher divorce rate than average, the MMWP is about 2% lower. This figures entails a decrease of almost 25% of the average estimate of 0.09 (or 9%).

In four out of five models, the interaction between GDP and the marital status dummy is significant and positive. In countries with a higher GDP per capita, the MMWP is greater.

TABLE 2.4. Multilevel regression models including cross-level interactions with country conditions.

	Model 4a	Model 4b	Model 4c	Model 4e		
Married		0.062 ⁺ (0.036)	Married	0.083 ^{***} (0.012)	Married	0.087 ^{***} (0.016)
Female labor force participation		0.012 (0.019)	GEM	0.023 ^{**} (0.009)	Traditional norms	-0.001 (0.013)
Married x Female labor force participation		-0.002 (0.003)	Married x GEM	-0.004 ⁺ (0.002)	Married x Traditional norms	0.002 (0.003)
GDP (per capita)		0.000 ^{***} (0.000)	GDP (per capita)	0.000 ^{**} (0.000)	GDP (per capita)	0.000 ^{**} (0.000)
Married x GDP (per capita)		0.000 ^{**} (0.000)	Married x GDP (per capita)	0.000 ^{***} (0.000)	Married x GDP (per capita)	0.000 (0.000)
(pseudo) loglikelihood	-25000	(pseudo) loglikelihood	-21229	(pseudo) loglikelihood	-23242	
N(countries)	29	N(countries)	25	N(countries)	27	
N	124251	N	99540	N	118643	
Model 4d	Model 4e					
Married		0.153 [*] (0.067)	Married	0.091 ^{***} (0.017)		
Social protection		0.037 ^{**} (0.012)	Divorce rate	0.008 [*] (0.003)		
Married x Social protection		-0.004 (0.004)	Married x Divorce rate	-0.002 ⁺ (0.001)		
GDP (per capita)		0.000 ^{***} (0.000)	GDP (per capita)	0.000 ^{***} (0.000)		
Married x GDP (per capita)		0.000 ^{**} (0.000)	Married x GDP (per capita)	0.000 ^{**} (0.000)		
(pseudo) loglikelihood	-23967	(pseudo) loglikelihood	-23086			
N(countries)	28	N(countries)	27			
N	115715	N	101214			

Note: Standard errors in parentheses. Models also include controls for educational attainment and age. ⁺ $p < 0.10$, ^{*} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$.

2.4.3 Sensitivity analyses

The results of the multilevel regression models remained substantively the same when the additional individual level controls for occupation and industry were included, although both the main effects and the interaction effects were somewhat smaller. The results of these models are available upon request. As we noted earlier, the results were not affected by including an additional control for the presence of underage children in the household. Neither did the results change substantively when we accounted for the fact that wages were measured as net levels in some of the countries rather than as gross levels.

2.5 Discussion and conclusion

Scholarly work on the male marriage wage premium has neglected influences of the country context. In this chapter we built upon earlier studies in several ways. First, we better explicated the theoretical framework on the role of macro-level conditions. Second, we examined the MMWP in a larger and more diverse group of countries. Third, we focused on a larger number of country characteristics and used more accurate macro-level indicators.

In the majority of countries under consideration, married men have an earnings advantage, which is only partially attributable to background characteristics accounting for selection into marriage. Our findings are in line with a comprehensive literature review (Ribar, 2004) and a recent meta-regression analysis (De Linde Leonard & Stanley, 2015) which show that selection generally only explains part of the MMWP. Marriage actually seems to affect men's productivity, and their earnings advantage is quite substantial. One way to quantify the premium of 7% (our lowest average estimate) is by the number of hours that unmarried men would have to work more to earn the same sum of money. The premium of 7% amounts to an unmarried man working 43 hours per week compared to a married man working 40. There are substantial variations across countries, however, and the premium is far from universal, at least less so than in the 70s and 80s (Schoeni, 1995). There are countries where married men make as much as 25% more than unmarried men, while in other countries there is no evidence of a marital status difference in men's earnings.

We sought the explanation of country differences in the MMWP in terms of the pressure for men to be breadwinners. The pressure exhibits itself in different ways: as the husband's perceived sense of responsibility (the desire to be a "good provider") or as the economic necessity to provide for dependents in the absence of public safety nets.

The Gender Empowerment Measure (GEM) was one of the two country level indicators that accounted for cross-national differences in the MMWP: in countries

where both women and men actively participate in economic and political life and in decision-making, married men are less likely to have an earnings advantage. Breadwinner pressure is likely reduced when women and men perform on a more equal footing, but we cannot rule out that other mechanisms are at work. For example, married men might also enjoy less favoritism on the part of employers in gender egalitarian societies. Unraveling whether married men behave differently at work in high GEM societies or are treated differently by employers, is an issue for future research. Nevertheless, our findings have important policy implications, as they show that gender equality, and measures enhancing it, also promotes equality among marital status groups, for men at least.

Results also showed that the MMWP was negatively related to the country's divorce rate. Following Datta Gupta and colleagues (2007) we argued that marital instability reduces intra-household specialization, as it becomes a more precarious strategy. A related reason why marital instability may shape the MMWP is that, with divorce looming, married men feel less responsible to provide for their families. Marriage entails a long-term commitment, and more strongly so if there are children. In high-divorce societies, husbands and fathers might be more risk averse.

A number of country conditions which we assumed were linked to breadwinner pressure did not, however, account for variation in the MMWP. Contrary to the study carried out by Jakobsson and Kotsadam (2013), we did not find an association between the MMWP and the female labor force participation rate. As the authors suggested, their findings might be driven by omitted national characteristics. To avoid this problem, we controlled for GDP. Of course, the inconsistency in results might also be attributable to differences in the samples of countries. Their study was based on 12 Western and Southern European countries. Ours covered a wider range of countries, representing a more stringent test of the hypothesis.

The generosity of social protection provisions was not related to the MMWP either. Drawing on the work of Datta Gupta and colleagues (2007), we expected that public provisions would shape breadwinner pressure by decreasing intra-household specialization and the sense of responsibility that married men have. A focus on only public provisions might not be sufficient. We suggest that future research should also consider market-provided services and income replacements. The mix of public and market arrangements for social risks is likely to provide better insight into conditions shaping breadwinner pressure. More particularly, insight will be gained into the necessity of having two household incomes.

Finally, our indicator of gendered cultural norms did not account for cross-national variation in the MMWP. Although there is evidence that cultural norms shape intra-household specialization (Fuwa, 2004), we do not find any implications for the MMWP. Note, however, that our chosen indicator, which enquired into whether "husband

and wife should both contribute to income”, has its limitations. Agreement need not necessarily imply that the respondent feels that spouses should be equally responsible for income generation. Given that we find a negative association between the Gender Empowerment Measure and the MMWP, we cannot disregard the importance of gender differences at the societal level.

Apart from the possible shortcomings in our measurements, the current paper has other limitations that warrant mentioning. Although we included several individual and country level control variables in our analyses, selection into marriage may still play a role in our results. Also, we cannot entirely account for reverse causality between marriage and earnings. Longitudinal data would better account for these issues. Unfortunately, longitudinal data on a large number of countries are not available as yet. Alternatively, instrumental variables are generally considered a good procedure to account for endogeneity in cross-sectional studies. Recent research on the MMWP suggests, however, that models including instrumental variables do not lead to substantively different results (Maasoumi, Millimet, & Sarkar, 2009). Nevertheless, our results should be interpreted with some caution. Another issue concerns our inability to disentangle marriage from cohabitation. As the literature suggests that cohabiting men earn a lower earnings premium (Mamun, 2012), we may be underestimating the MMWP by combining cohabiting and married men in the same group.

In spite of these limitations, the current paper advances the state of knowledge on the MMWP. Most importantly, we show that studying the MMWP from a single-country perspective obscures influential structuring conditions. The country context shapes the pressure for men to be breadwinners, which we argue is the key mechanism underlying the MMWP. We provide evidence for at least two influential factors (gender empowerment and the divorce rate) that contour the inequality in earnings between married and unmarried men.

CHAPTER 3

The marriage-health nexus: examining selection and causation in and across 30 countries⁴

⁴ This chapter is co-authored by Renske Keizer and Pearl Dykstra and a slightly different version is currently under review at an international peer reviewed journal. An earlier version of this paper was presented at the annual meeting of sociologists from the Netherlands and Flanders in 2015 in Amsterdam.

3.1 Introduction

Married individuals have better self-reported health and lower mortality rates; they are also less likely to be diagnosed with cancer or to suffer a heart attack compared with their unmarried counterparts (Kiecolt-Glaser & Newton, 2001). The literature examining the link between marital status and health has focused on two types of explanations that involve either causation or selection. The explanations focusing on causation suggest that marital status somehow affects people's health. Those concentrating on selection argue instead that health (partially) determines marital status or that the association is spurious, resulting from other unaccounted factors. Causation and selection arguments have been employed at the individual level to explain why married people are better off and why divorced and widowed people are worse off (Ross et al., 1990). At the country level, similar rationales have been employed to explain why the relation between marital status and health differs according to a country's marital status composition (Huijts & Kraaykamp, 2011a).

At the individual level, scholars have so far been unable to fully disentangle empirically whether and to what extent causation and selection are driving the relation between marital status and health. Earlier studies often used cross-sectional data which made it difficult to account for the role of selection (Ribar, 2004). Although more recent research has accounted for selection, it has not been able to pinpoint the causal mechanism at work due to restrictions on their data (Amato, 2015; Musick & Bumpass, 2012), or have had a limited scope (Mastekaasa, 2006; Soons & Liefbroer, 2008).

The question whether selection or causation is the driving force behind the link between marital status composition at the country level and marital status differences in health at the individual level also remains unanswered. Researchers have relied solely on cross-sectional data, which provide only limited opportunities to account for – or test the role of – selection (Hu & Goldman, 1990; Huijts & Kraaykamp, 2011a; Kalmijn, 2010; Stack & Eshleman, 1998).

In the current paper we aim to shed light on both debates. We make our contributions by comparing the results of random and fixed effects models, which we use to analyze panel data from 30 countries from the European Union Statistics on Income and Living Conditions (EU-SILC). Fixed effects models are generally viewed as the best method to account for selection effects, because they only consider changes within people. Random effects, at least when used with panel data, employ both differences between and changes within people and therefore do not account for selection effects beyond the inclusion of confounding covariates. Comparing the results of both types of models allows us to determine the extent to which there is a causal relation between marital status and health at the individual level, what this causal relation entails, and to what extent the relation reflects selection. It also allows us to determine whether cross-national variations in the

association between marital status and health are due to a causal effect of marital status composition or due to cross-national differences in selection.

3.2 Background

3.2.1 Micro-level: selection vs. causation

Research on the association between marital status and health dates back more than a century: the United States Census offices started reporting differentials in mortality rates by marital status in 1890 (Klebb, 1970). Three approaches have been developed to explain why marital status and health are related.

The first approach revolves around resources that marriage is said to provide. These resources lead to social psychological and economic advantages. On the social side, spouses monitor each other's health and encourage healthy behavior (Umberson, 1987). Furthermore, the stability associated with marriage and the knowledge that another adult cares about you, have both been linked to a lower level of stress and a general sense of security (Kiecolt-Glaser & Newton, 2001). On the economic side, married individuals have higher household income and couples can benefit from economies of scale (Waite & Gallagher, 2000), which allow them to spend more on health related expenses (Grossman, 1972).

The stress perspective emphasizes the detrimental consequences of marital dissolution rather than a beneficial effect of marriage. It suggests that the strains of marital dissolution undermine the health of the divorced and the widowed (Amato & Booth, 1991; Williams et al., 1992). Marital dissolution is linked to health through psychological as well as economic consequences (Kitson & Morgan, 1990); the latter resulting from the loss of financial resources.

Finally, the selection perspective suggests that an association between marital status and health exists because healthier people are also more likely to get and stay married and less likely to get divorced or become widowed. The association may also be spurious, if factors which affect both marital status and health are not accounted for. Examples of such factors are height, weight, temperament and anti-social behavior (Fu & Goldman, 1996).

The empirical literature on the link between marital status and health is vast, covering different outcomes including measures of psychological and physical health. In a comprehensive review, Ribar (2004) concluded that there is evidence supporting each of the three approaches. However, Ribar was cautious in making strong claims, as he argued that the bulk of the research had not adequately accounted for the confounding influence of selection. The majority of the studies which Ribar reviewed made use of cross-sectional data and methods. As a result, a more definitive answer to the question

to what extent each of the mechanisms contributes to the marital status differences in health still needs to be provided.

Recent studies that have employed longitudinal data in combination with fixed effects models have produced tentative evidence for each of the three theoretical perspectives. In Norway, Mastekaasa (2006) found no evidence that a transition into marriage (or cohabitation) was related to less psychological distress. In line with the stress perspective however, a transition out of marriage was found to be related to greater distress. The study was limited in scope in terms of the time period as well as the people it studied as it followed students from a university in Oslo over three years. This limited scope hinders generalization of the results to other contexts. In the Netherlands, transitions into and out of marriage were respectively found to be related to greater and lesser life satisfaction (Soons, Liefbroer, & Kalmijn, 2009). Using US data and assessing a range of different measures including happiness, depressive symptoms and self-assessed health, Musick and Bumpass (2012) found that a transition into marriage or cohabitation was related to modest health improvements. However, as the singles in this study included never married as well as divorced and widowed individuals, it is not clear whether these findings support the resources or stress perspective, or both. Amato's (2015) study in the US has similar results, although again the effects found in this study could not be attributed to one specific theoretical perspective (resources or stress). Another drawback of the previous research is that none of the studies have undertaken efforts to assess the size of the selection effect. Instead, they have focused on accounting for it as well as possible by using fixed effects models.

3.2.2 Macro-level: differences in selection vs. differences in causation

At the macro-level, scholars have based explanations for cross-national differences in the relation between marital status and health on variations in marital status composition (Hu & Goldman, 1990; Huijts & Kraaykamp, 2011a; Kalmijn, 2010; Stack & Eshleman, 1998). Marital status composition might shape the relation between marital status and health in three ways. A first line of reasoning suggests that in countries with a larger proportion of married individuals the size and strength of social networks is smaller, the so-called *greedy marriage hypothesis* (Gerstel & Sarkisian, 2006). This would suggest that the health gap between married and unmarried individuals is larger in countries with a larger proportion of married individuals. In contrast, a second line of reasoning argues that in countries with a larger proportion of married individuals the size and strength of social networks is greater, the *support networks (generous marriage) hypothesis* (Kravdal, 2007). Consequently, this would mean that the health gap between married and unmarried individuals is smaller in countries with a larger proportion of married individuals. A third line of reasoning suggests that, regardless of the proportion of married individuals, a higher proportion of people in the same marital status may

provide a social network for people to fall back on, this is termed the *peer group support hypothesis* (Huijts & Kraaykamp, 2011a). The health gap between the married and for instance the divorced individual, could then be expected to be smaller in countries with a greater proportion of divorced people. As discussed above, at the individual level the resources perspective holds that married individuals are better off partly because they have more social support, in the form of their spouse, than unmarried individuals. Each of the hypotheses at the country level suggests that marital status composition somehow affects the social networks available to unmarried people, thereby altering the individual level health advantage of being married compared to not being married. In other words, the hypotheses at the country level suggest that marital status composition affects the causal mechanism at the individual level.

Another line of reasoning is that the moderating effect of marital status composition on the relation between marital status and health reflects differences in selection processes across countries (Huijts & Kraaykamp, 2011a). A high proportion of married persons in a country might signal lesser health selectivity into marriage and greater selectivity in those who remain unmarried, as only those with the least favorable characteristics will remain unmarried. Similarly, a higher proportion of divorced people may reflect a more selective group that remains married and a less selective group that get divorced. This line of reasoning suggests that marital status composition does not actually affect the health gap associated with marital status, but rather that it reflects differences in selection at the individual level.

The studies examining cross-national differences in the relation between marital status and health have provided tentative support for the peer group support hypothesis (Hu & Goldman, 1990; Kalmijn, 2010), the greedy marriage hypothesis (Huijts & Kraaykamp, 2011a) and the selection hypothesis (Huijts & Kraaykamp, 2011a; Stack & Eshleman, 1998). All of these studies have employed cross-sectional data and methods, however, making it impossible to truly separate differences in selection from the three hypotheses involving causal mechanisms that have been proposed. Furthermore, recent evidence suggests that the methods employed by two of the previous studies (Huijts & Kraaykamp, 2011a; Kalmijn, 2010) may have produced biased results, leading to incorrect conclusions (Schmidt-Catran & Fairbrother, 2015). These studies, which employed multilevel regression models, did not adequately account for the nested structure of their data. Rather, a cross-classified modeling approach should have been used, where respondents are nested in year, country and country-year. The possibility exists that the conclusions that the authors drew concerning the role of marital status composition in shaping marital status health differentials, i.e. in favor of the peer group support hypothesis (Kalmijn, 2010), the greedy marriage hypothesis and the selection hypothesis (Huijts & Kraaykamp, 2011a), are incorrect.

3.3 Present study

In the present study we examine the relation between marital status and health by employing both random and fixed effects models. Comparing the results of these models, we are able to disentangle the role that selection and causation play. In our analyses, we also distinguish between singles who have never been married and those who have been married before. In doing so, we can determine whether health differences between singles and married individuals reflect marital resources or the strains of marital dissolution. Employing fixed effects models in a cross-national comparative context, we are also able to determine the extent to which variations in the relation between marital status and health are due to differences in selection, reflected in marital status composition, or whether there are differences in causal mechanisms as a result of variations in marital status composition. Although we have not explicitly addressed unmarried cohabitation above, there is compelling evidence that cohabitation is also associated with health benefits. However, we consider cohabiting and married individuals separately as cohabitation is generally found to be related to smaller benefits (e.g., Soons & Kalmijn, 2009).

3.4 Data

We use panel data from the European Union Statistics on Income and Living Conditions (EU-SILC). The data we use span the years 2003 to 2012 and include information from 30 countries. Data collection took place every year and respondents were interviewed 4 times. Each year, a quarter of the sample was refreshed. In France and in Norway respondents were interviewed for a period of 8 and 9 years respectively, instead of 4. In Luxembourg, there is no rotational scheme and the data consist of a true panel. Our sample includes all respondents who were between ages 25 and 75 at the time of their first interview. Respondents below 25 usually still live in the parental home and may not have completed their education. People over 75 were not included because these are a highly selective group of relatively healthy people (Huijts & Kraaykamp, 2011a), and all the more so given that the EU-SILC only samples respondents outside of institutionalized settings.

Our dependent variable is self-rated health, measured in each of the waves. It is a widely used health indicator that has consistently proven to be a good predictor of objective health measures, such as all-cause mortality (DeSalvo, Bloser, Reynolds, He, & Muntner, 2006; Kennedy, 2001; Walker, Maxwell, Hogan, & Ebly, 2004; Wilcox, Kasl, & Idler, 1996). The variable is measured with a single question: “*How is your health in general?*” with answer categories 1 = *very good*, 2 = *good*, 3 = *fair*, 4 = *bad*, and 5 = *very bad*. The answers were recoded so that a higher score represents better health.

The main independent variable is marital status at each of the waves. Marital status included five categories: never married, cohabiting, married, divorced/separated and widowed. The marital status variable is constructed by using two variables from the data: legal marital status and a question indicating whether people are in a consensual union. The cohabiting and married categories also include those individuals in a second or third (or higher order) union. Unfortunately there is no way to discern these in the data, aside from determining those who cohabit or marry for the first time (see Table 3.1).

TABLE 3.1. Descriptive statistics for the analytical sample.

Variable	Mean / %	SD	Range
<i>Respondent characteristics (N = 708,159)</i>			
Mean age at first observation	47.66		
Marital status transitions over the course of the data collection			
Cohabiting	3.5%		
First cohabitation	0.2%		
Married	23%		
First marriage	0.1%		
Divorce/Separation during survey	3%		
Widowed during survey	3%		
Mean observations per person	2.8		
<i>Person-year observations (N = 1,998,119)</i>			
Dependent variable			
Health	2.71	0.94	0-4
Independent variables			
Marital status			
Single, never married	15%		
Cohabiting	7%		
Married	65%		
Single, divorced/separated	7%		
Single, widowed	6%		
Age	49.20	13.78	25-75
Employed	56%		
Number of household members	3.01	1.40	1-10
Educational attainment			
Pre-primary education	1%		
Primary education	14%		
Lower secondary education	17%		
Upper secondary education	42%		
Post-secondary education	4%		
Tertiary education	22%		

We include several control variables to account for health confounders that are time-variant. Age is measured in years. Education level is based on ISCED coding and measured as an ordinal variable with six levels ranging from 1 = *Pre-primary education* to 6 = *Tertiary education*. Five dummies are included in the analyses for education level, with the lowest level as the reference category. We also include a measure of the number of household members and a dummy indicating whether someone was employed or not.

Table 3.1 provides descriptive statistics for the sample we use in the analyses.

3.4.1 Analytical method

We employ linear multilevel regression analyses. Ordinary regression analyses are inappropriate given the nested structure of the data, with years nested in individuals and individuals nested in countries. We estimate both random effects models and fixed effects models. In random effects models, the estimated health effect associated with marital status is made up of differences between as well as changes within individuals, while in fixed effects models only changes within individuals are taken into account. Fixed effects models cannot be estimated with random country intercepts as country is a time-invariant characteristic. Therefore we account for the nested structure in countries by clustering standard errors across countries, as others have done (see for example: Abendroth, Huffman, & Treas, 2014). We also run models separately for each of the countries in order to examine country differences in random and fixed effects models and to determine whether cross-national variations reflect differences in selection or whether there is evidence that marital status composition affects the causal mechanism at the individual level.

3.5 Results

Table 3.2 shows the results of the random and the fixed effects model, estimating the effect of different marital statuses on health with never married as the reference category for cohabiting and married, and married as the reference category for divorced/separated and widowed⁵. The random effects model shows a health advantage of 0.07 for married individuals over those who have never been married. Cohabiting individuals seem to have a somewhat smaller health advantage of 0.03, which is only marginally significant ($p < 0.10$). Those who are divorced/separated or widowed respectively have a health disadvantage of 0.14 and 0.18 compared to those who are married. Considering the scale (0-4) and the standard deviation (0.94) of the health measure, the magnitude of the effects is rather small.

⁵ In order to obtain estimates with two different reference categories, the models are run twice.

In the fixed effects model, the health advantage of the married, which can be interpreted here as the health difference that is related to a transition into marriage, is not significant and neither is the health advantage of a transition into cohabitation. Transitioning from marriage into divorce (or separation) is also unrelated to health and a transition to widowhood is related to a decrease in health of 0.07.

TABLE 3.2. Random and fixed effects models estimating the association between marital status and health.

	RE	FE
<i>Ref.: Never married</i>		
Cohabiting	0.034 ⁺ (0.019)	-0.010 (0.010)
Married	0.073 ⁺ (0.014)	0.007 (0.013)
<i>Ref.: Married</i>		
Divorced/separated	-0.142 [*] (0.020)	-0.016 (0.012)
Widowed	-0.178 [*] (0.016)	-0.068 [*] (0.016)
Age	-0.022 [*] (0.001)	-0.026 [*] (0.002)
Employed	0.220 [*] (0.020)	0.085 [*] (0.014)
Number of household members	-0.006 (0.004)	0.009 [*] (0.002)
<i>Ref.: Pre-primary education</i>		
Primary education	0.160 [*] (0.037)	0.042 [*] (0.013)
Lower secondary education	0.236 [*] (0.057)	0.104 [*] (0.033)
Upper secondary education	0.300 [*] (0.054)	0.167 [*] (0.045)
Post-secondary education	0.326 [*] (0.072)	0.175 [*] (0.047)
Tertiary education	0.516 [*] (0.049)	0.234 [*] (0.065)
Constant	3.347 [*] (0.091)	3.744 [*] (0.106)
Observations	1998119	1998119

RE = Random effects. FE = Fixed effects. Standard errors in parentheses. ⁺ $p < 0.10$, ^{*} $p < 0.05$

3.5.1 Cross-national variation

In order to more closely examine individual countries and how the relation between marital status and health differs across them, we estimate the random and fixed effects models separately in each of the countries. Figure 3.1 plots the health advantage for married individuals from the random effects models and the health difference related to a transition to marriage from the fixed effects models, compared to never married individuals, for each of the countries. The results from the random effects models are plotted from lowest to highest health advantage. Figure 3.2 plots the health disadvantage for divorced/separated individuals, compared to married individuals, and Figure 3.3 plots the health disadvantage for widowed individuals.

Figure 3.1 shows that there is considerable cross-national variation in the health advantage associated with marriage if we look at the random effects model. The health difference between married and never married individuals ranges from below 0 in Romania to about .17 in Malta. The differences between the results of the random and the fixed effects models show to what extent the health differential is based on a selection effect in each of the countries. In almost all countries, the health differential is substantially decreased in the fixed effect model. Only three countries (i.e. Slovakia, Lithuania and Portugal) appear to have a significant health advantage associated with the transition from never married to married. In Bulgaria, Finland and Belgium there seems to be a negative health effect associated with a transition into marriage.

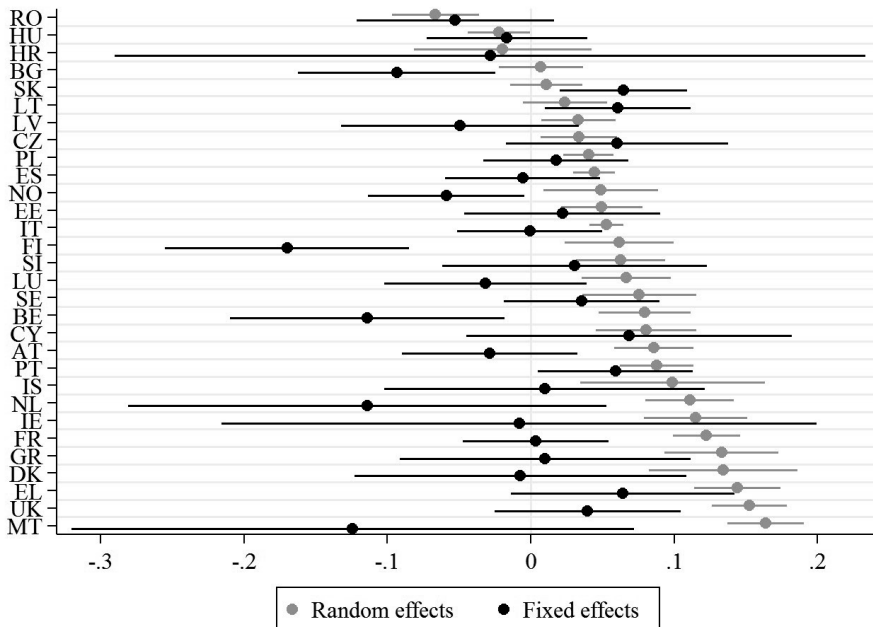


FIGURE 3.1. Random and fixed effects of marriage across countries (reference is never married).

Figure 3.2 and 3.3 show very similar results with respect to the health disadvantage of divorced/separated and widowed individuals compared to married individuals. In the random effects models, there is considerable cross-national variation in the health disadvantages of these groups. After accounting for selection effects using fixed effects models, a large part of these health disadvantages disappears. In many countries, the health disadvantages are rendered insignificant⁶.

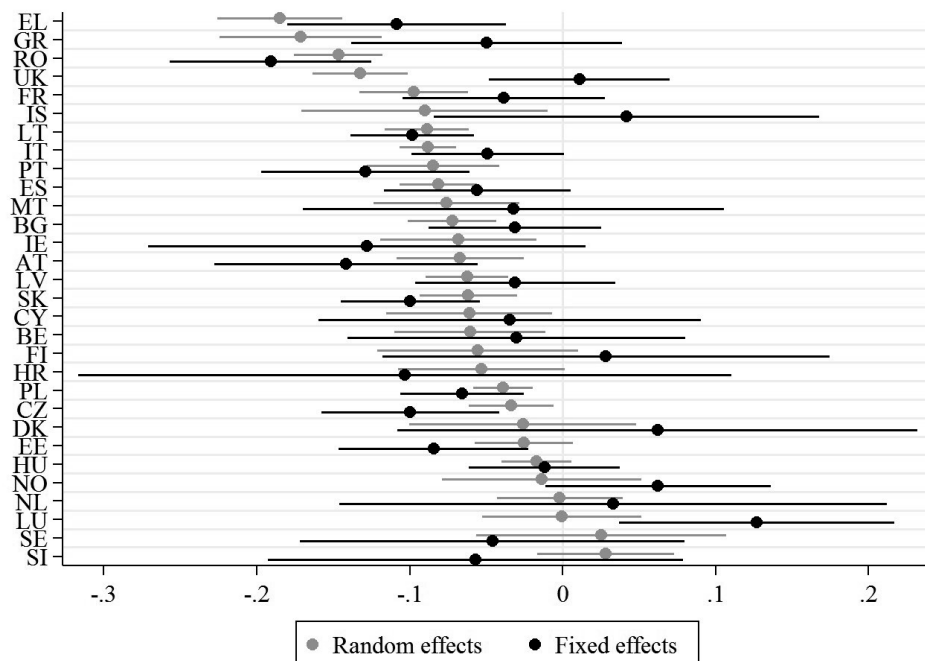


FIGURE 3.2. Random and fixed effects of widowhood across countries (reference is married).

⁶ Note however, that the confidence intervals are very wide for many of the countries examined. The reason for this, is that the results in the fixed effects models are necessarily only based on the data from those respondents who undergo a change in marital status, which is a comparatively small group. Therefore, the insignificance of the estimates is less informative and the main message to take away from these results is that the point estimate is generally considerably closer to zero in the fixed effects models.

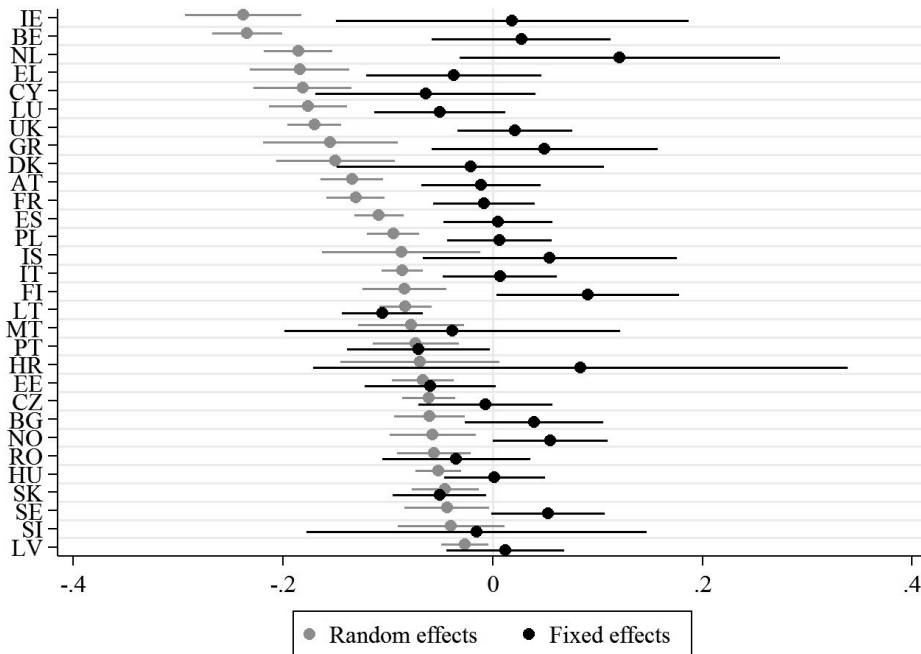


FIGURE 3.3. Random and fixed effects of divorce/separation across countries (reference is married).

3.6 Conclusion

In this chapter we set out to contribute to research on the relation between marital status and health in two ways. We aimed not only to disentangle causal and selection effects at the individual level, but also to determine whether (or to what extent) cross-national variations in the association between marital status and health reflect differences in selection or differences in causal mechanisms. We made these contributions by employing cross-national comparative longitudinal data from EU-SILC, which we analyzed using random and fixed effects models. Furthermore, by distinguishing between singles who have never been married and those who have gone through a marital dissolution we were able to separately test the viability of the resources (Umberson, 1987) and the stress perspective (Amato & Booth, 1991; Williams et al., 1992) respectively.

At the micro-level, the results of the random effects models *suggested* that the relation between marital status and health is a consequence of the beneficial effects of marital resources as well as the detrimental effect of marital dissolution. Marriage and cohabitation were related to better health compared to those who had never been married. Divorce and widowhood were related to worse health compared to those who were married. However, as we discussed, random effects models do not account for selection effects beyond the inclusion of several control variables. The results changed

markedly when we estimated fixed effects models, which account for all unobserved time invariant differences between people and therefore account for selection almost entirely. A transition from the never married state to being married was not related to a change in health. This means that we do not find evidence for the resources perspective. Marital dissolution, in the form of divorce or widowhood, was related to decreased health, although the effects were smaller than those found in the random effects models. Our results therefore indicate that selection plays an important role in the relation between marital status and health. It entirely explains differences in health between never married and married individuals and it explains a large part of the differences in health between married people and divorced and widowed people⁷. The only causal link between marital status and health therefore seems to be the result of the strains associated with marital dissolution. Our findings are similar to those found in Norway among university students (Mastekaasa, 2006). As mentioned above, several US studies found that singles, including those who were never married and those who had experienced a marital dissolution, who made the transition to marriage experienced an increase in health (Amato, 2015; Musick & Bumpass, 2012). Considering our findings, the results of the studies in the US may reflect the strains of marital dissolution that a proportion of the singles in their samples had suffered.

At the macro-level, the results of the random effects models show substantial variation in the association between marital status and health across countries. This is in line with the results of earlier research, which employed cross-sectional data and methods (e.g., Huijts & Kraaykamp, 2011). After accounting for selection using fixed effects models, there was a drastic reduction in the health differentials associated with marital status, as well as in the overall cross-national variation. We therefore conclude that the majority of the cross-national variation reflects selection processes. There are, however, also cross-national differences in the strength of the causal mechanisms linking marital status and health. In some countries, e.g., Slovakia and Lithuania, a transition to marriage is related to (greater) health improvements, while in most countries there is no relation at all. The same is true for the effect of marital dissolution. We did not examine whether the remaining cross-national differences in the causal impact of marital status on health was related to national marital status composition. It is unlikely that such a relation would be found, given the fact that there was so little variation across the countries.

It is beyond the scope of this study to examine why selection effects are stronger in some countries than in others. Speculating on explanations for differences in selection across countries, we identify one possibility. One might for instance expect that selection

⁷ This indicates that those who are less healthy are more likely to get divorced or widowed and it may also indicate that unhealthier individuals are less likely to remarry (Umberson, Wortman, & Kessler, 1992).

into and out of marriage based on health would be more stringent in a country where healthcare is less accessible and where being unhealthy is therefore a greater risk.

The current study has several limitations that warrant mentioning here. Although fixed effects models account for unobserved time invariant differences between people, they do not account for time varying characteristics. Possibly there are factors which change over time that affect both marital status and health, such as a person's social network. Although we have included several time-varying control variables, the EU-SILC dataset unfortunately does not include sufficient measures to address this issue entirely. It should also be noted that there is strong evidence that a "bad" marriage is worse for people's health than a "good" divorce (Hawkins & Booth, 2005; Umberson, Williams, Powers, Liu, & Needham, 2006). The EU-SILC does not include measures of relationship quality, therefore we cannot explore this issue. Our results only give an indication of what the average effect is across people; there may be some who become healthier following divorce or for that matter unhealthier following marriage. Furthermore, we have not touched upon gender differences in this chapter. There is evidence suggesting that the marital status health gap differs for men and women (Kiecolt-Glaser & Newton, 2001). Specifically, marriage might benefit men more than it does women. Finally, (most) respondents in this study are followed over only a four year period, which should be taken into account. This means that we do not have extensive information on how people's health develops following a transition in marital status. It could be that we are not finding evidence for the marital resources perspective because their benefits occur after a longer period of time.

The answer to the question posed in the introduction whether the association between marital status and health is due to causal or selection effects seems to be: mostly selection. This is a valuable insight to policymakers, some of whom believe that marriage should be actively encouraged to improve the health of the population (Waite & Gallagher, 2000). Instead of encouraging people to get married, effective policies should aim to prevent marital dissolution and relieve the strains associated with it.

CHAPTER 4

The influence of motherhood on income: do partner characteristics and parity matter?⁸

⁸ This chapter is co-authored by Renske Keizer and Pearl Dykstra and a slightly different version is published as: De Hoon, S., Keizer, R. & Dykstra, P.A. (2016). The influence of motherhood on income: do partner characteristics and parity matter? *Community, Work & Family*.

4.1 Introduction

Despite marked improvements over the past decades, women's economic independence in the Netherlands and elsewhere continues to lag far behind men's (Merens & van den Brakel, 2014; Weichselbaumer & Winter-Ebmer, 2005). The negative consequences of motherhood contribute heavily to women's enduring lower income. Although quite a few studies have examined why motherhood is detrimental to women's earnings – showing that it is the result of reduced labor force participation, fewer working hours and lower hourly wages (e.g., Sigle-Rushton & Waldfogel, 2007; Winslow-Bowe, 2006) – surprisingly little research has examined factors that mitigate or aggravate the earnings disadvantage of mothers (for a review, see Gough & Noonan, 2013).

This chapter contributes to the literature by investigating how characteristics of the male partner and the number of children a woman has affect the earnings disadvantage of mothers. Previous studies have investigated to what extent partner characteristics affect women's involvement in paid work, and therefore their earnings (Bernasco et al., 1998; Bianchi & Milkie, 2010; Thompson & Walker, 1989). Although researchers have suggested that partner characteristics, such as partner's earnings, may also affect linkages between motherhood and women's income, their ideas have not yet been put to the test (Anderson, Binder, & Krause, 2003; Budig & England, 2001; Budig & Hodges, 2010). For example, Budig and Hodges (2010) suggest that for women higher in the earnings distribution motherhood may have a smaller effect on their income due to favorable characteristics of their partner. Therefore, the first contribution the current study makes to the literature is to explicitly address how partner characteristics shape the relation between motherhood and women's earnings. In particular, we focus on the partner's time availability by means of his work hours (e.g., Blood & Wolfe, 1960; Kamo, 1988), his financial resources (e.g., Greenstein, 1996), and his gender role orientations (e.g., Thompson & Walker, 1989) given their importance for the division of tasks in the household, which in turn is associated with the amount of time women spend on the labor market and ultimately their earnings.

A second contribution to the literature is that we focus on parity. Previous research has either examined the earnings of mothers versus those of childless women (Budig et al., 2012), or scholars have assumed that each additional child has the same detrimental consequences for a woman's earnings (Budig & England, 2001). We question this assumption, arguing that the reduction in income after a second or third child is less pronounced, as major adjustments to employment mostly take place following the birth of the first child. A recent study on occupational attainment following motherhood is in line with the notion that the transition to motherhood is the crucial factor, not the arrival of subsequent children (Abendroth et al., 2014).

The two research questions that guide this study are therefore the following: First, to what extent do partner characteristics affect the negative relation between motherhood and women's earnings? Second, to what extent is the relation between motherhood and women's earnings affected by parity? In order to test our hypotheses, we use data from the first three waves of the Netherlands Kinship Panel Study (NKPS) (De Bruijn et al., 2012), which followed a representative sample of the Dutch population between 2002 and 2011. These data are especially well suited for the purpose of this study, as the longitudinal nature allows us to look at how changes in earnings are related to changes in parity over time. As is customary in the literature on the effect of motherhood on wages and earnings (e.g., Waldfogel, 1997), we use fixed effects models. These models account for unobserved heterogeneity and only utilize within-person variation, i.e. changes over time within an individual or couple. The data are multi-actor, with detailed information gained from both respondents and their partners.

4.2 The Dutch context

Our study is situated in the Netherlands, a country with several distinct characteristics that structure women's investment in paid work. Dutch society was long characterized by a male bread-winner model and until the 1960s working (married) women were the exception rather than the rule (Plantenga, Schippers, & Siegers, 1999). Although the Netherlands now has one of the highest female labor force participation rates among OECD countries (OECD, 2012), relatively few women work full-time. In fact, the Netherlands has the highest proportion of part-time employed women (and men). This means that, while female labor market participation is high, the average number of hours worked by women is actually lower than in many other countries. Dutch workers enjoy relatively greater flexibility in working hours than those in other countries as a result of legislation that gives individuals the right to increase or decrease their working hours (Yerkes, 2013). The current situation in the Netherlands can best be described as a one-and-a-half earner model (Plantenga, 2002). The 'half' generally refers to the contribution of the woman to household income. Even though most Dutch women work, the division of labor at home remains strongly influenced by traditional ideas about women's role. The majority of Dutch mothers believes children should be taken care of by their parents rather than childcare professionals (Portegijs, Cloin, Oom, & Eggink, 2006). Compared to the Nordic countries where more than 70 percent of all respondents approves of a young mother working full-time, only 30 percent of Dutch respondents approves this situation (Saraceno, 2011). These opinions are reflected in the comparatively low full-time childcare usage rate in the Netherlands: only 6% of children aged 0-3 (Mills et al., 2014). The low usage rate is most likely also driven by the high

childcare costs in the Netherlands, that result from relatively low government childcare expenditure (Noailly & Visser, 2009). Furthermore, women take on the majority of the childcare duties at home. In fact, The Fatherhood Report (The Fatherhood Institute, 2010) showed that for each hour a mother takes care of her children in the Netherlands, the father only spends 27 minutes with them. Fathers in all OECD countries, with the exception of Austrian fathers, were relatively more involved than Dutch fathers. The highly gendered distribution of childcare responsibilities is institutionalized in the Netherlands in the available paternity leave. While mothers are entitled to 12 weeks paid leave after the birth of a child, Dutch fathers can only take two days fully paid leave, far less than the leave available in countries like Spain (15 days), Finland (18) and Norway (60) (Huerta et al., 2013; Moss, 2013).

Taken together, these characteristics suggest that in the Dutch context motherhood strongly affects women's investment in paid work and thus their income. Indeed the earnings disadvantage seems to be among the largest compared to other developed countries, with estimates of a gross difference of as much as 50% annually, between women with and without children (Budig et al., 2012). In a country with such a large earnings differential between mothers and childless women, where men on average take on relatively little responsibility for childcare, contributions of the male partners that do provide assistance could make a substantial difference. Therefore it is an interesting context for the current study.

4.3 Partner characteristics

The first aim of this chapter is to examine how a partner may mitigate the negative effect that motherhood has on women's earnings. In order to answer this question, we start by considering why motherhood is negatively related to women's earnings in the first place. Following the birth of a child, mothers often cut back their working hours or quit working all together. Over time, the lower accumulation of experience resulting from unemployment and/or working fewer hours results in lower hourly wages (Sigle-Rushton & Waldfogel, 2007). Furthermore, there is some evidence suggesting discrimination against mothers (Correll, Benard, & Paik, 2013), resulting in higher levels of unemployment, shorter work weeks, and lower hourly wages. As discrimination is very difficult to examine with the research design we use, we focus on factors that influence the adjustments that mothers themselves make to their labor force participation after having made the transition to parenthood. Although outsourcing all childcare tasks to professionals is an alternative to cutting back working hours, Dutch parents are reluctant to do so (De Ruijter, 2005). Of interest to us is therefore whether there are circumstances that make fathers more likely to contribute to childcare and domestic labor and thereby mitigate the negative association between motherhood and women's earnings.

The time availability perspective (Blood & Wolfe, 1960; Kamo, 1988) suggests that the performance of domestic labor tasks is inversely related to the time spent on the labor market, and especially so for men (Presland & Antill, 1987). This suggests that a male partner who works fewer hours will take on more domestic labor tasks after the birth of a child, enabling a smaller decrease in the mother's working hours and ultimately her earnings. We therefore hypothesize that motherhood affects a woman's earnings less negatively among women with a partner who works fewer hours (H1).

The partner's financial contributions to the household may affect a mother's involvement in paid work in two ways. The relative resources perspective (e.g., Greenstein, 1996) suggests that a partner with lower earnings has less bargaining power to avoid doing domestic labor. A lower earning partner can therefore be expected to (have to) take on more domestic labor, enabling the woman to work more hours. At the same time, a lower earning partner may necessitate a woman to work more hours in order to make ends meet financially (Bernasco et al., 1998). Both mechanisms lead to the same hypothesis, namely that lower earnings on the part of the partner reduce the negative effect of motherhood on women's earnings (H2).

The partner's personal convictions, and more specifically his beliefs about gender roles (e.g., Hiller, 1984; Thompson & Walker, 1989) may also play an important role in mitigating the negative consequences that motherhood has for women's earnings. A partner with less traditional gender role attitudes is more likely to contribute to domestic labor enabling her to work more (Kaufman & Bernhardt, 2014). As the woman's own gender role attitudes will probably also affect the relation between motherhood and earnings, these must be accounted for. We therefore hypothesize that, accounting for a woman's own gender role attitudes, having a less traditional partner will mitigate the negative relation between motherhood and earnings (H3).

4.4 Parity

There are several reasons to assume that major adjustments in employment are more likely to occur following the transition to motherhood than following the birth of an additional child. First, a mother can combine certain childcare tasks when an additional child is born, reaping benefits of scale. One study suggests that mothers spend as much as 40% less time on a second child than on the first (Ekert-Jaffé, 2010). Second, from a financial point of view a second child puts additional strain on a household. Therefore, while a mother may be able to work fewer hours when she makes the transition to motherhood, she may not be able to afford to scale back her hours further when a second child is born. Accordingly, using data from the Dutch workforce survey, researchers from Statistics Netherlands (Bierings & Souren, 2011) showed that mothers reduce their

working hours most drastically following the birth of a first child. These considerations suggest that the transition to motherhood is more detrimental to women's earnings than the birth of a second (or third) child. Recent research on the relation between motherhood and occupational status supports this notion of a "declining penalty with parity" (Abendroth et al., 2014, p. 1003). We expect to find that in the Netherlands, the transition to motherhood is associated with a greater decrease in earnings than a second or higher order birth (H4).

4.5 Method

4.5.1 Respondents

In order to test our hypotheses, we use data from three waves of the Netherlands Kinship Panel Study (NKPS). The NKPS is a large scale panel survey that started in 2002 among a representative sample of adults between the ages of 18 and 79 residing in private households (De Bruijn et al., 2012). The data were collected using a combination of web -, telephone - and face-to-face interviews. The respondent's current partner was also asked to complete a short questionnaire.

In the first wave, 8,161 respondents filled out the questionnaire, of whom 6,091 participated in the second wave, and 4,390 did so in the third wave. This gives a total of 18,642 observations. Of these, 26% were excluded because there is no partner. We also exclude observations where a new partner is present, as we do not want to measure the possible effect of a partner change. This excludes a further 6% of the observations. We also excluded observations where women did not have a paid job either because they were unemployed or for instance retired (45%), or where the partner was not employed (6%) to avoid situations where one of the partners is responsible for the lion's share of the housework. Following the official definition of Statistics Netherlands, we define a respondent as employed when she or he performs at least 12 hours of paid labor per week. Information about the number of missing values on individual variables is presented below. The final sample consists of 3,831 observations from 2,005 couples.

4.5.2 Measures

Earnings are measured as the monthly income from paid labor reported by the women in each of the three waves. We suspected measurement error among 5% of observations where, considering their working hours, respondents reported earning less than 70% of minimum wage. These observations were therefore excluded. In addition, we excluded observations who were in the top 1 percentile of the earnings distribution, as they represent extreme outliers and in some cases possibly measurement error. In a further 10% of observations, earnings were not reported and these are also excluded. The

measure of monthly earnings was log transformed to account for the skewed distribution of the original values.

In order to measure our main independent variable, childbearing, we use three dummy variables indicating the presence of one child, two children or three or more children, with childless women as the reference category. In fixed-effects models, described in more detail below, only changes in variables over time are taken into account. A change in the number of children therefore indicates childbirth. We chose not to include a dummy for a higher number of children, as families with more than three children are highly uncommon (6%). There were no missing values on this variable.

The partner's gender role attitudes are measured by means of four items: "A women must quit her job when she becomes a mother", "It's unnatural if men in a business are supervised or managed by women", "It's more important for boys than it is for girls to be able to earn a living later in life", and "Working mothers put themselves first rather than their families" The answer categories ranged from 1 = strongly agree, to 5 = strongly disagree. The answers are recoded so that a higher score indicates that a partner is more traditional. Previous research has validated this scale and it has been used in earlier studies (De Jong & Liefbroer, 1998; Kalmijn, Bernasco, & Weesie, 1999). The Cronbach's alpha for the scale was .74. As we do not want to measure changes in attitudes of the partner which may occur after the birth of a child, we only take into account the attitudes of the partner in the first wave. The woman's gender role attitudes were measured using the same four questions as the partner's. For women, the responses to these questions also formed a reliable scale with a Cronbach's alpha of .73. As a result of partners not filling out the questionnaire, 22% of observations do not have information on this variable for the partner. Among women, 5% of observations had missing values on the gender role attitudes measure.

As the partners were not questioned on their work hours, we have the partner's working hours as reported by the woman in each of the waves. Unfortunately, this will undoubtedly introduce some error into the measure, but we have no reason to believe that this error will be related to our variables of interest. In the analyses, the values of this variable are divided by ten; therefore the reported coefficient is the effect of an increase of ten hours. There are no missing values on this variable.

The partner's earnings are also measured in each wave using information provided by the main respondent. The measure is constructed in the same way as monthly earnings for women, with the exception that it is not logged. In the analyses, the values of this variable are divided by 1000; therefore the reported coefficient can be interpreted as the effect of an increase of 1000 Euros. As with the women's earnings, there was a percentage of observations in which the partner's income did not seem to be measured correctly. For 9% of observations, earnings were below 70% of minimum wage or in the top 1 percent. These observations were excluded. In addition, 10% of the working partners did not report their income.

We include age, age squared and education level as control variables in the analyses. Age is usually found to be positively related to earnings, whereas the squared term generally has a negative relation to earnings (Mincer, 1974), together indicating a weakening positive relation. The level of educational attainment is measured on a 10-point scale, where 1 indicates a woman has no formal education and 10 indicates a woman has completed post-graduate education. There was a single observation with an unusually high age of 105 where measurement error was suspected and this observation was excluded. There were no other missing values for these variables.

Descriptive statistics for the variables used in the analyses are reported per wave in Table 4.1.

4.5.3 Analysis strategy

We use fixed-effects models to analyze the panel data from the NKPS. Fixed-effects models control for all unobserved time-invariant individual heterogeneity. This means that differences between individuals which do not vary over time, such as biological differences, as well as selection bias, are controlled for. Only the within-subject variation in the variables is utilized in estimation, meaning the approach models how changes in the dependent variable are related to changes in the independent variable. Fixed-effects models are the standard in research on the effects of motherhood on women's earnings (e.g., Waldfogel, 1997) and the method is conceptually well-suited for our analyses, as we are interested in assessing the relation between changes in parity and the earnings of a woman. Results of a Hausman (1978) test confirm that the use of fixed-effects models is preferred to the use of random-effects models.

Our hypotheses concern the effect that partner characteristics have on the relation between parity and a woman's earnings. We therefore include a series of interactions between the dummy variables for the number of children and the partner characteristics. The interactions are entered into the models in several steps (Model 2: interaction between the number of children and the partner's working hours; Model 3: interaction between the number of children and the partner's earnings; Model 4: interaction between the partner's attitudes and the number of children). In each of the models assessing the effect of partner characteristics on the motherhood earnings disadvantage we also include interactions between the number of children and the woman's gender role attitudes, in order to account for confounding influences. The first model includes only the dummy variables for the number of children and the control variables. Given that the dependent variable is the log of monthly earnings, the exponent of the coefficients can be interpreted as the percentage change in monthly earnings associated with a change in the variable under consideration.

TABLE 4.1. Descriptive statistics for the variables used in the analyses, NKPS wave 1 – 3.

Variable ^a	Wave 1			Wave 2			Wave 3			Min.	Max.
	Mean/Proportion	SD	Mean/Proportion	SD	Mean/Proportion	SD	Mean/Proportion	SD			
Woman's monthly earnings (in €)	1256	608	1303	.45	7.07	612	1466	.46	7.20	646	4000
Woman's monthly earnings (logged)	7.03	.45	7.07	.45	7.07	.46	7.20	.44	7.20	.44	8.29
No children	.28	-	.17	-	.17	-	.10	-	.10	-	1
One child	.17	-	.16	-	.16	-	.12	-	.12	-	1
Two children	.38	-	.44	-	.44	-	.49	-	.49	-	1
Three or more children	.17	-	.23	-	.23	-	.29	-	.29	-	1
Partner's working hours ^b	42	8.3	41	8.3	41	8.4	41	8.3	41	8.3	60
Partner's monthly earnings ^c	2096	834	2181	834	2181	818	2393	827	2393	827	7000
Gender role attitudes of the partner	1.86	0.65	1.83	0.65	1.83	0.63	1.81	0.64	1.81	0.64	4.5
Gender role attitudes of the woman	1.58	0.57	1.56	0.57	1.56	0.56	1.56	0.57	1.56	0.57	4.5
Woman's age	39	9.2	42	9.2	42	8.5	45	8	45	8	67
Woman's education	6.7	1.9	6.8	1.9	6.8	1.9	6.9	1.9	6.9	1.9	10
N (<i>observations</i>)	1510		1344		1344		977		977		10

^aAll continuous variables are centered in the analyses. ^b Divided by 10 in the analyses. ^c Divided by 1000 in the analyses.

We should note that we interpret the results of the interaction effects as if the partner characteristics remain stable and the number of children increases. However, as is always the case, the interactions also reflect the effect in the situation where the number of children remains stable and partner characteristics change. Readers should keep this in mind.

4.6 Results

4.6.1 Descriptive

Table 4.1 shows descriptive results for the variables used in the analyses. In the first wave, 28% has no children, 17% has one child, 38% has two children and 17% has three or more children. Over the course of wave two and three about 15% of the women in our sample had one or more children. 13% of the women had their first child over the course of waves two and three. Partners work on average around 41 hours per week and earn about 2200 Euro's. The attitudes of the partner are on average not very traditional, scoring around 1.8 out of 5 and women are slightly less traditional.

For reasons of parsimony we do not discuss the direct effects of the partner characteristics on the women's monthly earnings below. However, the coefficients are reported in Table 4.2. Note that the direct effect of the gender role attitudes is not estimated, as gender role attitudes were only measured in the first wave and therefore do not change over waves.

4.6.2 Multivariate

The results of the first model indicate that the birth of a first child is on average related to a decrease in monthly earnings of about 24%. In order to ascertain the effect of the birth of a second child, we subtract the effect of a first birth from the effect of a second birth, because the reference category in both cases is the childless women. This reveals that the birth of a second child is related to a decrease in earnings of 5%. Additional analyses using those with one child as the reference category revealed that the effect of a second child is significant. A third birth is related to a decrease in earnings of 2%. Additional analyses reveal that the difference is only significant compared to having no children or one child. The effect of the birth of a third child is not significant compared to having two children. These results, illustrated in Figure 4.1, support our fourth hypothesis that the earnings disadvantage associated with motherhood declines with parity.

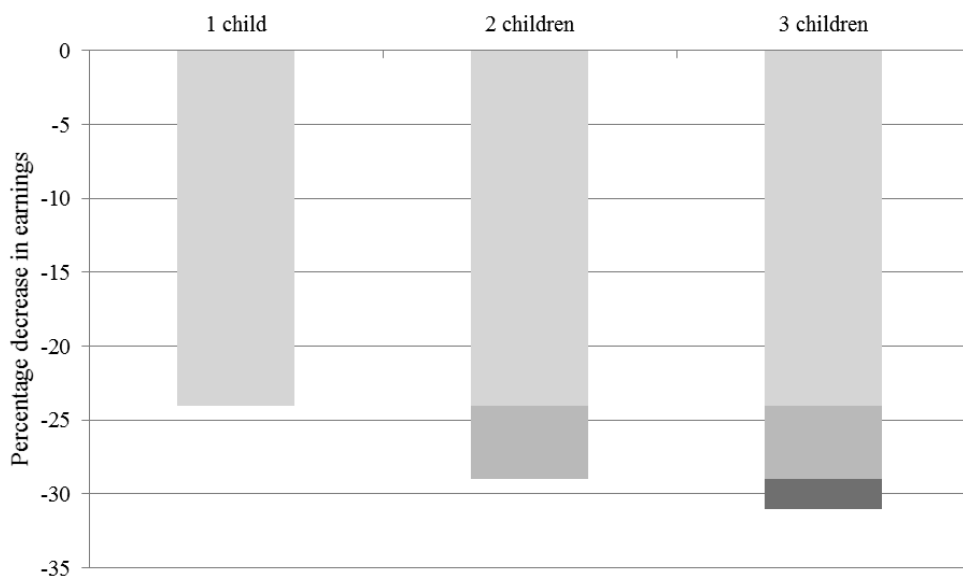


FIGURE 4.1. The separate and combined effect of the birth of a first, second and third child on a woman's earnings.

4.6.3 Partner characteristics

We expected that women with a partner who works fewer hours would have a smaller decrease in earnings following the birth of a child. The results of Model 2 in Table 4.2 show support for this expectation, but only with regard to the birth of a third child. For every ten hours that a partner works less (or more), the decrease in earnings associated with a third birth is about 6% smaller (or larger).

Our relative resources hypothesis stated that women with a lower earning partner would have a smaller decrease in earnings following the birth of a child. We do not find support for this expectation in the results of Model 3. The results remained the same in a specification where the interactions with partner's working hours were excluded. These findings contradict our hypothesis derived from the relative resources perspective.

Our third hypothesis posited that women with less traditional partners would get more help from their partners with domestic labor, resulting in a lower decrease in earnings associated with the birth of a child. The interactions between the dummies for the number of children and the partner's attitudes are not significant. A specification in which only the interaction with the partner's attitudes was estimated did not yield substantively different results. Therefore we find no support for our gender roles hypothesis.

Throughout Models 2, 3 and 4 we included an interaction between the number of children and the woman's gender role attitudes. The effects of these interactions are not reported in Table 4.2, but are available upon request. The woman's gender role attitudes

did not mitigate the effects of parity in any of the models. The results of all the models were also unaffected by excluding these interaction effects.

TABLE 4.2. Fixed effects regressions predicting changes in women's monthly earnings (logged).

	Model 1	Model 2	Model 3	Model 4
First birth	-0.268*** (0.026)	-0.264*** (0.027)	-0.265*** (0.029)	-0.266*** (0.029)
Second birth	-0.339*** (0.032)	-0.333*** (0.032)	-0.343*** (0.033)	-0.343*** (0.033)
Third birth	-0.373*** (0.043)	-0.369*** (0.043)	-0.387*** (0.043)	-0.387*** (0.043)
First birth X Partner's working hours		-0.009 (0.025)	-0.016 (0.026)	-0.016 (0.026)
Second birth X Partner's working hours		-0.021 (0.023)	-0.025 (0.023)	-0.026 (0.023)
Third birth X Partner's working hours		-0.060* (0.027)	-0.076** (0.028)	-0.075** (0.028)
First birth X Partner's earnings			0.013 (0.035)	0.012 (0.035)
Second birth X Partner's earnings			-0.004 (0.030)	-0.004 (0.030)
Third birth X Partner's earnings			0.027 (0.033)	0.027 (0.034)
First birth X Partner's gender role orientations				0.003 (0.044)
Second birth X Partner's gender role orientations				0.025 (0.047)
Third birth X Partner's gender role orientations				0.007 (0.064)
Partner's working hours		0.032 (0.019)	0.026 (0.019)	0.026 (0.019)
Partner's earnings			0.055 (0.028)	0.055 (0.028)
Constant	8.008*** (0.200)	7.978*** (0.203)	7.955*** (0.202)	7.959*** (0.202)
R-squared	0.201	0.205	0.218	0.218
N	3831	3831	3831	3831

Standard errors in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All models include: age, age squared, education level. Models 2-4 include interactions between childbirth dummies and woman's gender role attitudes.

4.6.4 Work, motherhood and the economic crisis

The first and second wave of the NKPS were collected prior to the global economic crisis that unfolded in 2008, the third wave was collected at the height of this crisis around 2010. It is very likely that the economic crisis has influenced women's decisions regarding both work and motherhood. In order to ascertain whether our results are affected by the economic context in which the data were collected, we ran additional models. In these models, we interacted a dummy variable indicating whether an observation was collected before 2008 or after, with the variables of interest in our analyses: parity and partner characteristics. The results (available upon request) suggested that the negative effect of childbirth on women's earnings was about 25% smaller during the economic crisis. This difference was roughly the same for the effect of a first, second and third birth, indicating that our findings with respect to parity are unaffected by the economic context. We did not find any substantive differences in the effects of partner characteristics either. One explanation why the negative effect of the birth of a child on women's earnings is smaller during economic downturn is that women are more reluctant to cut back their working hours because of the associated financial risks.

4.6.5 Additional analyses

As discussed, we only included observations in our analyses from those who were employed at the time of the interview. It is possible that this selection criterion affects our results with respect to the effect of partner characteristics on the motherhood penalty. In order to assess whether this is the case, we modeled unemployment (i.e. exclusion from the analyses) on the variables that are incorporated in our main models using logistic regression analyses. The results (available upon request) revealed that women who give birth, women who are older, who have relatively lower levels of education and who have more traditional attitudes are more likely to become unemployed. Furthermore, having a more traditional male partner was also related to a greater likelihood of becoming unemployed. However, we found no evidence that the effect of childbirth on unemployment is moderated by partner characteristics. This indicates that the results of our main models with respect to partner characteristics are not affected by our selection criterion.

4.7 Discussion

With this chapter, we aimed to contribute to the literature in two distinct ways. First, we explicitly examined whether characteristics of the partner affect the association between the birth of a child and a woman's earnings. Second, we studied how the effects of childbearing on women's earnings depend on parity. We hypothesized that having a

partner who worked fewer hours, who had lower earnings or who had less traditional attitudes, would mitigate the negative effect of motherhood on earnings. Furthermore, building on recent work (Abendroth et al., 2014), we expected to find that the negative effect of motherhood on earnings would decline with parity.

Our findings indicate that partner characteristics hardly matter for the effect that motherhood has on women's earnings. Neither the partner's earnings, nor his gender role attitudes affect the relation between motherhood and earnings. This suggests that, at least in the Netherlands, dynamics surrounding children and women's earnings do not seem to involve the relative resources (e.g., Greenstein, 1996) or the gender role attitudes (e.g., Thompson & Walker, 1989) of the partner. One explanation why the relative resources of the partner do not matter, may be that the division of childcare is not (or is less) the result of power struggles within a couple. The perspective is based on the notion that domestic labor is a nuisance which partners will try to avoid, and childcare may not be seen as a nuisance. Although the perspective is generally extended to include childcare (Deutsch, Lussier, & Servis, 1993), in the Netherlands the underlying mechanisms of the division of household duties and childcare tasks do not seem to be the same. There is some evidence both in the Netherlands (Poortman & Van Der Lippe, 2009) and in the United States (Ishii-Kuntz & Coltrane, 1992) that this is indeed the case.

A third perspective, time availability (e.g., Blood & Wolfe, 1960), does seem to matter, but only marginally. The partner's working hours mitigate the effect of motherhood only concerning the birth of a third child. A partner who works fewer hours may therefore enable a woman to remain more attached to the labor market following the birth of a third child, leading to a smaller decrease in earnings. By and large however, the effect of motherhood on women's earnings is remarkably independent of characteristics of the partner. This notion was further bolstered by additional analyses showing that partner's time spent on household labor (whether typically female or typically male tasks) and emotional support were both also unrelated to the effect of motherhood on women's earnings. In earlier work scholars suggested that women's own characteristics, such as being married (Budig & England, 2001), her position in the labor market earnings distribution (Budig & Hodges, 2010) and her level of educational attainment (Anderson et al., 2003), were partly representative of effects that the partner has. Our study does not support this point of view, at least not in the Netherlands. In case differences exist in the Netherlands in the effect of motherhood on women's earnings depending on for instance their position in the earnings distribution, this does not seem to be driven by characteristics of the partners of these women.

Our findings do provide strong evidence that parity matters when considering the effect of motherhood on a woman's earnings. A first child is more detrimental to women's earnings than a second or third child. In fact, a second child or third child hardly seems to affect women's earnings at all. Adjustments to women's employment

therefore indeed seem to be most drastic following the birth of first child (Abendroth et al., 2014). Our findings are also in line with data from Statistics Netherlands (Bierings & Souren, 2011), which showed that working hours are most strongly affected by the birth of a first child. There are several explanations for this finding. Mothers may benefit from economies of scale, or they may not be able to afford to cut back their working hours as additional children are born. Abendroth and colleagues (2014) also suggest that employer discrimination may be most pronounced following a first birth. Future research could aim to more fully comprehend why the effect of motherhood on earnings declines with childbirth. Whatever the mechanism may be, our study reiterates the importance of parity when it comes to examining the relation between motherhood and a woman's labor market outcomes.

There are several limitations to the current study. It should first be stressed that we only examine working couples. As discussed, this may lead to an underestimation of the motherhood penalty because we exclude women who quit working entirely following the birth of a child. We found evidence for this in additional analyses, which showed that childbirth was related to a greater likelihood of becoming unemployed. Results of the same analyses did suggest however, that the impact of childbirth on the likelihood of unemployment is not affected by characteristics of the partner. We also only focused on women with a partner in this study, while some women will bear children without a partner present. We do not address the effect that childbearing might have on these women's earnings. Furthermore, our selection of couples who remained together over the course of the three waves possibly introduced a bias towards couples with close relationships, which may have influenced the findings. In any case, the selection criteria we applied need be kept in mind when gauging the generalizability of our findings. Also, although our results suggests that the economic independence of women takes a considerable hit following the transition to motherhood, the effect need not necessarily persist over time. Earlier work has shown that the earnings gap between mothers and childless women seems to dissipate over time (Sigle-Rushton & Waldfogel, 2007).

Whether our findings are typical for the Netherlands, or whether they also pertain to other countries remains to be seen. The Netherlands has very flexible working hour arrangements compared to other countries, especially for women (Yerkes, 2013). Therefore one would expect to find effects of partner characteristics more easily in the Netherlands than in a country where working hours are more rigid. Future studies, preferably making use of cross-national dyadic data, should put this idea to the test in countries outside the Netherlands.

Despite its limitations, the current study has revealed that in a traditional context like the Netherlands, partner characteristics are of little influence on the negative association between motherhood and income. Parity, however, turned out to be of significant influence, with the transition to motherhood leading to the most substantial drop in income.

CHAPTER 5

**Examining the relation between part-time work and happiness
in dual-earner couples from a life course perspective:
incorporating individual, couple and country characteristics⁹**

⁹ This chapter is co-authored by Jack Lam and Renske Keizer and a slightly different version is currently under review at an international peer reviewed journal.

5.1 Introduction

Employment confers pecuniary and non-pecuniary benefits that enhance people's well-being (Winkelmann & Winkelmann, 1998). The income provided by employment is not the most important benefit however (Ibid.). Instead, paid work is rewarding in itself, giving people social status, social contacts and self-esteem, as well as structuring their daily life (e.g., Lane, 1992; Spencer, 2004). In light of the advantages of being employed, there is a consensus in the literature that unemployment is related to (substantially) lower well-being (Lucas, Clark, Georgellis, & Diener, 2004). Although being employed conveys certain benefits, the relation between the number of hours a person works and their level of well-being is not evidently positive. Studies examining time-use data suggest that people generally view working as one of the least pleasant activities (e.g., Kahneman, Krueger, & Schkade, 2004). This might be explained by the time demands that paid work places on individuals, which reduce the time available for other activities, such as leisure and household work (e.g., Pouwels, 2011). Working more hours may therefore increase time pressure and work-family conflict, both of which could reduce people's happiness (Ibid.).

It may therefore not come as a surprise that research on the relation between work hours and well-being, often comparing part-time to fulltime workers, has produced mixed results: some studies find that those who work more hours are better off, while others find no relation or a negative effect (for a review see, Dolan, Peasgood, & White, 2008). In this chapter we contend that these findings might not be in conflict with each other, as linkages between work hours and well-being are likely to differ by social context. The social context may shape the meaning and the consequences of working part-time or fulltime and may therefore determine whether someone is happier working part-time or fulltime. Linkages between work hours and happiness are likely to differ strongly by differences in one's family constellation. Furthermore, cultural expectations as to whether a person should work fulltime or part-time may differ across countries and there may be repercussions if one deviates from these expectations.

The current paper contributes to the literature by examining how the relation between work hours and happiness is shaped by social context. We do so by employing several key principles from the life course perspective (Elder, 1994). Specifically, we incorporate the concepts of *lives in context* (Moen et al., 1995), *cumulative contingencies* (Dannefer, 2003; Keizer, 2016) and *linked lives* (Elder, 1994). These concepts respectively refer to the interplay of human lives and historical times, the idea that experiences in one life domain may affect those in another and in later life, and the notion that individual lives are interdependent. They imply that it matters whether someone is a man or a woman, whether someone has children and where he or she lives. Our second contribution to the literature is that we put the two key explanations for linkages between work hours and

happiness-- revolving around adherence to gender role prescriptions and experienced work-family conflict-- to the test. So far very little attention has been paid to testing which of these explanations is applicable, and to what extent the applicability of these two explanations differs across contexts. To begin to address these questions, we employ data from the International Social Survey Programme's 2012 module on Family and Changing Gender Roles (ISSP Research Group, 2014) in combination with country-level data on policies from the OECD's Family Database (OECD, 2016).

5.2 Theoretical framework

The life course perspective is a theoretical model that has emerged over the past decades across a number of disciplines including sociology, demography and psychology. Although definitions of the life course perspective vary across disciplines and the subjects under study, several key themes have been identified (Elder, 1994; Van Wissen & Dykstra, 1999). Central to the life course perspective is the idea that the social context shapes human lives. Three of the core principles of the life course approach include: the interplay of human lives and historical times, alternatively termed *lives in context* (Moen et al., 1995), the idea that experiences in one life domain may affect those in another and in later life, recently dubbed *cumulative contingencies* (Keizer, 2016), and the principle of interdependent or *linked lives* (Elder, 1994; Van Wissen & Dykstra, 1999). Below we outline how these core principles can further our understanding of the relation between work hours and happiness.

5.2.1 Gender

Whether someone is happier working part-time or fulltime may depend on his or her gender for two reasons. Based on qualitative research, Simon (1995) argues that men and women view the relationship between work and family roles differently. Men see both roles as interdependent and they see their work as an integral part of their family role (Simon, 1995). This idea is confirmed by other research, which finds that providing financially is central to the identities of many fathers (Christiansen & Palkovitz, 2001). Women however see their roles as mothers and as workers as independent and even as conflicting since working more means having less time to spend on family responsibilities (Simon, 1995). The life course perspective emphasizes the way that men's and women's lives are shaped by the historical context, the notion of *lives in context*. An important aspect of the historical context is the prevailing sociocultural ideology about gender roles (Liefbroer & Billari, 2010). Accordingly, Akerlof and Kranton (2000) contend that the way men and women view and experience their work and family role is shaped by society's prescriptions concerning these roles. Household work and childcare are

traditionally viewed as women's work and providing financially is a man's job. Deviating from cultural standards may lead people to experience a loss of identity and have lower well-being (Ibid.). Men may therefore be happier in fulltime jobs, while women may be happier in part-time jobs.

A related reason why women may be happier in part-time jobs concerns the division of household labor. The literature suggests that, in line with traditional role patterns, women perform the majority of household labor, and they do so regardless of the number of hours that they, or their partner, spend on paid work (Knudsen & Waerness, 2007). Hochschild labeled this women's *second shift* (Hochschild & Machung, 1989). For women therefore, having to combine a fulltime job with household work may result in work-family conflict and increased stress, while working part-time may help them deal with their responsibilities at home. Even though this may not be without consequences for women's career path and retirement savings (e.g., Davies, Joshi, & Peronaci, 2000).

Few studies have explicitly examined how paid work hours affect individual well-being among men and women, notable exceptions are studies by Baxter, Gray and Alexander (2007), Booth and Van Ours (2008;2009;2013), and Collewet and De Koning (2011). The results of these studies have been mixed. Some found that neither men's nor women's happiness is affected by working part-time or fulltime (Booth & Van Ours, 2008). Others found that women were happier working less than fulltime, while men were happier working fulltime (Baxter et al., 2007; Booth & van Ours, 2009). Finally, some suggest that paid work hours have no effect on women's happiness, but that men are happiest in large part-time – or fulltime jobs (Booth & van Ours, 2013; Collewet & de Koning, 2011). These mixed results might be explained to some extent by the fact that studies have used different datasets or different model specifications. However, they may also be explained by contextual factors. One such factor is the country context, which we will return to below in section 2.4. Another is parental status: having children may shape how work hours and happiness are related among men and women.

5.2.2 Parenthood

The life course concept of *cumulative contingencies* stresses the importance of earlier life experiences for later life, as well as the interplay between different roles that people have (Dannefer, 2003; Keizer, 2016; Van Wissen & Dykstra, 1999). The transition to parenthood is such an important experience that changes people's lives and a person's role as a parent is likely to interact with their role at work. There are several (interrelated) reasons why paid work hours may be associated with happiness more strongly among parents than among the childless. First, children greatly increase the time demanded by household duties for men and women (see for example, Sayer et al., 2009). The increased time demands mean that work-family conflict is more likely to arise for parents, making the difference between working part-time and fulltime more pertinent. Another reason

why children may matter, is that the transition to parenthood is related to a stronger (gendered) specialization of labor in the household (Thompson & Walker, 1989). As a result, the proportion of women that work part-time is generally higher among parents than it is among the childless (European Commission, 2014). Related to this is the fact that gender roles become more salient after the transition to parenthood. Society's prescriptions concerning appropriate behavior for men and women are more stringent when it comes to their roles as mothers and fathers (Katz-Wise, Priess, & Hyde, 2010). Although some studies have focused on parents (e.g., Baxter et al., 2007), we know of no study that has explicitly compared how the relation between work hours and well-being differs between parents and childless men and women.

In addition to the presence of children, the age of the children may also matter. Pre-school age children may place greater time demands on their parents than school age children, as the latter spend a part of the day away from home and are generally more self-sufficient. A review of the literature by Monna and Gauthier (2008) suggests that parents indeed spend more time with young children than they do with older children. Given these varying time demands by children's life course stage, we expect that differences in happiness between those working fulltime and those working part-time are greater among parents with pre-school age children than those with school age children.

5.2.3 Partner's work hours

Aside from one's own working hours, people's well-being may also be shaped by the work hours of their partner. Another important principle in life course theory is the notion of *linked lives*: the idea that people's lives are linked to others around them (Elder, 1994). As people move through life, they are not only affected by their own experiences and the decisions they have made themselves; they may also be affected by the decisions and experiences of those close to them. Within couples, the time allocation of one partner can therefore be expected to affect the well-being of the other partner. A partner's work hours may affect the work-family conflict and stress that someone experiences. Partners who work more, for instance, tend to contribute less to household duties (Knudsen & Waerness, 2007). This would lead to the expectation that both men and women are happier when their partner works part-time, given that these partners are more likely to take on a larger share of household responsibilities.

Akerlof and Kranton's (2000) thesis that the well-being of an individual is negatively affected if one deviates from society's prescriptions may however also be extended to the work hours of the partner. Society's prescriptions do not (only) revolve around individuals, instead they concern the division of tasks between men and women in couples. A fulltime working female partner may challenge men's traditional provider role and negatively affect their well-being. Similarly, a part-time working male partner may challenge women's responsibility at home.

In regards to society's prescription on gender roles within couples, studies on dual-earner couples find that breadwinning women traditionally downplay their economic contributions, in order to neutralize deviating from gender norms/expectations surrounding the male breadwinner model. Studies find that women within these couples do so by either performing a disproportionate amount of housework (Bittman, England, Sayer, Folbre, & Matheson, 2003; Brines, 1994; Evertsson & Neramo, 2004; Tichenor, 2005), or else by turning to husbands in decision-making (Tichenor, 2005).

Furthermore, there is evidence of crossover effects in well-being between partners, which may mean that when a partner's paid work hours negatively affect their well-being this may influence one personally (Wunder & Heineck, 2013). This leads to the expectation that men may be happier with a part-time working partner and, alternatively, women with a fulltime working partner.

Few studies have examined partner influences in the relation between paid work hours and well-being, notable exceptions are papers by Baxter and colleagues (2007), Booth and Van Ours (2008;2009;2013) and Keizer and Komter (2015). The results of these studies were also mixed. Some found no cross-partner effects of work hours on well-being (Booth & Van Ours, 2008). Others found that women's happiness increased if their male partner worked fulltime, but that work hours of female partners did not affect men's happiness (Baxter et al., 2007; Booth & van Ours, 2009). Yet others found the opposite, i.e. the happiness of women was unaffected by the working hours of their partner, while men were happier with a part-time working partner (Booth & van Ours, 2013). Finally, one study indicated that women were happier with a partner who worked more hours, while men were happier with a partner who worked fewer hours (Keizer & Komter, 2015). Once again contextual factors might explain these mixed results. Specifically the results may be affected by the country context, as countries differ in both their gender role prescriptions and in the work-family policies that are in place.

5.2.4 Country characteristics

The life course concept of *lives in context* recognizes that where people live affects how their lives unfold (Mayer, 2009). In the Netherlands and in Germany the male breadwinner ideology (with a female caretaker) has remained strong compared with, for instance, the Scandinavian countries where more egalitarian gender roles exist (Lewis et al., 2008). In more gender egalitarian societies, men's and women's roles are less restricted and deviation from these *weaker* norms should be less detrimental to people's well-being. In more progressive societies, women may therefore be comparatively happier working fulltime and men may be comparatively happier working part-time. With respect to the effect of partner's paid work hours, in more progressive societies men may be relatively happier with a fulltime working partner and women may be relatively happier with a part-time working partner.

Incidentally, this might explain why the earlier research discussed above found such mixed results when they examined the relation between work hours and well-being. Studies were done in different countries: the United Kingdom (Booth & van Ours, 2009), Australia (Booth & van Ours, 2009) and The Netherlands (Booth & van Ours, 2013; Collewet & de Koning, 2011). The latter two countries can be considered more traditional and the former is more progressive. Additional evidence for the importance of cultural norms comes from a study that examined the relation between work hours and well-being among women cross-nationally and found that part-time working women were less happy comparatively in more progressive countries (Treas, Van der Lippe, & Tai, 2011).

The reason why countries might differ in the linkages between work hours and happiness might be differences in family policies. Prior studies have shown that family policies have the capacity to influence the division of labor. For example, Fuwa and Cohen (2007) find that social policies such as parental leave and childcare services affect the gendered division of housework. Policies generally do not determine the number of paid work hours for men and women; instead they facilitate certain work arrangements, such as working part-time or fulltime. The work arrangements that are easier to maintain, as a result of this facilitation, will likely enhance individual well-being, while others decrease well-being.

The relation between paid work hours and well-being may be affected by policies that shape the division of care responsibilities between the family and the state. Familizing policies, which support the family in taking on care responsibilities, are contrasted with de-familizing policies, which delegate these responsibilities to the state (Leitner, 2003). The relation between paid work hours and well-being is expected to be affected by such policies, because they mediate the negative consequences associated with working part-time or fulltime. Familizing policies tend to relieve the financial impact of working part-time compared to working fulltime. We therefore expect that those working part-time, and those whose partner works part-time, are relatively happier in countries with more strongly familizing policies. Defamilizing policies tend to relieve the impact that work-family conflict may have for those working fulltime, for instance by taking on care responsibilities for children. Therefore, those working fulltime, and those with a fulltime working partner, are expected to be relatively happier in countries with more defamilizing policies.

5.2.5 Work-family conflict and deviation from gender roles

In the literature there are two key mechanisms that may link work hours to men's and women's happiness. These are (1) the work-family conflict that individuals (especially women) experience and (2) deviation from (or adherence to) gender roles. In a review, Umberson, and colleagues (2010) find that although many studies see work-family

conflict as a potential threat to well-being, very few explicitly examine the association between the two in general. In the literature on the relation between work hours and well-being specifically, few attempts have been made to test the work-family conflict mechanism. A reason for this is that earlier studies have included non-working individuals (homemakers) in the analyses, in which case a measure of conflict cannot be included (e.g., Treas et al., 2011b). A notable exception is a study by Boye (2011), which finds that accounting for work-family conflict indeed explains some of the relation between work hours and well-being in her study of European mothers and fathers.

The relation between deviation from (or adherence to) gender roles and well-being is somewhat more established in the literature, especially for men. For instance, studies have found that men's well-being suffers when their spouse contributes relatively more to household income, supposedly because it diminishes their role as the breadwinner (Rogers & DeBoer, 2001). Although conversely women are generally happier when their husband does a larger share of the housework, evidence suggests that many women do not want to lose control of the household, which they consider their domain (Thompson & Walker, 1989). In studies on the relation between work hours and well-being, the salience of the gender roles mechanism is generally inferred rather than tested (e.g., Booth and van Ours, 2009).

We put these two explanations for linkages between work hours and happiness to the test by examining which of these is applicable, and to what extent the applicability of these two differs across contexts. We will account for work-family conflict to examine not only whether it explains the relation between personal work-hours and happiness, but also the relation between the partner's work-hours and happiness. We include a proxy for adherence to gender roles in order to examine to what extent it explains the relation between work hours, personal and the partner's, and happiness.

5.3 The present study

In this study we contribute to the literature by examining the relation between paid work hours and well-being from a life course perspective. Considering different gender role prescriptions and the division of household labour, women are expected to be happier working part-time (H1a) and men are expected to be happier working fulltime (H1b). Furthermore, the relation between paid work hours and happiness is expected to be more pronounced for parents than for the childless, given the impact that children have on time demands at home and the salience of gender roles (H3a). Moreover, the relation between paid work hours and happiness is expected to be greater for parents with pre-school age children than those with school age children (H3b). Gendered role prescriptions also suggest that women are happier with a fulltime working partner (H2a) and men with a part-time working partner (H2b). Based on its effect on the division

of household labour however, men and women would both be expected to be happier with a part-time working partner (H3). The expected relations between work hours and happiness may be driven by work-family conflict and/or the deviation from gender role prescriptions. We examine the applicability of both mechanisms in explaining the associations. At the macro level, women working fulltime and men working part-time are expected to be relatively happier in more progressive countries (H4). Finally, macro level policy arrangements may also shape the relation between paid work and well-being. In countries with more familizing policies, we expect that those who work part-time and those who have a part-time working partner are happier (H5a) and in countries with more de-familizing policies, we expect to find the opposite (H5b).

5.4 Data and method

In order to examine the relation between paid work hours and well-being, we use data from the 2012 Family and Changing Gender Roles module of the International Social Survey Programme (ISSP Research Group, 2014). The data were collected by independent research organizations and include information representative of the populations of 37 countries. For the individual level analyses we use data from 34 countries, as crucial variables were missing in the data for 3 countries¹⁰. As country level data are not available for all of these 34 countries, the number of countries varies from 34 to 18 across the analyses where we examine country level effects.

The analysis is limited to respondents between the ages of 25 and 55. This is the age range that is normally associated with working life. This age range excludes 45% of the original sample of 51,773. We only examine people who are married or living together as unmarried. We do so in order to ensure we only include couples that are living together, rather than also including couples that are living apart. In the latter category of couples, dynamics are likely very different from those in the former and may in some cases be more akin to singles. This selection criterion excludes 25% of the remaining sample. Of those who are married or living together we only select those couples where both partners are working and where we have information on their number of working hours. This excludes 51% of the remaining sample. For all variables respondents who answered "Don't know", who refused to answer, or who did not answer, were excluded by means of listwise deletion. The total sample for our analyses consists of 9,525 respondents. On average, there are 407 respondents per country. The number of respondents range from 31 in India to 1,022 in China.

¹⁰ We use data from Argentina, Australia, Austria, Canada, Chile, China, Taiwan, Croatia, Czech Republic, Denmark, Finland, France, Germany, Iceland, India, Ireland, Israel, Japan, South Korea, Latvia, Lithuania, Mexico, Norway, Philippines, Poland, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United States and Venezuela.

5.4.1 Individual level variables

The dependent variable in our study is happiness. The respondents were asked “If you were to consider your life in general, how happy or unhappy would you say you are, on the whole?” and answer categories ranged from 1 = *completely happy* to 7 = *completely unhappy*. The answers to the original question were recoded so that a higher score indicates that a respondent is happier.

The central independent variable in this study is the number of paid work hours. We distinguish between those working part-time, defined as working 32 hours per week or less, and those who work fulltime, defined as working more than 32 hours per week. In the analyses, a dummy variable is included that indicates whether someone works part-time, making fulltime workers the reference category. The partner’s paid work hours are measured in the same way. The information about the partner’s paid working hours is provided by the respondent. Note that this may introduce some measurement bias.

In order to examine whether the relationship between paid work and happiness is stronger among parents, we measure the presence of dependent children in the household. We define two groups of dependent children, those younger than school age and those of school age and under 18. We categorize individuals according to whether they have one or more younger or older children in the household. This leads to four categories: (1) those with no children, (2) those with only pre-school age children, (3) those with only older children and (4) those with both younger and older children. People with adult children, whether living at home or not, are in the first category.

Work-family conflict is measured with the responses to four statements. The respondents were asked: “How often has each of the following happened to you during the past three months?”. The four statements were: “I have come home from work too tired to do the chores which needed to be done”, “It has been difficult for me to fulfil my family responsibilities because of the amount of time I spent on my job”, “I have arrived at work too tired to function well because of the household work I had done”, and “I have found it difficult to concentrate at work because of my family responsibilities”. The answer categories to the four statements range from 1 = *several times a week* to 4 = *never*. The four questions form a reliable scale with a Cronbach’s alpha of .77 (ranging from .66 to .87 across countries). The measure used in the analyses is the mean of the four items, recoded so that a higher score represents more work-family conflict.

As a measure of adherence to gender roles, we include the respondent’s relative earnings compared to the partner. The question that is used gauges who has the higher income in the household. Although the measure is somewhat crude and subjective, we feel that it is the respondent’s perception of relative earnings which really matters in the context of adhering to or deviating from gender norms. For men, earning comparatively more suggests adherence to gender role prescriptions and for women it suggests deviation from these prescriptions. The answer categories range from 1 = *My spouse/partner has no*

income to 7 = *I have no income*. The measure is recoded so that a higher score indicates that the respondents earns relatively more than his or her partner.

We include several individual level control variables in the analyses, which previous research has shown to be associated with well-being and work status: age, age squared and the level of educational attainment. Education is measured with three dummies for the *low educated*, the reference category including those without a formal education or with only elementary schooling, the *middle educated*, including those with lower, upper or post-secondary (non-tertiary) education, and the *high educated*, including those with a lower or upper level tertiary education. We also control for frequency of attendance of religious services, which ranges from 0 = *never* to 4 = *at least once a week* and is included as a continuous variable in the analyses. Finally, we control for *health* with a five-point indicator, ranging from 0 = *poor* to 4 = *excellent*.

5.4.2 Country level variables

As a measure of gender progressiveness, we generate a scale based the responses to seven statements and aggregate this measure across all respondents within a country. In order to produce an unbiased country measure, it is aggregated by using the entire sample available, i.e. before applying our selection criteria. The seven statements gauge the respondent's gender role values. Examples of statements are "Being a housewife is just as fulfilling as working for pay" and "A man's job is to earn money; a woman's job is to look after the home and family". Answer categories ranged from 1 = *strongly agree* to 5 = *strongly disagree*. Factor analysis shows that the seven items measure one construct and the items form a reliable scale with a Cronbach's alpha of .73 (ranging from .47 to .82 across countries). A higher score on the resulting measure indicates that respondents have more progressive gender role values. The score on the resulting aggregate measure indicates that a country has more progressive gender role norms.

We examine two defamilizing policies and two familizing policies from the OECD's Family Database (OECD, 2016). Fulltime childcare usage for children younger than 3 is used as a proxy for a defamilizing policy. Ideally, the (state provided) childcare coverage rate would be used, however this measure is not available. We use a measure of fulltime care in order to assess the total amount of available childcare for children younger than 3. In countries with more fulltime childcare usage for children younger than 3, it is easier for parents, especially women, to work fulltime. The childcare usage rate was not available for the following countries: Argentina, Australia, Canada, Chile, China, India, Israel, Japan, South Korea, Mexico, Philippines, Russia, Turkey, United States and Venezuela.

We consider the cost of fulltime childcare for children younger than 3 as a familizing policy. Although childcare may provide parents with an opportunity to combine fulltime work with their family role, the price of childcare also matters. As childcare is more

expensive, it becomes less interesting financially to keep working and send children to childcare. Instead, parents, especially low-earning women, may choose to stay at home and take care of the children rather than work and pay high fees (e.g., Connelly, 1992). In countries with more expensive childcare, working fulltime may therefore be harder for parents. Data on the cost of childcare was not available for the following countries: Argentina, Chile, China, Croatia, India, Mexico, Philippines, Russia, Turkey and Venezuela.

Another defamilizing policy measure that we look at is the number of weeks of fully paid maternal (parental) leave. Well-paid (short term) leaves reduce family dependency by allowing parents (the mother) to remain strongly attached to the labour market (Lohmann & Zagel, 2015). In countries with more weeks of fully paid leave, working fulltime is expected to be easier (especially for women). Data on the number of weeks of fully paid leave was not available for the following countries: Argentina, China, India, Philippines, Russia and Venezuela.

Leave policies can also be considered familizing when they are long and not well-paid. In this case, the leave policies foster detachment from - rather than attachment to the labour market, especially among mothers (Ibid.). We therefore include a measure of the number of unpaid weeks of leave as a familizing policy indicator. In countries with more weeks of unpaid leave, we expect fulltime working people to be worse off. Data on the duration of unpaid leave is unavailable for the following countries: Argentina, China, India, Russia and Venezuela.

We include GDP per capita (in current prices, adjusted for PPP) as a control variable at the country level to account for the confounding influence of overall wealth in the country. On the one hand, a country's wealth may affect the public provision of childcare, as well as the generosity of leave policies. On the other hand, wealth may also affect the necessity to work fulltime.

Descriptive statistics are presented for the entire sample and for men and women separately in Table 5.1.

TABLE 5.1. Descriptive statistics for the variables used in the analyses.

<i>Variable</i>	Total (N = 9,525)		Women (N = 5,163)		Men (N = 4,362)	
	<i>Mean/Proportion</i>	<i>St. dev.</i>	<i>Mean/Proportion</i>	<i>St. dev.</i>	<i>Mean/Proportion</i>	<i>St. dev.</i>
<i>Individual level</i>						
Happiness	5.47	0.91	5.47	0.91	5.47	0.91
Part-time worker	15%		24%		5%	
Partner part-time worker	13%		5%		22%	
No children	37%		37%		37%	
Pre-school age child(ren)	15%		14%		15%	
School age child(ren)	35%		36%		35%	
Pre-school age and school age child(ren)	13%		13%		13%	
Male	46%					
Age	41.19	8.08	40.63	8.13	41.84	7.97
Primary education	4%		4%		4%	
Secondary education	58%		55%		60%	
Tertiary education	38%		41%		36%	
Work-family conflict	1.89	0.71	1.94	0.73	1.83	0.68
Relative earnings	4.13	1.33	3.56	1.25	4.8	1.08
Health	3.38	0.96	3.37	0.97	3.40	0.95
<i>Country level</i>						
Progressive gender role norms (N=34)	3.27	0.34				3.23-81.74
Childcare usage (% of 0-2 years old) (N=18)	33.74	22.83				0-28.72
Cost of childcare (% of average income)(N=23)	12.27	7.62				0-62
Fully paid leave (weeks) (N=27)	29.22	16.82				0-118
Unpaid leave (weeks) (N=28)	22.86	30.34				2.81-4.06
GDP (N=34)	30,846	14,294				4948-66357

5.4.3 Analytic method

In order to test our hypotheses, we employ linear multilevel regression analyses. These models take into account the nested structure of the data; individuals are clustered within countries. Not accounting for this nested structure is likely to lead to inaccurate or incorrect estimates.

We specified individuals as level 1 units and countries as level 2 units. We report regression coefficients, standard errors, and the level 1 and level 2 variance in happiness unexplained by the variables in the models.

We estimate models separately for men and women and separately for those with and without pre-school age and school age children. Estimating the models separately has two main advantages. First, interpretation of the results is more straightforward if we do not include three – and even four way interactions (e.g., *paid work hours x gender x parenthood x country norms*). Second, estimating the models separately allows the effects of the control variables to vary across the groups, such that for example education level is not restricted to have the same effect on happiness for men and women or for parents and childless individuals. Preliminary analyses revealed that analyses should indeed be run separately for men and women, as the effects of several control variables varied substantially for these different groups (results available upon request).

The null model, which is not presented, estimates the variation in happiness at the individual – and the country level. The results of this model suggest that respectively 7.5% and 9% of the variation in happiness is at the country level for men and women. The first model includes a dummy for part-time work and controls for demographic characteristics which may confound the relation between paid work hours and happiness. In the second model, we include the measure of partner's paid work hours to assess the partnered influence. The third and fourth model alternately account for work-family conflict and relative earnings. Finally the fifth through ninth model includes cross-level interactions between the five country level variables and paid work hours in order to assess the impact of gender role norms, familizing and de-familizing policies separately.

Table 5.2 provides an overview of our hypotheses and the support that we found for them. Tables 5.3 and 5.4 show the results of the first four models for women and men with and without young (pre-school age) and older (school age) children. We find some support for our first hypothesis that women are happier working part-time and men working fulltime. Women with only older children are happier working part-time, although the effect is only marginally significant ($p < .10$). The size of the effect (0.095) is small considering the happiness measure ranges from 1 to 7 and has a standard deviation of 0.91. Men with only older children are happier working fulltime. The effect (-0.239) is larger than for women, however it is still modest considering the range and standard deviation of the happiness measure. These findings also provide some support for the second hypothesis that the relation between work hours and well-being would be more

pronounced among men and women with children. Crucially however, the presence of older children seems to be important in this regard and not the presence of young children.

5.5 Results

TABLE 5.2. Hypothesized happiness advantages and disadvantages and the support we find for them.

	Men			Women		
	No children	Pre-school age children	School age children	No children	Pre-school age children	School age children
<i>Micro level</i>						
Part-time worker	-	---	--	+	+++	++
<i>Meso level</i>						
Partner part-time worker	+	+++	++	+	-	+++ ---
<i>Macro level^a</i>						
Progressive norms x Part-time worker	+			-		
Progressive norms x Partner part-time worker	-			+		
Familizing policies x Part-time worker	+			+		
Defamilizing policies x Part-time worker	-			-		
Familizing policies x Partner part-time worker	+			+		
Defamilizing policies x Partner part-time worker	-			-		

Note: A minus represents an expected negative effect on happiness and a plus represents an expected positive effect on happiness. A grey box represents a supported expectation. The number of signs represents the expected size of the relation. Opposite signs represent contrasting expectations. ^a Macro level hypotheses do not vary across the different categories or men and women.

Turning to the effect of the partner’s working hours on individual well-being, we see that both men and women are happier with a part-time working partner. Again the effects are only found for men and women with older children. For women, the effect is about twice as large as the effect of own work hours (0.181) and marginally significant ($p < .10$). For men the effect is somewhat smaller (0.137). These findings are in line with the fourth hypothesis based on the partner’s available time to contribute to household labor. Accounting for the partner’s work hours decreases the effect of women’s own work hours (0.068) and it is no longer significant. Among men we see the opposite, the

effect of their own work hours becomes stronger when accounting for their partner's work hours (-0.267).

In order to examine the mechanisms underlying the happiness differences between those working part-time and those working fulltime, we accounted for work-family conflict and relative earnings in two separate models. The inclusion of the measure for work-family conflict halves the positive effect of working part-time for women. Although this effect was not significant to begin with, this seems to indicate that there are differences in work-family conflict between those who work part-time and those who work fulltime. For men, the negative effect of working part-time is not altered by accounting for work-family conflict. The main effect of work-family conflict is negative for both women (-0.170) and men (-0.221). The effect of the partner's working hours on individual happiness is not affected by accounting for work-family conflict. In contrast to our expectation, this suggests that the effects of partner's work hours are not driven by the experienced stress of dealing with work and family responsibilities.

The measure for relative earnings was included as an indicator for the breadwinner position and the adherence or deviation from gender role prescriptions. After accounting for their relative earnings compared to the partner, the positive effect of working part-time is larger among women (0.101) and marginally significant ($p < 0.10$). This indicates that the positive effect of working part-time for women is partially suppressed by the fact that these women earn relatively less. This is emphasized by the main effect of relative earnings, which is positive (0.032) and marginally significant. The effect of the partner's work hours is considerably smaller (0.155) and no longer significant for women, after accounting for relative earnings. Women therefore seem happier with a part-time working partner because in that case their own earnings are relatively higher. For men, both the effect of the own work hours and the effect of the partner's work hours are diminished after accounting for relative earnings. This suggests that men are unhappier working part-time and happier with a part-time working partner, partially because they have respectively lower versus higher relative earnings.

Before we examined the effect of country level characteristics on the relation between paid work and happiness, we estimated models with a random slope for own paid work hours and those of the partner. These models give an indication whether there is cross-national variation in the effects that these have on happiness. Using a likelihood ratio-test, we then examined whether the random slope fit the data better than the fixed slope. We tested different specifications in which either personal work hours, or those of the partner, or both were given a random slope. In none of the specifications for any of the categories of men and women did we find evidence that the model with the random slopes fit the data better than those without.

In order to check whether there were indeed no effects of country characteristics, we nevertheless included a cross-level interaction between our country-level variables

and own/partner's paid work hours, each in a separate model and accounting for GDP per capita (results not reported here). We did not find any cross-level interactions to be significant.

TABLE 5.3. Multilevel regression models predicting women's happiness among women with and without children.

	Women without children				Women with young children				Women with older children				Women with young and older children			
	M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4
Part-time	0.079 (0.055)	0.077 (0.055)	0.044 (0.055)	0.066 (0.056)	-0.016 (0.078)	-0.009 (0.079)	-0.050 (0.079)	0.003 (0.080)	0.092 ⁺ (0.054)	0.087 (0.054)	0.042 (0.054)	0.101 ⁺ (0.054)	0.077 (0.072)	0.079 (0.072)	0.061 (0.072)	0.101 ⁺ (0.054)
Worker																
Partner		0.036 (0.094)	0.029 (0.093)	0.050 (0.094)		-0.131 (0.133)	-0.125 (0.131)	-0.144 (0.134)	0.181 ⁺ (0.109)	0.179 ⁺ (0.108)	0.155 (0.110)		-0.037 (0.145)	-0.008 (0.147)	0.155 (0.110)	
part-time worker																
Work-family			-0.198 [*] (0.030)													
Conflict																
Relative earnings				-0.023 (0.017)				0.022 (0.027)				0.032 ⁺ (0.018)				0.032 ⁺ (0.018)
Constant	4.849 [*] (0.489)	4.842 [*] (0.490)	5.295 [*] (0.489)	4.917 [*] (0.493)	4.008 [*] (0.941)	3.924 [*] (0.945)	4.493 [*] (0.944)	3.887 [*] (0.944)	4.702 [*] (0.818)	4.627 [*] (0.819)	5.244 [*] (0.820)	4.504 [*] (0.821)	3.811 [*] (1.233)	3.832 [*] (1.238)	4.196 [*] (1.245)	4.504 [*] (0.821)
Individual																
Level	0.030 (0.013)	0.030 (0.013)	0.028 (0.013)	0.031 (0.014)	0.019 (0.016)	0.019 (0.017)	0.033 (0.020)	0.018 (0.016)	0.045 (0.017)	0.044 (0.017)	0.054 (0.020)	0.044 (0.017)	0.006 (0.013)	0.007 (0.013)	0.015 (0.016)	0.044 (0.017)
variance																
Country																
level	0.681 (0.023)	0.681 (0.023)	0.665 (0.023)	0.680 (0.023)	0.718 (0.040)	0.717 (0.040)	0.692 (0.038)	0.717 (0.040)	0.746 (0.026)	0.745 (0.026)	0.730 (0.025)	0.744 (0.026)	0.676 (0.040)	0.675 (0.040)	0.663 (0.039)	0.744 (0.026)
variance																
Observations	1753	1753	1753	1753	690	690	690	690	1685	1685	1685	1685	608	608	608	1685

Standard errors in parentheses. ⁺ $p < 0.10$, ^{*} $p < 0.05$. Controls included in each of the models include: age, age squared, level of education, attendance of religious services and general health.

TABLE 5.4. Multilevel regression models predicting men's happiness among men with and without children.

	Men without children				Men with young children				Men with older children				Men with young and older children			
	M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4	M1	M2	M3	M4
Part-time Worker	-0.051 (0.101)	-0.066 (0.102)	-0.078 (0.101)	-0.060 (0.103)	-0.151 (0.155)	-0.119 (0.157)	-0.115 (0.157)	-0.117 (0.158)	-0.239* (0.108)	-0.267* (0.108)	-0.271* (0.107)	-0.245* (0.108)	0.222 (0.153)	0.209 (0.155)	0.156 (0.154)	0.173 (0.157)
Partner part-time worker	0.062 (0.061)	0.054 (0.060)	0.054 (0.060)	0.054 (0.062)	0.127 (0.093)	-0.126 (0.093)	-0.126 (0.093)	-0.130 (0.095)	0.137* (0.061)	0.137* (0.061)	0.138* (0.060)	0.104* (0.062)	0.045 (0.086)	0.045 (0.086)	0.065 (0.085)	0.080 (0.090)
Work-family Conflict			-0.157* (0.034)				-0.041 (0.053)				-0.211* (0.034)				-0.175* (0.053)	
Relative Earnings				0.014 (0.021)			0.004 (0.033)					0.057* (0.023)				-0.046 (0.034)
Constant	5.905* (0.580)	5.872* (0.581)	6.289* (0.584)	5.806* (0.590)	5.926* (1.110)	5.968* (1.109)	6.110* (1.121)	5.944* (1.126)	4.720* (0.991)	4.653* (0.990)	5.322* (0.983)	4.382* (0.994)	5.649* (1.275)	5.696* (1.278)	6.205* (1.275)	6.032* (1.300)
Individual Level Variance	0.023 (0.013)	0.022 (0.012)	0.023 (0.012)	0.022 (0.013)	0.036 (0.022)	0.039 (0.023)	0.042 (0.024)	0.040 (0.023)	0.049 (0.020)	0.041 (0.018)	0.045 (0.019)	0.043 (0.019)	0.110 (0.047)	0.105 (0.047)	0.101 (0.044)	0.104 (0.046)
Country level Variance	0.687 (0.026)	0.687 (0.026)	0.677 (0.025)	0.687 (0.026)	0.780 (0.045)	0.776 (0.045)	0.774 (0.045)	0.776 (0.045)	0.708 (0.027)	0.707 (0.027)	0.687 (0.026)	0.704 (0.027)	0.635 (0.041)	0.636 (0.041)	0.623 (0.040)	0.634 (0.041)
Observations	1462	1462	1462	1462	621	621	621	621	1408	1408	1408	1408	519	519	519	519

Standard errors in parentheses. * $p < 0.10$, * $p < 0.05$. Controls included in each of the models include: age, age squared, level of education, attendance of religious services and general health.

5.6 Conclusions

The current paper contributes to research on the relation between work hours and well-being by taking a life course perspective, focusing on how individual, couple and country characteristics may affect linkages between work hours and happiness. Specifically, we examined whether the association between working part-time or fulltime and happiness was affected by: gender, the presence and age of children, the partner's work hours and cultural norms and policies at the country level.

We find that gender and parenthood shape the relation between paid work hours and well-being. In accordance with the expectations based on the different roles prescribed for men and women (e.g., Akerlof & Kranton, 2000), we found evidence, albeit limited, that women are happier working part-time. In contrast, men were found to be happier working fulltime. These findings are in line with some of the earlier studies that have explicitly focused on the effects of gender on the relation between work hours and happiness (Baxter et al., 2007; Booth & van Ours, 2009). With regard to parenthood, we expected to find that the happiness differences between those working fulltime and those working part-time would be more pronounced among mothers and fathers than among childless men and women. Our results suggest that among childless men and women, working part-time or fulltime does not affect how happy they are. The results for mothers and fathers are puzzling however. We found that working part-time or fulltime only affects happiness among those with school age children and not those with pre-school age children or both. Based on the time demands placed on parents by younger children, we expected to find that working part-time would be more salient for these parents, considering the experienced work-family conflict, especially for women. How might these findings be explained? Assuming that indeed the time demands faced by parents of younger children are greater, perhaps a selection effect can explain these findings. Fulltime working women with young children may be those who can deal with the time demands, while those who work part-time need to work less in order to do so. In that case, we would not expect to find a difference in happiness between part-time and fulltime working women (with young children). Older children place fewer time demands on parents, which may mean that those working part-time actually enjoy a substantial advantage in leisure time, explaining the happiness advantage of mothers with older children who work part-time. However, this does not explain why only men with older children are happier working fulltime. Perhaps working part-time is generally socially accepted for men with younger children, so that they can help at home, and not for men with older children. It is beyond the scope of the current study to examine these explanations further and we urge future research to do so. Our findings lend support to the salience of the life course perspective and the emphasis it places on the notions of *lives in context* and *cumulative contingencies*.

We expected, based on the notion of *linked lives* (Elder, 1994), that the partner's paid work hours would also affect men's and women's happiness. Our findings are most in line with expectations based on time demands and related work-family conflict (e.g., Pouwels, 2011), which suggested that both men and women would be happier with a part-time working partner. We found that among mothers and fathers with dependent (older) children, those with a part-time working partner were happier. For women, these findings are not in line with expectations based on men's and women's gender role prescriptions (e.g., Akerlof and Kranton, 2000), that men and women would be happier with a partner who adhered to gender norms.

In an effort to uncover the mechanisms underlying the association between work hours and well-being, we accounted for measures of work-family conflict and the respondent's relative earnings compared to the partner, as a measure of adherence to gender role prescriptions. Our results provide a first indication that different mechanisms underlie the relation between work hours and happiness among mothers and fathers with older children. The findings for women provide tentative evidence that part-time workers are happier because they experience less work-family conflict, presumably because they have more time to spend on family responsibilities. Note however that the effect for women was not significant, nor was it very large. In contrast, adhering to gender role norms did not explain why women are happier when working part-time. In fact, accounting for relative earnings actually increased the happiness advantage for those who work part-time, indicating that the positive relation is suppressed by their lower earnings compared to their partners. For men with older children, we find that the happiness advantage of those who work fulltime is unaffected by work-family conflict, which is to be expected given women's greater responsibility for household labour. After accounting for relative earnings, the happiness advantage of fulltime workers decreases, suggesting that fulltime working men are happier because they adhere more strongly to gender role norms by earning more. A substantial happiness advantage remains after controlling for relative earnings however. Although explaining the remaining happiness advantage is outside the scope of this study, explanations might be sought in the characteristics of part-time work.

Surprisingly, the positive effect of a part-time working partner on the happiness of mothers and fathers does not seem to be explained by decreased work-family conflict. Instead, we find evidence among both men and women that the happiness advantage of having a part-time working partner is at least partly driven by relative earnings. For men, this is in line with the expectations based on gender role norms, but for women it is not. Puzzlingly, it seems that women are also happier with a part-time working partner because they earn comparatively more. Perhaps this could be explained from a relative resources perspective, which suggests that the marital power of each partner is related to the proportion of the household income they contribute (Blood & Wolfe, 1960). Women with more marital power may in turn be happier.

Finally, we found no evidence that country-level conditions affect the relation between work hours and well-being. Counter to the ideas based on the notion of *lives in context* (Mayer, 2009; Moen et al., 1995) neither cultural norms concerning gender roles nor familizing and defamilizing policy arrangements seem to shape the relation between paid work and happiness for either men or women. Given the modest effect sizes that were found this is however not surprising. Mathieu and colleagues (2012) show that the expected size of the cross-level interaction and the sample size at the higher level greatly affect the statistical power to uncover cross-level interaction effect. In this study, both the cross-level interaction effect that can be expected based on the individual level effect, as well as the sample size at the country level, may be too small to provide enough statistical power. Our findings diverge from the findings of Treas and colleagues (2011b) among women. They found cross-level interactions between country level variables and the effect of work hours on women's happiness using an earlier dataset from the ISSP. For example, in line with our own expectations, the benefit of working part-time compared to working fulltime was found to be smaller in more progressive countries. Although differences may be due to selection criteria or modelling choices, another possibility is that the contextual effect has weakened over the past decade. Perhaps differences in gender role prescriptions across countries have diminished and come to matter less in the past decade for how work hours and happiness are linked in individuals. For instance, in one study using three waves of the World Values Survey, of 36 countries around the world, Dorius and Alwin (2011) find a convergence of gender attitudes, towards more gender egalitarian views.

The study has several limitations that warrant mentioning here. We use cross-sectional data and we can therefore not any make strong causal claims. The selectivity of the sample should also be taken into account when interpreting the results. We do not examine singles for instance, and the effect of work hours on happiness may be markedly different for these individuals, especially if they are single parents. The effect of work hours may also differ when one has a partner who is not employed or where one of the partners is considerably older or younger. Finally, given the necessary statistical power to find evidence of cross-level interactions, our sample size at the country level is a serious limitation. Unfortunately, very few data sources exist that include data from a large number of countries and also all of the necessary information at the individual level, let alone longitudinally collected data.

On the whole, our life course approach has provided some interesting insights into the relation between work hours and well-being. We learned that a deeper understanding of the relation between work hours and happiness can be gleaned by considering the social context in which individual operate; their gender, parental status, children's age and partner's work hours. Our findings also provide a first indication that the mechanisms underlying the relation between work hours and happiness differ for men and women.

A task for future research will be to further explicate these differences, and to consider other policies and contexts that may mitigate differences in happiness and promote better well-being.



CHAPTER 6

**The impact of family interdependencies on different indicators
of well-being and the role of country context**

6.1 Family interdependencies and well-being from a life course perspective

Social inequalities are apparent in many life outcomes, including income and health. Traditional explanations revolving around human and cultural capital no longer suffice to explain these differences in well-being (Huisjes, Van Kolschooten, & Van Maanen, 2011). While women are rapidly catching up to men in terms of their average level of education (an important measure of human capital), their income and their economic independence continue to lag behind men's (Merens & van den Brakel, 2014). Scholars have therefore stressed the need to look beyond individual characteristics and take into account family interdependencies in order to explain new and persistent forms of social inequality (Hagestad & Dykstra, 2016). Family interdependencies are the linkages that people have to their parents, their siblings, and, in the nuclear family, to a partner and to their children. The aim of this dissertation was to examine how interdependencies in the nuclear family shape inequalities, i.e., differences in well-being. I adopted a broad range of well-being indicators - including hourly wages, monthly earnings, self-rated health, and happiness - in order to provide an extensive, if not exhaustive, overview of the impact of family interdependencies. Using the life course perspective as a guiding framework, I aspired to answer the following central research question:

“To what extent, how and under which circumstances are partnerships and parenthood related to men's and women's well-being?”

The question *to what extent* partnerships and parenthood are related to men's and women's well-being is multifaceted. Answering this question provides insight into the differences between partnerships and parenthood in their impact on well-being and gender differences that exist. *How* family interdependencies are related to well-being is a question of the mechanisms that are operating. The mechanisms that underlie linkages between partnerships and well-being are likely to differ from those linking parenthood and well-being. The mechanisms may also differ for men and women. The question concerning the *circumstances* under which partnerships and parenthood are related to men's and women's well-being, encompasses the role that context plays. I focused specifically on the national context, in particular the institutional, cultural and economic settings. The importance of the national context in shaping individual lives is emphasized by life course scholars and captured by the concept of lives in context (Moen et al., 1995). The majority of studies have approached the relation between family interdependencies and well-being from a single-country perspective, however scholars often do discuss the specifics of the country at hand (Yu, 2015). By looking at multiple countries, I was able to actually examine the impact of the country context.

In this final chapter I synthesize the findings of the four empirical studies and discuss their implications for the social scientific literature and for the ongoing public policy debate surrounding (the reduction of) social inequality. I begin by briefly summarizing the main findings.

6.2 Summary of the main findings

In the first empirical study, described in chapter two, I examined the relation between being married and men's wages from a cross-national comparative perspective. The *male marriage wage premium*, married men's wage advantage, is a phenomenon that has received and continues to receive much scholarly attention (e.g., Becker, 1981; Budig & Lim, 2016; Cheng, 2016; Hersch & Stratton, 2000; Killewald & Gough, 2013). Cross-national variations in this premium have hardly been examined (for exceptions, see Jakobsson and Kotsadam, 2013; Schoeni, 1995), even though this may reveal how the macro context shapes inequalities between married and unmarried men. I expected that the *male marriage wage premium* would be shaped by the normative context, and more specifically the pressure that married men experience to be a breadwinner. I used data from 29 countries from the Luxembourg Income Study (LIS). In accordance with of the majority of the literature (for a review, see Ribar, 2004), I found that married men had higher wages than never married men. Moreover, the male marriage wage premium varied across countries with different levels of gender equality and marital stability. In line with my expectations, the premium was larger in countries with greater gender inequality and greater marital stability, where breadwinner pressure is arguably stronger.

In the second study, I examined the relation between partnership status and health, again from a cross-national perspective. At the individual level, I aimed to discern causal and selection mechanisms, an issue with which earlier research has struggled (e.g., Amato, 2015; Musick & Bumpass, 2012). The goal was to reach a better understanding of the extent to which cross-national variations in the relation between partnership status and health reflected differences in causal mechanisms or differences in selection (Huijts & Kraaykamp, 2011a). The data used for this study came from the European Union Statistics on Income and Living Conditions (EU-SILC), which span the years 2003 to 2012 and include information from respondents from 30 countries. My results suggested that at the individual level a large part of the association between partnership status and health is explained by selection. The evidence also indicated that losing a partner was causally related to a decline in people's health. Across countries the bulk of the variation in the relation between partnership status and health was found to be attributable to differences in selection - who enters a partnership and who does not - rather than differences in causal mechanisms - the impact that partnerships have on health.

The third study examined the negative impact of motherhood on the earnings of Dutch women, the so-called *motherhood penalty*. Although several studies have examined why motherhood is detrimental to women's earnings – drivers include: reduced labor force participation, fewer working hours and lower hourly wages (e.g., Sigle-Rushton & Waldfogel, 2007; Winslow-Bowe, 2006) – surprisingly little research has examined under what circumstances the earnings disadvantage may be greater or smaller (for a review, see Gough & Noonan, 2013). I specifically focused on the potentially mitigating or aggravating role of interdependencies in the nuclear family: how the penalty was affected by the partner and by parity. I used data from the first three waves of the Netherlands Kinship Panel Study (NKPS). In line with earlier research (e.g., Budig, Misra, & Boeckmann, 2012), motherhood was found to have a substantial negative effect on Dutch women's earnings. Partner characteristics, however, had very little influence. The male partner's financial resources, his working hours, his gender role attitudes, his time spent on household labor and the emotional support he provided were all practically unrelated to the motherhood penalty. The penalty did, however, vary with parity. The first child had a large negative effect on women's earnings and the influence of later children was progressively smaller.

In the final empirical study, I examined the relation across different countries between part-time employment and happiness among men and women in dual earner couples. The relation between part-time employment and happiness remains contested, as some studies have found that those who work part-time are better off, while others have found no relation or a negative one (for a review see Dolan, Peasgood, & White, 2008). I expected that these differential findings may be driven by the national context, specifically the normative and policy context, and by factors such as gender, parenthood and the partner's work hours. I used data from the 2012 module of the International Social Survey Programme (ISSP) and included information from 34 countries. In contrast to my expectations, I did not find that the relation between part-time employment and happiness differed across national contexts. I did, however, find tentative evidence that women with school-age children were happier working part-time because they experienced less work-family conflict. Men with school-age children were happier working fulltime compared to working part-time and this was partly explained by the fact that in doing so they adhered to traditional gender role norms. Men and women with school-age children were both happier if their partner worked part-time. I found no evidence that part-time employment affected the happiness of childless men and women or, surprisingly, parents of pre-school age children.

6.3 Substantive contributions

I adopted a life course perspective to provide new insights into the relation between family interdependencies and well-being. I looked at a broad range of indicators and my results underlined the utility of the life course perspective. I have identified three patterns in the results of the four studies I carried out. These patterns concern the importance of the outcome that is being examined, the relevance of gender and the significance of country context.

6.3.1 Outcomes

I found partnered individuals to be better off than singles, in terms of wages and in terms of health, and people who experienced a partnership dissolution were unhealthier. However, the respective mechanisms linking partnerships to wages and to health seem to differ. On the one hand, results from the study examining the relation between marriage and men's wages (chapter two) suggested the existence of a causal mechanism. Specifically, men seem affected by marriage in a way that makes them more productive, as recent research also indicates (Budig & Lim, 2016). On the other hand, results from the study examining the relation between marital status and health (chapter three) suggested that this association is largely driven by a selection mechanism. Differences in health between, for instance, married and never married people are almost entirely explained by the fact that healthier people are more likely to get and stay partnered, a process to which others have also alluded (Chiappori, Oreffice, & Quintana-Domeque, 2010; Fu & Goldman, 1996; Wood, Goesling, & Avellar, 2007).

A possible explanation for why having a partner appears to have a causal effect on wages, while the association with between partnerships and health is mostly driven by selection, is that income is something which partners share, while self-rated health is more a personal characteristic. In other words, income may be seen as a measure of well-being that is more subject to interdependence than self-rated health. One might expect to find a greater influence of having a partner for positive and negative health *behaviors* which are more subject to interdependence, such as eating together or the consumption of alcohol. This is an issue for future research.

The well-being measure under examination also mattered when I considered the extent to which partnered individuals are affected by characteristics of their partner. In contrast to my expectations and those of other scholars (e.g., Anderson, Binder, & Krause, 2003; Budig & Hodges, 2010), the partner's characteristics hardly mattered for the motherhood penalty that Dutch women suffer. I did find, however, that both men's and women's happiness is affected by the partner's working hours, although the existence of this effect was contingent on the absence or presence of school-age children.

The Dutch context may explain why the role of the partner is limited when it comes to the motherhood penalty. The Dutch minimum wage is set to a level that can support a family, which means that if the male partner has a fulltime job the woman's earnings could be viewed as a bonus (De Beer & Deven, 2000). Dutch women's income is therefore less likely to be dependent on characteristics of the partner, meaning it is less shaped by interdependence and more by personal preferences. Happiness, studied in the fourth study, is an outcome which is probably strongly shaped by interdependence. The characteristics of one partner – their earnings, work hours and their attitudes - can affect the other partner's happiness by creating opportunities and limitations (Pouwels, 2011).

The impact of parenthood on women's well-being also seemed dependent on the outcome being considered. The transition to motherhood is related to a decrease in working hours and consequently lower earnings. At the same time, decreased working hours (working part-time instead of fulltime) benefit mother's happiness.

6.3.2 Gender

My findings emphasized the importance of gender in considering how parenthood shapes individual well-being in terms of earnings and happiness. Parenthood has, generally speaking, different implications for men's and women's lives. These findings are in line with qualitative research, which suggests that the differential meaning and impact of parenthood is largely driven by gendered role norms (Simon, 1995). My research reiterated the fact that that women suffer financially from the transition to parenthood, which is probably largely due to a decrease in the number of working hours (e.g., Kahn, García-Manglano, & Bianchi, 2014; Sigle-Rushton & Waldfogel, 2007). Meanwhile, evidence from other studies suggests that, instead of a fatherhood penalty, men actually earn a premium due to the fact that they increase their working hours following the transition to fatherhood (Glauber, 2008; Hersch & Stratton, 2000; Killewald, 2012). As I noted earlier, although women may suffer financially, the decreased number of working hours increases their happiness. Women therefore appear to make a trade-off between income and the strains of combining work and family responsibilities, foregoing the former to experience less of the latter. Recent research suggests that this trade-off is shaped at the national level by welfare state interventions (Budig, Misra, & Boeckmann, 2016). Publicly funded childcare seems to tip the trade-off more in favor of income, by reducing strains from family responsibilities. Among men, a different pattern emerged: fathers, at least those with school age children, were happier working fulltime than working part-time. The different dynamics for men and women closely reflect the traditional division of gender roles, where women assume responsibility for the household and childrearing and men provide for their family financially.

6.3.3 Country context

The life course principle of lives in context suggests that people's lives are shaped by the national context in which they live. Based on this principle, I expected that the relation between family interdependencies and well-being would be structured by economic, institutional and cultural differences across countries. I found that the country context shaped the wage advantage of married men compared to unmarried men (chapter two) and that it shaped the health gap between men and women in different marital statuses (chapter three).

There was also evidence at the country level that it mattered which outcome was investigated. Gender equality and marital instability decreased the breadwinner pressure for married men and subsequently their wage advantage. I argued that, regardless of the country under examination, breadwinner pressure would drive two mechanisms linking marriage to men's wages: intra-household specialization and men's sense of responsibility. In contrast, I found that country context had a substantial impact on the selection of individuals into different marital statuses based on their health. Cross-national differences that existed in the health gaps between people in different marital statuses almost entirely disappeared after accounting for selection of healthier people into marriage. The results of chapter five were again notably different and suggested that the relation between part-time work and happiness was unaffected by the normative and policy context of the country. This is an issue for future research.

Examining the impact of motherhood on women's earnings and how this is affected by characteristics of the partner, I focused only on the Dutch context. The Netherlands was an especially interesting context to study the motherhood penalty for several reasons, arguably the most important of which is that Dutch women are champions of part-time work and they are much more flexible in their work hours than women in other countries (Plantenga, 2002). Although I found that the earnings of women decrease following the transition to motherhood, the partner's characteristics did not seem to influence this penalty. Earlier work has shown that the motherhood penalty itself differs across countries and that it is smaller in countries with more parental leave, publicly provided childcare and when there is support for maternal employment (Boeckmann, Misra, & Budig, 2014; Budig et al., 2012). It is conceivable that the influence of a partner on the motherhood penalty also differs across countries. In countries with less childcare facilities, the impact of the transition to motherhood on women's working hours and their earnings may for instance be more dependent on the partner's work hours.

Despite the fact that not all my expectations about country level influence were supported - especially in the final empirical chapter in which I examined the relation between part-time work and happiness - the current dissertation represents a step further in the development of our understanding of the relation between family interdependencies and well-being. My results have shown that country context, in the

form of gender equality and marital stability, impacts the strength of mechanisms linking family interdependencies to well-being, specifically the breadwinner pressure that leads married men to earn higher wages. In addition, country context influences which mechanism links family interdependencies to well-being, for instance whether marital status is solely related to health through selection or also through a causal linkage. The impact of the national context is especially important considering the fact that findings from a single country are not necessarily generalizable. Scholars focusing on one country have discounted theories without considering the impact of the broader country context. The vast majority of studies examining the male marriage premium for example focused on testing theories in the United States (e.g., Killewald & Gough, 2013). As social scientists, we should not turn a blind eye to the country context in which individual behavior takes place. Even scholars who use data from a single country, as many scholars in the US do, will have to take into account the notion of *lives in context* as the cultural and policy environments within that country continue to change.

6.4 Methodological contributions

I made several methodological contributions in this dissertation. These contributions did not revolve so much around the development of new methods, but rather around the way that I employed existing methods. Specifically, I used a collection of single-country estimates to make (preliminary) cross-national comparisons and I compared the results of fixed and random effects models to assess the magnitude of selection effects.

In the studies examining the relation between partnerships and (a) men's wages (chapter two) and (b) men's and women's self-rated health (chapter three), I used a collection of single-country estimates to provide an overview of cross-national variation. The majority of studies that make cross-national comparisons use multilevel models, especially since the estimation of such models has been eased by their incorporation into most statistical packages such as SPSS and STATA. The method of using single-country estimates has two main advantages over multilevel models. First, by comparing single-country estimates and plotting them, one gains considerably more insight into the magnitude and nature of cross-national variations. In multilevel models, cross-national variability is captured by the country-level variance estimate, which might obscure outliers and countries where relations are substantively different (Yu, 2015). The second advantage is that individual-level effects, those of interest and those included as controls, are not fixed to the same value across countries. These individual level effects can vary freely, which in multilevel modeling terms is called a *random slope*. Multilevel models have the drawback that only a limited number of random slopes can be incorporated. Otherwise, models do not converge. For that reason, it is customary to include random slopes only

for the predictor variables, while fixing the effects of control variables. Thus, researchers are essentially introducing omitted variable bias, as fixed effects are constrained to their mean for each country. I analyzed the data for each country separately and plotted the results, which is a more feasible approach to deal with the inclusion of many random slopes. In summary, I showed that single-country analyses can provide clearer insight into cross-country variation, while also producing results that are potentially less biased.

In the study examining the relation between partnerships and self-rated health (chapter three), I compared fixed and random effects models. I did so in order to provide insight into the extent to which the relation between marital status and health is explained by selection of healthier individuals into marriage. In combination with the method described above, analyzing data for each country separately, comparing fixed and random effects models also facilitated an examination of differences across countries in the extent to which the marriage-health nexus was explained by selection. The comparison of fixed and random effects in itself is not new. Earlier studies have relied on such comparisons to determine the magnitude of the selection effect in, for instance, the motherhood penalty (e.g., Budig & England, 2001). Comparisons of fixed and random effects models have not been used, however, to explain cross-national differences. I showed that comparing fixed and random effects models can provide scholars with new insights into cross-national variation and help them break it down into its component parts: selection and causation. In the context of my examination of the relation between marital status and health, this method indicated that it may be more fruitful to study the way that the country context affects selection into (and out of) marriage based on health, instead of studying the way that country context shapes the way that marriage affects health.

6.5 Limitations and avenues for future research

The empirical studies I carried out led to several interesting avenues for future research. Some of them are inspired by my results and others are driven by the limitations that I faced.

In my dissertation I chose to focus on two indicators of interdependencies in the nuclear family, partnerships and parenthood. In the broader family network there are other interdependencies which may be important. People's lives may also be shaped by the needs of siblings and elderly (grand) parents or by the support received from family members outside the nuclear family. In fact, scholars have argued that extended family members, especially (grand) parents are becoming more important and may even become more important than nuclear family members (Bengtson, 2001; Hagestad & Dykstra, 2016; Marshall & Bengtson, 2011). Changing demographical age structures

have resulted in greater opportunities and needs for support and influence across more than two generations. Researchers need to take into account these changes in their approach to studying inequality (Mare, 2011).

Family interdependencies shift over the course of life. In early adulthood, partnerships and parenthood are more influential, for instance in terms of their attachment to the labor market, than later in life. In mid-life, elderly parents and their care needs, the impact of which I did not examine, may exert a greater influence on labor market attachment (Hagestad & Dykstra, 2016). Despite the influence that extended family members are likely to have at some point in people's lives, focusing on the nuclear family, as I did, is a logical first step and my results can serve as a point of reference for future studies that explore other family interdependencies.

Another caveat to my research is that I have looked at the presence of a partner, rather than the quality of the relationship. The impact of having a partner, or being single, likely differs across individuals. Earlier research shows that "bad" marriages or relationships are toxic to people, and those involved may be better off separated or divorced (Hawkins & Booth, 2005; Umberson et al., 2006). My research did not investigate the impact of characteristics such as spousal support or relationship satisfaction, leaving a challenge for future researchers.

An important methodological limitation was the difficulty in identifying country characteristics that shape the relation between family interdependencies and well-being through so-called cross-level interaction effects. Despite plausible theoretical arguments, I found little evidence of cross-country variation in the study where I examined the impact of part-time employment on happiness (chapter five). Furthermore, several country characteristics that I considered in the study on married men's wage advantage had no effect (chapter two).

A second interpretation of my findings could be that data from more countries or data including different measures is needed to answer the questions I posed. In chapter five, I discussed the issues involving statistical power that arise in cross-national comparative research (Mathieu et al., 2012). The ability to identify cross-level interactions hinges on the number of countries that are included, as well as the size of the effect. In current cross-national comparative research, being able to examine 30 countries is often considered a luxury and several cross-European data collection efforts such as the European Quality of Life Survey (EQLS) and EU-SILC are commendable for their inclusion of a large number of countries. However, this may not be enough to determine the consequences of policies and other country characteristics future data collection programs will need to include a larger number of countries, as others have also argued (e.g., Schenk, 2013). In addition to including more countries, future research might develop more sensitive measures of well-being. This applies more to physical and mental well-being than to financial well-being, as the latter is generally measured as sensitive as it can possibly be.

For example, although the general health measure used in chapter three are strongly correlated to more objective health measures (DeSalvo et al., 2006; Kennedy, 2001; Walker et al., 2004; Wilcox et al., 1996), with only five answer categories it does not discriminate very well. The lack of sensitivity makes it difficult to detect differences in health between people and across countries. New, more finely tuned measures might be developed in order to distinguish smaller differences. More finely tuned measures could consist of a scale including multiple items. However, I realize cross-national equivalence is not easily achieved. The more intricate the measures used, the more difficult it is to make them cross-nationally (or rather cross-culturally) comparable. Income measures have their own set of problems, the most important of which is people's reluctance to answer. Government register data could potentially solve this issue, but in many countries these data are not available or their use is expensive and subject to very strict regulations.

6.6 Policy suggestions to reduce inequality

Based on the results of my empirical studies I have identified two sets of policy implications. The first set deals with policies aimed at decreasing gender inequality. Gender inequality has been on the policy agenda at both the national and international level for a long time. The second set of policy implications deals with inequality at large. Decreasing inequality, not just between men and women, but also between those with and without a partner and those with and without children, is an issue that policy makers have been dealing with, for example in the context of the Millenium Development Goals (United Nations, 2015). However, the finding that the relation between partnership status and self-rated health is mostly driven by selection processes (chapter three) suggests that some social inequalities may not be driven by family interdependencies. For that reason, policies aimed at marriage promotion and campaigning for marriage in general, which some policy makers and social scientists have done especially in the United States (e.g., Waite & Gallagher, 2000), will not necessarily benefit the well-being of the population.

Policies aimed at reducing gender inequality. The finding that cross-national differences in married men's wage advantage are driven by gender equality and marital (in)stability (chapter two) suggested that the male marriage wage premium is partially culturally determined. In my interpretation of the results, gender inequality and marital stability, both to a large extent culturally rooted, increase married men's pressure to be the breadwinner, in turn increasing their wages compared to unmarried men. At the same time, the *motherhood penalty* that women suffer is to a large extent the result of internalized cultural prescriptions that delegate responsibility for the children to them. This notion is supported by the fact that partners and their characteristics had almost no influence on the motherhood penalty. So what can policy makers do with this information? In

order to reduce gender inequality in earnings, policies should aim at decreasing both the benefit of marriage for men and the penalty of motherhood for women. Both would be attained by policies focusing on changing the dominant gender roles. A policy that seems to be accomplishing this to some extent, is the daddy quota on parental leave that several Scandinavian countries have introduced. The daddy quota represents a fixed period of leave that men have to take up in order for the couple to be eligible for additional leave. Research suggests that the policy may positively affect attitudes concerning gender equality among both parents and childless individuals (Kotsadam & Finseraas, 2011). Furthermore, the authors show that after the introduction of the daddy quota men have started to take on a greater amount of household labor and there are also fewer conflicts about household labor. Evidence from another (unpublished) study suggests that the daddy quota has also lowered divorce rates (Olafsson & Steingrimsdottir, 2016).

Policies aimed at reducing inequality at large, between those with and those without a partner and children. Inequalities in earnings between childless women and mothers are driven by the fact that mothers take on the bulk of the responsibility for household tasks and childrearing. At the same time, inequality in wages between married and unmarried men seems to be driven by the necessity for married men to take on the breadwinner role. Gender inequality and inequality at large seem therefore to be driven by the same processes. Hence, if policies could stimulate a change in the division of tasks in the household, both gender inequality and inequality at large would probably decline. This is easier said than done, considering the entrenched nature of gender roles. One of the problems in changing gendered labor division is in the valuation of household work. Even though household labor, not in the least childrearing, is a cornerstone the economy and of society at large, those who perform it are not paid, with the exception of domestic workers. In the US, scholars calculated that paying for domestic workers to do *all* the household work would raise the GDP by 26% in 2010 (Bridgman, Dugan, Lal, Osborne, & Villones, 2012). Although household labor may hold great value to society at large, the fact that the work is unpaid gives it lower social standing, which may be part of the reason why men are not interested in taking it on. Recognizing and acknowledging the value of household work by paying for it may lead to a shift in how society and especially men view it, and consequently lead to a shift in gender roles.



SUMMARY

Traditional explanations of social inequality revolve around differences in cultural and human capital, such as levels of educational attainment and skill sets. To explain persistent social inequalities, scholars have stressed the need to look beyond these kinds of individual characteristics and take into account interdependencies in families. These are the linkages that people have to their parents, their siblings, and, in the nuclear family, to a partner and to their children. In contemporary society, individual life chances and well-being are not only structured by cultural and human capital at the individual level, but increasingly also by partner relationships, parenthood, care obligations, and intergenerational transfers between family members.

In this dissertation, I focused on the structuring role of interdependencies in nuclear families stemming from partner relationships and parenthood. Moving beyond an individual-level focus to gain insight into inequality is my first contribution to the literature. Understanding the role that these interdependencies play as drivers of differences in well-being, specifically in income and health, as well as between men and women, is valuable from both a societal and a scientific perspective.

Partnerships and parenthood shape individual life chances and well-being in several influential ways. Firstly, entering, remaining in, and exiting different types of partnerships has consequences for individual well-being. Having a spouse seems to be beneficial, living with a partner outside of marriage also appears to be propitious and losing a partner, through divorce, separation and widowhood, has a number of adverse consequences for adults as well as their children. Secondly, partnerships and partnership history are closely related to people's pathways in parenthood and employment. The majority of partnered people end up having one or more children together, thereby forming new family interdependencies. Furthermore, becoming a parent has highly gendered consequences for men's and women's involvement in paid labor.

The way that family interdependencies stemming from partnerships and parenthood shape individual well-being is likely to differ across countries, given that institutional and cultural factors shape the antecedents and consequences of partnerships and parenthood. Unfortunately however, the vast majority of studies approach the link between partnerships, parenthood and well-being from the perspective of a single country. My second contribution to the literature was therefore to take into account economic circumstances, cultural climate and policies in order to provide a better understanding of the relation between family interdependencies and well-being.

The life course perspective

My research on family interdependencies was driven by a life course perspective. This approach is especially well-suited to study the relation between family interdependencies and well-being, and the way that they are shaped by the country context. Two principles

that are at the core of the life course paradigm are: linked lives, and the interplay of human lives and historical times.

The principle of linked, or interdependent, lives emphasizes that as people move through life, they are affected by the people around them and they themselves in turn affect the lives of those people. Individuals, in other words, do not develop in isolation from others and people are bound to the decisions that others make and the events that take place in other people's lives. More generally, the concept of linked lives also refers to the linkages across individual life domains, especially between family - and work life.

The family interdependencies that I focused on, stemming from partnerships and parenthood, are arguably the most prominent links in people's lives. With regard to partners, there are several elements to consider that may impact someone's life and their well-being. First and foremost, it matters whether someone has a partner or not. As I mentioned earlier, married and cohabiting individuals seem to be better off. Several mechanisms underlie the link between having a partner and greater well-being. Partnered individuals can for instance pool their incomes and they benefit from economies of scale. Partners also represent a source of support and social control that singles lack. Beyond having (or losing) a partner, the partner's characteristics also matter and they can shape experiences in other life domains, such as employment and parenthood. Partnerships are closely tied up with the transition to parenthood. Children increase both the financial burden and the time demands that partners face at home. Therefore, parenthood is closely related to people's employment trajectories and how these influence their well-being.

In societies that are continuously and rapidly changing, people born in different years are subject to different constraints and opportunities. The life course perspective suggests that individual life courses may well reflect these different historical contexts. Aside from the temporal aspect of historical context, one might also consider the geographical setting of the life course. Just as people born in different years may face different constraints and opportunities, so might people born in different countries. Both ideas are captured in the concept of lives in context.

This concept suggests that family interdependencies and their relation to well-being may not be the same in all countries. The mechanisms linking family interdependencies to well-being may be stronger or weaker depending on the country context, but their nature might also differ between societies. Several relevant country characteristics can be identified. First, the way partnerships and parenthood are linked to well-being may be contingent on differences in welfare state arrangements. Second, the relation between family interdependencies and well-being may be shaped by the substantial cultural differences that exist between countries. Third, the relation between partnerships and well-being may be affected by differences in family formation. Considering the impact that policies, cultural norms and composition may have on the link between family

interdependencies and well-being, it is crucial to examine these relations from a cross-national comparative perspective.

Research objectives

Utilizing the life course perspective and especially the concepts of linked lives and lives in context, I aimed to answer the following central research question in this dissertation:

“To what extent, how and under which circumstances do partnerships and parenthood shape individual well-being?”

Answering this question, I aimed to provide insight into (a) the extent to which family interdependencies and well-being are linked, (b) the mechanisms that underlie the relation between family interdependencies and well-being, and (c) the way that both are affected by country characteristics, such as cultural norms and social policies. To answer the central research question, four empirical studies were carried out.

Empirical studies

In the first study, I addressed the way that marriage affects wages among men and how this effect is shaped by the country context. Married men earn more than unmarried men, a phenomenon termed the male marriage wage premium (MMWP). The limited cross-national comparative research suggests that there are substantial differences across countries in men’s wage benefits associated with marriage. This study built upon individual level explanations of the MMWP revolving around intra-household specialization and married men’s sense of responsibility. I argued that both intra-household specialization and married men’s sense of responsibility for their family are dependent on the extent to which men in a particular society experience pressure to take on the role of the breadwinner. More specifically, I examined whether the strength of the theoretical mechanism that links marriage to men’s wages varied, depending on four country characteristics: gender differences on the labor market, gendered cultural norms, marital stability and social protection provisions. My expectation was that breadwinner pressure and therefore the marriage benefit in men’s wages is greater in countries where: men have a more pronounced labor market advantage, gendered cultural norms are more traditional, there is more marital stability, and there are less generous social protection programs. The analyses in this chapter were based on micro-level data from the Luxembourg Income Study (LIS). The analyses incorporated data from 29 countries. The country level data came from several different sources: the World Bank, the United Nations, the World Values Survey and the International Labour Organization.

In accordance with of the majority of the literature, I found that married men had higher wages than never married men. Moreover, the male marriage wage premium varied across countries with different levels of gender equality and marital stability. In line with my expectations, the premium was larger in countries with greater gender inequality and greater marital stability, where breadwinner pressure is arguably stronger.

The second study examined the relation between marital status and inequalities in health from a cross-national comparative perspective. Married individuals are healthier than their unmarried counterparts, across a range of different outcomes. I extended the literature in two ways. First, I aimed to disentangle causal and selection effects at the individual level, a question that has remained open in the literature. Second, I aimed to determine whether (or to what extent) cross-national variations in the relation between marital status and health reflect differences in selection or differences in causal mechanisms. I did this by comparing random and fixed effects models. Furthermore, I distinguished between singles who have never been married and those who have gone through a marital dissolution. Doing so allowed me to separately test the applicability of two explanations of the relation between marital status and health. The two explanations involve marital resources and the strains of marital dissolution. In this study, I used data from the European Union Statistics on Income and Living Conditions (EU-SILC) for all of the available waves from 2004 until 2012.

My results suggested that at the individual level a large part of the association between partnership status and health is explained by selection. The evidence also indicated that losing a partner was causally related to a decline in people's health. Across countries the bulk of the variation in the relation between partnership status and health was found to be attributable to differences in selection - who enters a partnership and who does not - rather than differences in causal mechanisms - the impact that partnerships have on health.

The third study concerned the effect of childbearing on women's earnings. The negative consequences of the transition to motherhood for women's earnings are well established. Motherhood is related to earnings inequality among women because mothers are employed less often, work fewer hours and earn lower hourly wages. I extended the literature by investigating how characteristics of the male partner as well as the number of children affect the earnings disadvantage of mothers. Given their importance for the division of tasks in the household, I focused on the partner's time availability, his financial resources and his gender role orientations. I expected mother's earning disadvantage to be smaller if the partner has: more time available, fewer economic resources and more progressive gender role orientations. Furthermore, previous research has either examined the earnings of mothers versus those of childless women, or it has assumed that each additional child has the same consequences for women's earnings. I questioned these assumptions and argued that the reduction in income after a second or

third child is less pronounced, given that major adjustments to employment take place following the birth of the first child. The analyses in this chapter are based on data from the Netherlands Kinship Panel Study (NKPS). I used data from the first three waves in the analyses.

In line with earlier research, motherhood was found to have a substantial negative effect on Dutch women's earnings. Partner characteristics, however, had very little influence. The male partner's financial resources, his working hours, his gender role attitudes, his time spent on household labor and the emotional support he provided were all practically unrelated to the motherhood penalty. The penalty did, however, vary with parity. The first child had a large negative effect on women's earnings and the influence of later children was progressively smaller.

In the fourth study, I addressed the question of how work hours are related to happiness in dual earner couples. Previous research has produced mixed answers to the question whether individuals are happier working part-time or fulltime: some studies find that part-time workers are happier, while others suggest that fulltime workers are better off. I argued that these findings are not in conflict with each other, but instead that the relation may depend on gender, parenthood, the work hours of the partner and the country's norms and policies. I also extended the literature by explicitly testing the mechanisms linking work hours to happiness. These explanations revolve around work-family conflict and adherence to (or deviation from) gender role prescriptions. The data used for this study came from the 2012 Family and Changing Gender Roles module of the International Social Survey Programme (ISSP).

In contrast to my expectations, I did not find that the relation between part-time employment and happiness differed across national contexts. I did, however, find tentative evidence that women with school-age children were happier working part-time because they experienced less work-family conflict. Men with school-age children were happier working fulltime compared to working part-time, and this was partly explained by the fact that in doing so they adhered to traditional gender role norms. Men and women with school-age children were both happier if their partner worked part-time. I found no evidence that part-time employment affected the happiness of childless men and women or, surprisingly, parents of pre-school age children.

Conclusions

I adopted a life course perspective to provide new insights into the relation between family interdependencies and well-being. I looked at a broad range of indicators and my results underlined the utility of the life course perspective. I have identified three patterns in the results of the four studies I carried out. These patterns concern the importance of the outcome that is being examined, the relevance of gender and the significance of country context.

I found partnered individuals to be better off than singles, in terms of wages and in terms of health, and people who experienced a partnership dissolution were unhealthier. However, the respective mechanisms linking partnerships to wages and to health seem to differ. On the one hand, results from the study examining the relation between marriage and men's wages (chapter two) suggested the existence of a causal mechanism. Specifically, men seem affected by marriage in a way that makes them more productive. On the other hand, results from the study examining the relation between marital status and health (chapter three) suggested that this association is largely driven by a selection mechanism. Differences in health between, for instance, married and never married people are almost entirely explained by the fact that healthier people are more likely to get and stay partnered, a process to which others have also alluded.

A possible explanation for why having a partner appears to have a causal effect on wages, while the association with between partnerships and health is mostly driven by selection, is that income is something which partners share, while self-rated health is more a personal characteristic. In other words, income seems to be an indicator of well-being that is more subject to interdependence than self-rated health. One might expect to find a greater influence of having a partner for positive and negative health behaviors which are more subject to interdependence, such as eating together or the consumption of alcohol. This is an issue for future research.

The well-being measure under examination also mattered when I considered the extent to which partnered individuals are affected by characteristics of their partner. In contrast to my expectations and those of other scholars, the partner's characteristics hardly mattered for the motherhood penalty that Dutch women suffer. I did find, however, that both men's and women's happiness is affected by the partner's working hours, although the existence of this effect was contingent on the absence or presence of school-age children.

The Dutch context may explain why the role of the partner is limited when it comes to the motherhood penalty. The Dutch minimum wage is set to a level that can support a family, which means that if the male partner has a fulltime job the woman's earnings could be viewed as a bonus. Dutch women's income is therefore less likely to be contingent on characteristics of the partner, meaning it is less shaped by interdependence and more by personal preferences. Happiness, studied in the fourth study, is an outcome which is probably strongly shaped by interdependence. The characteristics of one partner – their earnings, work hours and their attitudes - can affect the other partner's happiness by creating opportunities and limitations.

The impact of parenthood on women's well-being also seemed dependent on the outcome being considered. The transition to motherhood is related to a decrease in working hours and consequently lower earnings. At the same time, decreased working hours (working part-time instead of fulltime) benefit mother's happiness.

My findings emphasized the importance of gender in considering how parenthood shapes individual well-being in terms of earnings and happiness. Parenthood has, generally speaking, different implications for men's and women's lives. These findings are in line with qualitative research, which suggests that the differential meaning and impact of parenthood is largely driven by gendered role norms. My research reiterated that women suffer financially from the transition to parenthood, which is probably largely due to a decrease in the number of working hours. Meanwhile, evidence from other studies suggests that, instead of a fatherhood penalty, men actually earn a premium due to the fact that they increase their working hours following the transition to fatherhood. As I noted earlier, although women may suffer financially, the decreased number of working hours increases their happiness. Women therefore appear to make a trade-off between income and the strains of combining work and family responsibilities, foregoing the former to experience less of the latter. Recent research suggests that this trade-off is shaped at the national level by welfare state interventions. Publicly funded childcare seems to tip the trade-off more in favor of income, by reducing strains from family responsibilities. Among men, a different pattern emerged: fathers, at least those with school age children, were happier working fulltime than working part-time. The different dynamics for men and women closely reflect the traditional division of gender roles, where women assume responsibility for the household and childrearing and men provide for their family financially.

The life course principle of lives in context suggests that people's lives are shaped by the national context in which they live. Based on this principle, I expected that the relation between family interdependencies and well-being would be structured by economic, institutional and cultural differences across countries. I found that the country context shaped the wage advantage of married men compared to unmarried men (chapter two) and that it shaped the health gap between men and women in different marital statuses (chapter three).

There was also evidence at the country level that it mattered which outcome was investigated. Gender equality and marital instability decreased the breadwinner pressure for married men and subsequently their wage advantage. I argued that, regardless of the country under examination, breadwinner pressure would drive two mechanisms linking marriage to men's wages: intra-household specialization and men's sense of responsibility. In contrast, I found that country context had a substantial impact on the selection of individuals into different marital statuses based on their health. Cross-national differences that existed in the health gaps between people in different marital statuses almost entirely disappeared after accounting for selection of healthier people into marriage. The results of chapter five suggested, however, that the relation between part-time work and happiness was unaffected by the normative and policy context of the country. This is an issue for future research.

Examining the impact of motherhood on women's earnings and how this is affected by characteristics of the partner, I focused only on the Dutch context. The Netherlands was an especially interesting context to study the motherhood penalty for several reasons, arguably the most important of which is that Dutch women are champions of part-time work and they are much more flexible in their work hours than women in other countries. Although I found that the earnings of women decrease following the transition to motherhood, the partner's characteristics did not seem to influence this penalty. Earlier work has shown that the motherhood penalty itself differs across countries and that it is smaller in countries with more parental leave, publicly provided childcare and when there is support for maternal employment. It is conceivable that the influence of a partner on the motherhood penalty also differs across countries. In countries with less childcare facilities, the impact of the transition to motherhood on women's working hours and their earnings may for instance be more dependent on the partner's work hours.

Though not all my expectations about country level influence were supported - especially in the final empirical chapter in which I examined the relation between part-time work and happiness - the current dissertation represents a step further in the development of our understanding of the relation between family interdependencies and well-being. My results have shown that country context, in the form of gender equality and marital stability, impacts the strength of mechanisms linking family interdependencies to well-being, specifically the breadwinner pressure that leads married men to earn higher wages. In addition, country context determines which mechanism links family interdependencies to well-being, for instance whether marital status is solely related to health through selection or also through a causal linkage. The impact of the national context is especially important considering that findings from a single country are not necessarily generalizable. As social scientists, we should not turn a blind eye to the country context in which individual behavior takes place.

Methodological contributions

I made several methodological contributions in this dissertation. Specifically, I used a collection of single-country estimates to make (preliminary) cross-national comparisons, and I compared the results of fixed and random effects models to assess the magnitude of selection effects.

In the studies examining the relation between partnerships and (a) men's wages (chapter two) and (b) men's and women's self-rated health (chapter three), I used a collection of single-country estimates to provide an overview of cross-national variation. The method of using single-country estimates has two main advantages over multilevel models. First, by comparing single-country estimates and plotting them, one gains

considerably more insight into the magnitude and nature of cross-national variations. The second advantage is that individual-level effects, those of interest and those included as controls, are not fixed to the same value across countries. These individual level effects can vary freely, which in multilevel modeling terms is called a random slope. Multilevel models have the drawback that only a limited number of random slopes can be incorporated. Otherwise, models do not converge. For that reason, it is customary to include random slopes only for the predictor variables, while fixing the effects of control variables. Thus, researchers are essentially introducing omitted variable bias, as fixed effects are constrained to their mean for each country. I analyzed the data for each country separately and plotted the results, which is a more feasible approach to deal with the inclusion of many random slopes.

In the study examining the relation between partnerships and self-rated health (chapter three), I compared fixed and random effects models. I did so to gain insight into the extent to which the relation between marital status and health is explained by selection of healthier individuals into marriage. The comparison of fixed and random effects of and in itself is not new. Comparisons of fixed and random effects models have not been used, however, to explain cross-national differences. I showed that comparing fixed and random effects models can provide scholars with new insights into cross-national variation and help them break it down into its component parts: selection and causation.

Limitations and avenues for future research

The empirical studies I carried out led to several interesting avenues for future research. Some of them are inspired by my results and others are driven by the limitations that I faced.

In my dissertation, I chose to focus on two indicators of interdependencies in the nuclear family, partnerships and parenthood. People's lives may also be shaped by the needs of siblings and elderly (grand) parents or by the support received from family members outside the nuclear family. Changing demographical age structures have resulted in greater opportunities and needs for support and influence across more than two generations. Researchers need to consider these changes in their approach to studying inequality.

Another caveat to my research is that I have looked at the presence of a partner, rather than the quality of the relationship. The impact of having a partner, or being single, likely differs across individuals. Earlier research shows that "bad" marriages or relationships are toxic to people, and those involved may be better off separated or divorced. My research did not investigate the impact of characteristics such as spousal support or relationship satisfaction, leaving a challenge for future researchers.

Policy suggestions to reduce inequality

Based on the results of my empirical studies I have identified two sets of policy implications. The first set deals with policies aimed at decreasing gender inequality. The second set of policy implications deals with inequality at large.

Policies aimed at reducing gender inequality. The finding that cross-national differences in married men's wage advantage are driven by gender equality and marital (in)stability (chapter two) suggested that the male marriage wage premium is partially culturally determined. In my interpretation of the results, gender inequality and marital stability, which can both be traced to a country's institutional and religious heritage, increase married men's pressure to be the breadwinner, which reveals itself in their higher wages compared to unmarried men. At the same time, the motherhood penalty that women suffer is to a large extent attributable to internalized cultural prescriptions that delegate responsibility for the children to them. This notion is supported by the finding that partners and their characteristics had almost no influence on the motherhood penalty. So what can policy makers do with this information? To reduce gender inequality in earnings, policies should aim at decreasing both the benefit of marriage for men and the penalty of motherhood for women. Both would be attained by policies focusing on changing the dominant gender roles. A policy that seems to be accomplishing this to some extent, is the daddy quota on parental leave that several Scandinavian countries have introduced. The daddy quota represents a fixed period of leave that men have to take up in order for the couple to be eligible for additional leave. Research suggests that the policy may positively affect attitudes concerning gender equality among both parents and childless individuals. Furthermore, findings show that men who have made use of the daddy quota take on a greater amount of household labor and have fewer conflicts about household labor compared to men who have not used this leave. Evidence from another (unpublished) study suggests that the daddy quota has also lowered divorce rates.

Policies aimed at reducing inequality at large, between those with and those without a partner and children. Inequalities in earnings between childless women and mothers are driven by the fact that mothers take on the bulk of the responsibility for household tasks and childrearing. At the same time, inequality in wages between married and unmarried men seems to be driven by the necessity for married men to take on the breadwinner role. Gender inequality - and inequality at large - seem therefore to be driven by the same processes. Hence, if policies could stimulate a change in the division of tasks in the household, both gender inequality and inequality at large would probably decline. This is easier said than done, considering the entrenched nature of gender roles. One of the problems in changing gendered labor division is in the valuation of household work. Even though household labor, not in the least childrearing, is a cornerstone the economy

and of society at large, those who perform it are not paid, except for domestic workers. Although household labor may hold great value to society at large, the fact that the work is unpaid gives it lower social standing, which may be part of the reason why men are not interested in taking it on. Recognizing and acknowledging the value of household work may lead to a shift in how society and especially men view it, and consequently lead to a shift in gender roles.



SAMENVATTING

(summary in Dutch)

Traditionele verklaringen van sociale ongelijkheid richten zich op verschillen in cultureel en menselijk kapitaal, bijvoorbeeld verschillen in opleidingsniveau. Deze verklaringen zijn echter niet goed in staat gebleken om hedendaagse sociale ongelijkheden te kunnen verklaren. In de huidige samenleving worden individuele levenskansen niet alleen beïnvloed door individueel cultureel en menselijk kapitaal, maar steeds meer ook factoren en eigenschappen die verder rijken dan het individu - partnerrelaties, ouderschap en mantelzorgverantwoordelijkheden. In dit licht hebben sociale wetenschappers opgeroepen om bij de bestudering van sociale ongelijkheid expliciet rekening te houden met dergelijke afhankelijkheden binnen families. Gehoor gevend aan deze oproep heb ik in dit proefschrift onderzocht hoe afhankelijkheden in families – specifiek de afhankelijkheden die ontstaan in partnerrelaties en ouderschap – bijdragen aan verschillen in welbevinden.

Partnerrelaties en ouderschap beïnvloeden individuele levenskansen op verschillende wijzen. Ten eerste heeft het aangaan of het verbreken van een relatie gevolgen voor het welbevinden. Het hebben van een echtgenoot heeft bijvoorbeeld een positieve samenhang met welbevinden, maar ook ongehuwd samenwonen lijkt voordelen met zich mee te brengen. Het verlies van een partner heeft daarentegen negatieve gevolgen voor zowel de betrokken volwassenen als hun kinderen. Ten tweede zijn partnerrelaties nauw verbonden met het ouderschap en de loopbaan van mensen. In het merendeel van de partnerrelaties worden één of meerdere kinderen geboren, waarbij zorgtaken voor de kinderen ontstaan. Bovendien heeft het ouderschap consequenties voor de loopbaan van zowel mannen als vrouwen. Vrouwen gaan over het algemeen minder uren werken wanneer zij moeder worden, terwijl mannen juist meer uren gaan werken.

De manier waarop partnerrelaties en ouderschap het welbevinden beïnvloeden, verschilt daarnaast mogelijk tussen landen. Er zijn substantiële institutionele en culturele verschillen tussen landen die het verband tussen deze familie-afhankelijkheden en het welbevinden beïnvloeden. Desalniettemin maakt het merendeel van de onderzoekers die zich richten op de verhoudingen tussen partnerrelaties, ouderschap en welbevinden gebruik van gegevens binnen één land. Daarom heb ik er in dit proefschrift voor gekozen te onderzoeken hoe de economische, culturele en beleidsmatige omstandigheden van een land invloed hebben op de relatie tussen familie-afhankelijkheden en welbevinden.

Het levenslopperspectief

In mijn onderzoek naar de invloed van familie-afhankelijkheden heb ik ervoor gekozen gebruik te maken van het levenslopperspectief. Twee principes die de kern vormen van het levenslopperspectief zijn de wisselwerking tussen individuele levens en de historische context (*lives in context*) en het principe van verbonden levens (*linked lives*). Deze benadering is bijzonder geschikt om de relatie tussen familie-afhankelijkheden en

welbevinden te bestuderen, alsmede de manier waarop deze wordt vormgegeven door de het land waarin men woont.

Het principe van verbonden levens benadrukt het idee dat mensen beïnvloed worden door anderen met wie zij in aanraking komen en op wie zij vervolgens ook weer invloed uitoefenen. Individuen ontwikkelen zich met andere woorden niet in isolatie van andere mensen, maar worden beïnvloed door de beslissingen die anderen maken en de gebeurtenissen in het leven van anderen. Het concept van verbonden levens verwijst daarnaast ook naar de verbanden tussen levensdomeinen, met name de manier waarop familie en werk samenhangen en elkaar wederzijds beïnvloeden.

In dit proefschrift heb ik mij gericht op afhankelijkheden die worden gecreëerd door partnerrelaties en ouderschap. Er zijn verschillende manieren waarop partners elkaars welbevinden kunnen beïnvloeden. Het is uiteraard van belang om te weten of er een partner aanwezig is. Zoals eerder genoemd zijn mensen met een partner doorgaans beter af. Mensen met een partner zijn bijvoorbeeld gemiddeld genomen gezonder. Verschillende mechanismen kunnen hieraan ten grondslag liggen. Partners kunnen bijvoorbeeld hun inkomen bundelen en zo profiteren van schaalvoordelen die alleenstaanden moeten ontberen. Een partner kan ook een bron van steun en sociale controle zijn. Naast het wel of niet hebben van een partner kunnen ook de kenmerken van deze partner, bijvoorbeeld zijn of haar genderrol attitudes, van belang zijn - en invloed hebben op - de werkuren van zijn of haar metgezel en de verdeling van zorgtaken. Binnen partnerrelaties worden ook kinderen geboren, die op hun beurt financiële lasten en zorgtaken met zich mee brengen. De financiële lasten vragen om voldoende inkomen, maar de zorgtaken vragen tegelijkertijd om genoeg beschikbare tijd. Het ouderschap beïnvloedt daarom ook de loopbanen van de beider partners.

Naast het principe van verbonden levens, benadrukt het levenslopperspectief ook dat in welke periode je wordt geboren invloed heeft op je gedrag, je ontwikkeling en je leven. Daarnaast heeft waar je geboren bent, en in welk culturele, politieke en economische omstandigheden je leeft, ook invloed op je. Beide ideeën maken deel uit van het concept lives in context van het levenslopperspectief.

Ik verwacht dat familie-afhankelijkheden en hun relatie tot welbevinden niet in alle landen hetzelfde zijn (lives in context). In sommige landen is de invloed van partnerrelaties en ouderschap waarschijnlijk groter dan in andere landen. De mechanismen die familie-afhankelijkheden met welbevinden verbinden kunnen sterker of zwakker zijn afhankelijk van het land, maar ook hun aard kan verschillen tussen landen. Verschillende omstandigheden in landen zouden van belang kunnen zijn. Ten eerste is de manier waarop partnerrelaties en ouderschap verbonden zijn met welbevinden afhankelijk van verschillen in verzorgingsstaat-arrangementen. In sommige landen is er bijvoorbeeld meer steun voor alleenstaande ouders dan in andere landen. Dit zal verschillen in welbevinden tussen alleenstaande ouders en twee-ouder gezinnen verkleinen. Ten tweede

kan de relatie tussen familie-afhankelijkheden en welbevinden worden vormgegeven door culturele verschillen. De rolverdeling tussen mannen en vrouwen is in sommige landen bijvoorbeeld een stuk traditioneler dan in andere landen, waardoor het ouderschap een grotere invloed heeft op de loopbaan van zowel mannen als vrouwen. Ten derde kunnen verschillen in de relatie tussen partnerrelaties en welbevinden tussen landen het gevolg zijn van verschillen in gezinssamenstelling. Welke mensen een partnerrelatie aangaan verschilt per land en in sommige landen hebben welvarende of gezonde mensen meer kans op een partner. Gezien de invloed die beleid, culturele normen en verschillen in gezinssamenstelling kunnen hebben op het verband tussen familie afhankelijkheden en welbevinden is het van cruciaal belang om deze relaties te onderzoeken.

Doel van mijn onderzoek

Dit proefschrift had ten doel de volgende centrale onderzoeksvraag te beantwoorden, gebruikmakend van het levensloopperspectief en in het bijzonder de concepten linked lives en lives in context.

“In welke mate, hoe en onder welke omstandigheden beïnvloeden partnerrelaties en ouderschap het individueel welbevinden?”

Door deze vraag te beantwoorden trachtte ik inzicht te krijgen in de mate waarin familie afhankelijkheden en welbevinden met elkaar verbonden zijn, in de mechanismes die deze relatie tot stand brengen en in de manier waarop beiden beïnvloed worden door eigenschappen van het land waar men woont, zoals de culturele normen en het gevoerde sociaal beleid.

Empirische studies

Om de centrale onderzoeksvraag te beantwoorden heb ik vier empirische studies uitgevoerd.

In de eerste studie heb ik mij gericht op de manier waarop getrouwd zijn invloed heeft op het uurloon van mannen en hoe deze relatie vormgegeven wordt door het land waar zij wonen. Getrouwde mannen verdienen een hoger uurloon dan ongetrouwde mannen. Uit het (beperkte) internationaal vergelijkende onderzoek dat is gedaan blijkt dat er aanzienlijke verschillen bestaan tussen landen met betrekking tot dit loonvoordeel van getrouwde mannen. Mijn studie bouwde voort op twee centrale verklaringen voor dit loonvoordeel die draaien om (1) de verdeling van huishoudstaken en (2) het verantwoordelijkheidsgevoel van getrouwde mannen. Ik beargumenteerde dat zowel de verdeling van huishoudstaken als het verantwoordelijkheidsgevoel van

getrouwde mannen afhankelijk zijn van de mate waarin zij druk ervaren om de rol van kostwinner op zich te nemen in hun land. Ik onderzocht daarbij vier landkenmerken: sekseverschillen op de arbeidsmarkt, gendernormen, het echtscheidingspercentage en het sociale vangnet. Ik verwachtte dat de druk om de kostwinner rol te vervullen en daarmee het loonvoordeel van getrouwde mannen, groter zou zijn in landen waar: mannen een groter voordeel hebben op de arbeidsmarkt, de gendernormen traditioneler zijn, het echtscheidingspercentage lager is, en er een minder groot sociaal vangnet is. De analyses in dit hoofdstuk waren gebaseerd op gegevens van de Luxembourg Income Study (LIS). In de analyses werden gegevens opgenomen uit 29 landen. De data op het macro-niveau waren afkomstig uit verschillende bronnen: de Wereldbank, de Verenigde Naties, de World Values Survey en de Internationale Arbeidsorganisatie.

Ik vond dat getrouwde mannen een hoger uurloon hadden dan nooit-getrouwde mannen, wat in overeenstemming is met de meeste literatuur over dit onderwerp. Daarnaast bleek dat het loonvoordeel van getrouwde mannen tussen landen met verschillende niveaus van gendergelijkheid en echtscheidingspercentages varieerde. In lijn met mijn verwachtingen was het loonvoordeel groter in landen met een grotere ongelijkheid tussen mannen en vrouwen en een lager echtscheidingspercentage. Dit waren landen waarin ik beargumenteerde dat de druk om de kostwinner rol te vervullen groter is.

De tweede studie onderzocht de relatie tussen de burgerlijke staat van mensen en ongelijkheden in gezondheid en dat deed ik vanuit een internationaal vergelijkend perspectief. Getrouwde mensen zijn over het algemeen gezonder dan ongetrouwde mensen, in een heel scala van verschillende gezondheidsuitkomsten, zoals een lagere kans op kanker of een hartaanval. Met deze studie vergrootte ik op twee manieren de kennis over dit onderwerp. Ten eerste beantwoorde ik de vraag of de relatie tussen burgerlijke staat en gezondheid op het individuele niveau het gevolg is van een causaal verband of dat het een kwestie van selectie is. Een causaal verband zou betekenen dat burgerlijke staat mensen daadwerkelijk beïnvloedt om gezonder te gaan leven, terwijl selectie betekent dat mensen met een betere gezondheid meer kans zouden hebben om een partner te krijgen/te trouwen. Ten tweede wilde ik bepalen of, en in welke mate, cross-nationale verschillen in de relatie tussen de burgerlijke staat en gezondheid verschillen weerspiegelen in causale verbanden of in selectie mechanismen. Daarnaast heb ik onderscheid gemaakt tussen alleenstaanden die nooit getrouwd zijn geweest en degenen die eerder getrouwd zijn geweest. Door dit onderscheid te maken, kon ik de toepasbaarheid van twee causale verklaringen voor de relatie tussen de burgerlijke staat en gezondheid afzonderlijk testen. De eerste verklaring gaat er vanuit dat mensen met een partner een betere gezondheid hebben doordat deze partner financiële middelen met zich meebrengt en sociale steun, zogenaamde marital resources. De tweede verklaring gaat er daarentegen vanuit dat niet het hebben, maar het verliezen van een partner de

gezondheid van mensen beïnvloedt doordat dit tot stress en andere negatieve gevolgen leidt. In deze studie heb ik gebruik gemaakt van gegevens uit de European Union Statistics on Income and Living Conditions (EU-SILC).

Mijn resultaten wezen uit dat op individueel niveau een groot deel van het verband tussen burgerlijke staat en gezondheid wordt verklaard doordat gezondere mensen meer kans hebben een partner te vinden (er is dus een selectie effect). Daarnaast bleek dat het verliezen van een partner wel een negatieve invloed heeft op de gezondheid. Tussen verschillende landen bleek het grootste deel van de variatie in de relatie tussen burgerlijke staat en gezondheid toe te schrijven aan verschillen in selectie en niet aan verschillen in causale mechanismen.

In de derde studie onderzocht ik het effect van het krijgen van kinderen op het inkomen van vrouwen. De negatieve gevolgen van het moederschap voor het inkomen komen in diverse onderzoeken naar voren. Het moederschap leidt tot een lager inkomen omdat moeders vaker niet werken, minder uren werken als ze wel werken en een lager uurloon krijgen dan kinderloze vrouwen. Vaak wordt in onderzoek slechts stilgestaan bij de individuele kenmerken van de vrouw die samenhangen met veranderingen in het uurloon in de transitie naar het moederschap. Mijn bijdrage was te onderzoeken hoe kenmerken van de partner en het aantal kinderen (pariteit) invloed hadden op de inkomensachterstand van moeders, de zogenaamde motherhood penalty. Ik concentreerde me daarbij op de volgende kenmerken van de partner: zijn werkuren, zijn inkomen en zijn genderrol attitudes. Ik verwachtte dat het negatieve effect van moederschap op het inkomen kleiner zou zijn naar mate de partner minder uren werkte, een lager inkomen had en meer progressieve genderrol attitudes had. Kijkende naar het aantal kinderen (pariteit) heeft eerder onderzoek de inkomens van moeders vergeleken met die van kinderloze vrouwen of is het ervan uitgegaan dat ieder extra kind dat geboren wordt eenzelfde negatief effect heeft op het inkomen van vrouwen. Ik betwistte deze aanname en stelde dat de daling van het inkomen na een tweede of derde kind minder uitgesproken zou zijn, gezien het feit dat de grootste aanpassingen in het aantal werkuren plaatsvinden na de geboorte van het eerste kind. De analyses in dit hoofdstuk werden gedaan met gegevens van de Nederland Kinship Panel Study (NKPS).

In lijn met eerder onderzoek lieten mijn resultaten zien dat het moederschap grote negatieve gevolgen heeft voor het inkomen van Nederlandse vrouwen. De kenmerken van de partner hadden hier echter weinig invloed op. De financiële middelen van de partner, zijn werkuren en zijn genderrol attitudes hadden praktisch geen invloed op de motherhood penalty. Het aantal kinderen dat een vrouw krijgt is echter wel van groot belang: het eerste kind had een groot negatief effect op het inkomen van de vrouw, voor latere kinderen was dit effect veel kleiner.

In de vierde studie onderzocht ik hoe werkuren gerelateerd zijn aan hoe gelukkig mannen en vrouwen in tweeverdiener-gezinnen zijn. Eerder onderzoek heeft

contrasterende antwoorden gegeven op de vraag of mensen gelukkiger zijn wanneer zij deeltijd werken of voltijd; sommige studies vonden dat deeltijd werknemers gelukkiger zijn, terwijl anderen juist vonden dat voltijd werknemers gelukkiger zijn. Ik voerde aan dat deze bevindingen niet per se met elkaar in strijd zijn, maar dat de relatie tussen werkuren en geluk afhankelijk zou kunnen zijn van het geslacht, de aanwezigheid van kinderen, de werkuren van de partner en de culturele normen en het beleid van het land waar men woont. Ik onderzocht in deze studie ook twee mechanismes die het verband tussen werkuren en geluk verklaren. Het eerste mechanisme veronderstelt dat voltijd werkende mensen minder gelukkig zullen zijn wanneer er conflicten ontstaan tussen werk verantwoordelijkheden en familie verantwoordelijkheden. Het tweede mechanisme benadrukt dat de werkuren (voltijd of deeltijd) overeen moeten komen met de genderrol verwachtingen die gelden in een land om tot meer geluk te leiden. Voor dit onderzoek heb ik gebruik gemaakt van gegevens uit de Family and Changing Gender Roles module van het International Social Survey Programme (ISSP) van 2012.

In tegenstelling tot mijn verwachtingen wezen mijn resultaten erop dat er de relatie tussen deeltijd (of voltijd) werk en hoe gelukkig mensen zijn niet verschilde tussen landen. Daarnaast heb ik uitgevonden dat vrouwen met schoolgaande kinderen gelukkiger zijn wanneer zij deeltijd werken, omdat ze minder conflict tussen werk en familie verantwoordelijkheden ervaren. Mannen met schoolgaande kinderen waren daarentegen gelukkiger wanneer zij voltijd werkten en dit was deels te verklaren door het feit dat ze daarmee handelden naar de traditionele genderrol verwachtingen die in veel landen gelden. Mannen en vrouwen met schoolgaande kinderen waren beiden gelukkiger wanneer hun partner deeltijd werkte. Hoe gelukkig kinderloze mannen en vrouwen waren leek niet afhankelijk van het feit dat zij voltijd of deeltijd werkten en ditzelfde gold verassend genoeg ook voor ouders van jonge (nog niet schoolgaande) kinderen.

Conclusies

Om tot nieuwe inzichten te komen met betrekking tot de relatie tussen familie-afhankelijkheden en welbevinden hanteerde ik een levensloopperspectief. In de resultaten van mijn vier studies zijn drie overkoepelende patronen te identificeren. Deze patronen hebben betrekking op het belang van het type welbevinden dat onderzocht wordt, het belang van het geslacht van de respondent en het belang van het land waarin een persoon woont.

Mijn resultaten lieten zien dat mensen met een partner beter af zijn dan mensen zonder partner in termen van inkomen en gezondheid. Daarnaast lieten de resultaten ook zien dat mensen die een relatiebreuk meemaakten ongezonder zijn. De mechanismen die partnerrelaties enerzijds aan inkomen en anderzijds aan gezondheid verbinden lijken

echter te verschillen voor deze twee uitkomstmaten. De resultaten uit de studie naar de relatie tussen het huwelijk en de lonen van mannen duiden op een causaal verband: het huwelijk lijkt mannen productiever te maken. De resultaten uit de studie naar de relatie tussen burgerlijke staat en gezondheid wezen er daarentegen op dat dit verband in grote mate het gevolg is van de selectie van gezondere personen in partnerrelaties. Verschillen in gezondheid tussen bijvoorbeeld getrouwde en nooit getrouwde mensen zijn bijna volledig te verklaren door het feit dat gezonde mensen meer kans hebben op een partner.

Een verklaring waarom het hebben van een partner wel inkomen beïnvloedt maar niet gezondheid, is mogelijk dat inkomen door partners gedeeld wordt, terwijl de gezondheid meer een persoonlijk kenmerk is. Inkomen kan gezien worden als vorm van welbevinden die meer afhankelijk is van andere mensen terwijl dit voor gezondheid niet geldt. Het is te verwachten dat de partner een grotere invloed heeft op gezondheidsmaten die te maken hebben met gedrag en meer afhankelijk zijn van de invloed van anderen, zoals samen eten of de consumptie van alcohol.

Ook voor de invloed van de partner was het van belang welke vorm van welbevinden onderzocht werd. In tegenstelling tot mijn verwachtingen hadden de kenmerken van de partner nauwelijks invloed op de grote van de motherhood penalty. Het gelukniveau van zowel mannen als vrouwen werd echter wel beïnvloed door de werkuren van de partner.

De Nederlandse context zou kunnen verklaren waarom de rol van de partner beperkt is wanneer we kijken naar de relatie tussen moederschap en het inkomen. Het Nederlandse minimumloon is ingesteld op een niveau dat het in principe mogelijk maakt om van één voltijd baan een familie te onderhouden. Dit betekent dat wanneer de man een voltijd baan heeft, het inkomen van zijn vrouw gezien kan worden als een bonus. Het inkomen van Nederlandse vrouwen is daarom waarschijnlijk minder afhankelijk van de kenmerken van de partner en meer van persoonlijke voorkeuren. Het gelukniveau wordt waarschijnlijk sterker vormgegeven door onderlinge afhankelijkheid. De kenmerken van de ene partner – zijn of haar inkomen, werkuren en attitudes – kunnen het geluk van de andere partner beïnvloeden door ervoor te zorgen dat hij of zij bijvoorbeeld minder kan werken of juist meer moet werken dan ze zouden willen.

Ook wat betreft het effect van moederschap verandert het beeld als we kijken naar verschillende vormen van welbevinden. De eerste keer moeder worden heeft over het algemeen een daling in de werkuren als gevolg en daarmee ook een lager inkomen. Tegelijkertijd zijn moeders die minder werken (deeltijd) gelukkiger dan moeders die meer werken (voltijd). Het is daarom niet zonder meer te zeggen dat het moederschap een positieve of een negatieve bijdrage levert aan het welbevinden van vrouwen.

Mijn bevindingen benadrukten ook het belang van het geslacht van respondenten in de manier waarop het ouderschap inkomen en geluk beïnvloedt. Het hebben van kinderen heeft andere gevolgen voor het leven van mannen dan voor vrouwen. Mijn onderzoek liet zien dat vrouwen er financieel op achteruit gaan wanneer zij kinderen

krijgen, wat waarschijnlijk grotendeels te wijten is aan een daling van het aantal werkuren. Uit de resultaten van ander onderzoek blijkt echter dat mannen meer gaan verdienen wanneer zij vader worden, voornamelijk omdat zij juist meer gaan werken. Zoals eerder opgemerkt lijkt de daling in het aantal werkuren voor vrouwen echter wel gepaard te gaan met een hoger gelukniveau. Vrouwen maken dus wellicht een afweging tussen een hoger inkomen enerzijds en de stress van het combineren van werk en familie verantwoordelijkheden anderzijds. Recent onderzoek geeft aan dat deze afweging op nationaal niveau door beleidsmaatregelen vormgegeven wordt. Door de overheid gefinancierde kinderopvang lijkt de afweging meer richting inkomen te bewegen, doordat de stress van familie verantwoordelijkheden verminderd wordt. In mijn eigen onderzoek vond ik dat mannen, in het bijzonder vaders met schoolgaande kinderen, gelukkiger waren wanneer zij voltijds werkten. Het verschil met moeders weerspiegelt de traditionele verdeling van taken, waarbij vrouwen de verantwoordelijkheid voor het huishouden en de opvoeding hebben en mannen de kost verdienen.

Volgens het principe van lives in context worden de levens van mensen onder andere vormgegeven door het land waarin zij wonen. Op basis van dit principe verwachtte ik dat de relatie tussen familie-afhankelijkheden en welbevinden zou worden gestructureerd door economische, institutionele en culturele verschillen tussen landen. Mijn resultaten lieten zien aan dat het land waar mannen wonen het inkomensvoordeel van getrouwde mannen beïnvloedt. Het verschil in gezondheid tussen mensen met een verschillende burgerlijke staat bleek ook afhankelijk te zijn van het land waar zij woonden.

Gendergelijkheid en een hoger echtscheidingspercentage verminderden naar mijn idee de druk die mannen ervaren om kostwinner te zijn en daarmee hun inkomensvoordeel. Ik beargumenteerde dat de druk om kostwinner te zijn twee causale mechanismes aanstuurde die het huwelijk met het inkomen van mannen verbinden. Naast causale mechanismes wezen de resultaten van mijn studie naar het verband tussen burgerlijke staat en gezondheid erop dat het land waar men woont ook een grote invloed kan hebben op selectie mechanismes. De resultaten van het onderzoek naar de relatie tussen deeltijd werk en het gelukniveau suggereerde echter dat deze relatie totaal niet afhankelijk was van de normatieve en beleidsmatige omstandigheden in een land. Samengenomen wijzen deze bevindingen erop dat het land waar men woont op verschillende manieren het leven van mensen beïnvloedt.

In het onderzoek naar de relatie tussen moederschap en het inkomen van de vrouw, heb ik alleen gekeken naar de Nederlandse context. Hoewel mijn resultaten uitwezen dat de inkomsten van vrouwen vaak lager worden door het moederschap, hadden de kenmerken van de partner hierop geen invloed. Eerder onderzoek heeft aangetoond dat de motherhood penalty verschilt van land tot land en dat deze kleiner is in landen met meer ouderschapsverlof, meer kinderopvang en meer ondersteuning voor werkende moeders. Het is denkbaar dat de ook invloed van een partner op de motherhood penalty

verschilt van land tot land. In landen met minder kinderopvang kan de impact van de overgang naar het moederschap op de werkuren van vrouwen bijvoorbeeld meer afhankelijk zijn van de werkuren van de partner. Toekomstig onderzoek moet uitwijzen of dit het geval is.

Ondanks het feit dat niet al mijn verwachtingen over de invloed van het land waar men woont werden ondersteund heb ik met dit proefschrift bijgedragen aan het begrip van de relatie tussen familie-afhankelijkheden en welbevinden. Mijn resultaten hebben aangetoond dat waar men woont de sterkte van mechanismes kan beïnvloeden die familie-afhankelijkheden aan welbevinden verbinden, zoals de mechanismes die ervoor zorgen dat getrouwde mannen een hoger inkomen hebben. Daarnaast is het land waar men woont ook van belang voor welk mechanisme familie-afhankelijkheden en welbevinden verbindt. Zo kan burgerlijke staat in het ene land verbonden zijn met gezondheid door middel van een selectie mechanisme (gezondere personen hebben meer kans op een partner), maar in het andere land door middel van een causaal mechanisme (het hebben van een partner brengt bepaalde financiële voordelen met zich mee en sociale steun). Dit alles betekent dat de bevindingen in een enkel land niet zonder meer te generaliseren zijn naar andere landen. Als sociale wetenschappers dienen we daarom rekening houden met het land waar individuen wonen.

Beperkingen en mogelijkheden voor toekomstig onderzoek

Mijn empirische studies hebben geleid tot een aantal interessante richtingen voor toekomstig onderzoek.

In mijn proefschrift heb ik ervoor gekozen om me te concentreren op twee indicatoren van afhankelijkheden in het gezin: partnerrelaties en ouderschap. De levens van mensen kunnen echter ook vormgegeven worden door de behoeftes van hun broers, zussen of ouders. Ook kunnen zij beïnvloed worden door familieleden buiten het gezin. Veranderende demografische structuren leiden ertoe dat er nu meer uitwisseling van steun plaatsvindt tussen meer dan twee generaties. Een hogere levensverwachting zorgt er bijvoorbeeld voor dat ouders vaker en langer een beroep kunnen doen op grootouders voor hulp met de opvoeding van kinderen. Onderzoekers moeten met dergelijke demografische veranderingen rekening houden in nieuwe studies naar de oorzaken van ongelijkheid.

Een andere beperking van mijn onderzoek is dat ik niet naar de kwaliteit van de partnerrelatie gekeken heb. Het hebben van een partner heeft niet voor iedereen dezelfde invloed op het welbevinden. Eerder onderzoek heeft bijvoorbeeld uitgewezen dat in sommige gevallen huwelijken of partnerrelaties ook een sterke negatieve invloed kunnen hebben op het welbevinden en dat deze mensen dan beter af zijn wanneer ze van deze partner scheiden. In mijn onderzoek heb ik niet gekeken naar de invloed van kenmerken

zoals de steun van de partner of de tevredenheid met de relatie. Ook hiermee moet toekomstig onderzoek rekening houden wanneer het verband tussen partnerrelaties en welbevinden onderzocht wordt.

Beleidsuggesties om de ongelijkheid te verminderen

Op basis van de resultaten van mijn empirische studies heb ik beleidsimplicaties geïdentificeerd op twee vlakken: beleid gericht op het verminderen van genderongelijkheid en beleid dat gericht is op de vermindering van ongelijkheid in meer algemene zin.

Beleid gericht op het verminderen van genderongelijkheid. De bevinding dat cross-nationale verschillen in het inkomensvoordeel van getrouwde mannen worden gedreven door genderongelijkheid en het scheidingspercentage (hoofdstuk twee) geeft aan dit voordeel deels cultureel bepaald wordt. Tegelijkertijd is de zogenaamde motherhood penalty grotendeels het gevolg van geïnternaliseerde culturele voorschriften die de verantwoordelijkheid voor opvoeding en het huishouden bij vrouwen leggen. Wat betekenen deze bevindingen voor beleidsmakers? Om de genderongelijkheid in inkomen te beperken moet beleid erop gericht zijn het inkomensvoordeel van getrouwde mannen en de inkomensachterstand van moeders beiden te verminderen. Dit wordt mogelijk bereikt door beleid te implementeren dat erop gericht is de geldende gendernormen te veranderen. Een beleidsmaatregel die hier aan kan bijdragen is de zogenaamde daddy quota die een aantal Scandinavische landen ingevoerd hebben. Deze daddy quota behelst een vastgestelde hoeveelheid verlof die enkel door vaders kan worden opgenomen. Onderzoek heeft aangetoond dat deze beleidsmaatregel een positief effect heeft op attitudes aangaande gendergelijkheid onder zowel ouders als kinderlozen. Daarnaast lijkt de introductie van het daddy quota ervoor te zorgen dat mannen een groter deel van het huishoudelijk werk op zich nemen en dat er minder conflicten over huishoudelijk werk zijn. Bovendien is het aantal echtscheidingen na introductie van de daddy quota ook lager geworden.

Beleid gericht op het verminderen van ongelijkheid in algemene zin. Ongelijkheid in inkomens tussen kinderloze vrouwen en moeders wordt veroorzaakt door het feit dat moeders het grootste deel van de verantwoordelijkheid voor de huishoudelijke taken en de opvoeding op zich nemen. De ongelijkheid in inkomens tussen gehuwde en ongehuwde mannen lijkt te kunnen worden verklaard door de druk die gehuwde mannen ondervinden om de kostwinner rol op zich te nemen. Genderongelijkheid en ongelijkheid in meer algemene zin lijken daarom te worden gedreven door dezelfde processen. Daarom zou een verandering in de verdeling van taken in het huishouden zowel de genderongelijkheid als de ongelijkheid in algemene zin kunnen verminderen. Gezien de diepgewortelde rolpatronen is dit echter makkelijker gezegd dan gedaan. Een van de problemen bij het veranderen van de verdeling van taken tussen mannen en

vrouwen is volgens mij de waardering van huishoudelijk werk. Ondanks de grote waarde van huishoudelijke arbeid en de opvoeding van kinderen voor de samenleving – iedereen heeft immers baat bij goed opgevoede kinderen die later productieve leden van de samenleving worden - heeft het een lage sociale status. Het erkennen van de waarde van huishoudelijk werk zou ervoor kunnen zorgen dat er een kentering plaatsvindt in hoe de samenleving dit werk beoordeelt. Het zou ervoor kunnen zorgen dat er een verandering plaatsvindt in de heersende verdeling van arbeid en zorg tussen mannen en vrouwen.



REFERENCES

- Abendroth, A.-K., Huffman, M. L., & Treas, J. (2014). The parity penalty in Life Course perspective: Motherhood and occupational status in 13 European countries. *American Sociological Review*, *79*, 993-1014.
- Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *Quarterly Journal of Economics*, *115*(August), 715-753.
- Allison, P. (1999). Multiple imputation for missing data: A cautionary tale. *Sociological Methods & Research*, *28*(3), 301-309.
- Alwin, D. F., Braun, M., & Scott, J. (1992). The separation of work and the family: Attitudes towards women's labour-force participation in Germany, Great Britain, and the United States. *European Sociological Review*, *8*(1), 13-37.
- Amato, P. R. (2015). Marriage, cohabitation and mental health. In *Family Matters* (pp. 5-13).
- Amato, P. R., & Booth, A. (1991). Divorce and psychological Stress. *Journal of Health and Social Behavior*, *32*(4), 396-407.
- Anderson, D. J., Binder, M., & Krause, K. (2003). The motherhood wage penalty revisited: Experience, heterogeneity, work effort, and work-schedule flexibility. *Industrial and Labor Relations Review*, *56*, 273-294.
- Atkinson, A. B. (2004). The Luxembourg Income Study (LIS): past, present and future. *Socio-Economic Review*, *2*(2), 165-190.
- Atkinson, A. B., Piketty, T., & Saez, E. (2011). Top incomes in the long run of history. *Journal of Economic Literature*, *49*(1), 3-71.
- Balbo, N., Billari, F. C., & Mills, M. (2013). Fertility in advanced societies: A review of research. *European Journal of Population = Revue Europeenne de Demographie*, *29*(1), 1-38.
- Baxter, J., Gray, M., & Alexander, M. (2007). Mothers and fathers with young children: Paid employment, caring and wellbeing. *FaHCSIA Social Research Paper*, *30*.
- Becker, G. S. (1973). A theory of marriage: Part I. *The Journal of Political Economy*, *81*(4), 813-846.
- Becker, G. S. (1981). *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Bengtson, V. L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and Family*, *63*(1), 1-16.
- Bernard, J. (1981). The good-provider role: Its rise and fall. *American Psychologist*, *36*(1), 1-12.
- Bernasco, W., de Graaf, P. M., & Ultee, W. C. (1998). Effects of spouse's resources on occupational attainment in the Netherlands. *European Sociological Review*, *14*(1), 15-31.
- Bianchi, S. M., & Milkie, M. a. (2010). Work and family research in the first decade of the 21st century. *Journal of Marriage and Family*, *72*(3), 705-725.
- Bierings, H., & Souren, M. (2011). *Minder werken na geboorte kind*. Retrieved from <http://www.cbs.nl/NR/rdonlyres/DFC60B4B-CB83-4FF0-9BE9-9D0B7C2A1A6D/0/2011k3v4p21art.pdf>
- Bittman, M., England, P., Sayer, L. C., Folbre, N., & Matheson, G. (2003). When does gender trump money? Bargaining and time in household work. *American Journal of Sociology*, *109*(1), 186-214.
- Blood, R. O., & Wolfe, D. M. (1960). *Husbands and wives: the dynamics of married living*. New York: Free Press.
- Boeckmann, I., Misra, J., & Budig, M. J. (2014). Cultural and institutional factors shaping mothers' employment and working hours in postindustrial countries. *Social Forces*, *93*(4), 1301-1333.
- Boele-Woelki, K., Curry-Summer, I., Jansen, M., & Schrama, W. (2006). *Huwelijk of geregistreerd partnerschap?*
- Booth, A. L., & Van Ours, J. C. (2008). Job satisfaction and family happiness: The part-time work puzzle. *The Economic Journal*, *118*(526), F77-F99.

- Booth, A. L., & van Ours, J. C. (2009). Hours of work and gender identity: Does part-time work make the family happier? *Economica*, 76(301), 176–196.
- Booth, A. L., & van Ours, J. C. (2013). Part-time jobs: What women want? *Journal of Population Economics*, 26, 263–283.
- Bridgman, B., Dugan, A., Lal, M., Osborne, M., & Villones, S. (2012). Accounting for household production in the national accounts, 1965–2010. *Survey of Current Business*, 92(5), 23–36.
- Brines, J. (1994). Economic dependency, gender, and the division of labor at home. *American Journal of Sociology*, 100(3), 652.
- Budig, M. J., & England, P. (2001). The wage penalty for motherhood. *American Sociological Review*, 66(2), 204.
- Budig, M. J., & Hodges, M. J. (2010). Differences in disadvantage: Variation in the motherhood penalty across white women's earnings distribution. *American Sociological Review*, 75(5), 705–728.
- Budig, M. J., & Lim, M. (2016). Cohort differences and the marriage premium: Emergence of gender-neutral household specialization effects. *Annual Meeting of the Population Association of America*, 1–40.
- Budig, M. J., Misra, J., & Boeckmann, I. (2012). The motherhood penalty in cross-national perspective: The importance of work-family policies and cultural attitudes. *Social Politics: International Studies in Gender, State & Society*, 19(2), 163–193.
- Budig, M. J., Misra, J., & Boeckmann, I. (2016). Work-family policy trade-offs for mothers? Unpacking the cross-national variation in motherhood earnings penalties. *Work and Occupations*, 42(2), 119–177.
- Carr, D., & Springer, K. W. (2010). Advances in families and health research in the 21st century. *Journal of Marriage and Family*, 72(3), 743–761.
- Case, A., & Paxson, C. (2005). Sex differences in morbidity and mortality. *Demography*, 42(2), 189–214.
- Cheng, S. (2016). The accumulation of (dis)advantage: The intersection of gender and race in the long-term wage effect of marriage. *American Sociological Review*, 81(1), 29–56.
- Chiappori, P., Oreffice, S., & Quintana-Domeque, C. (2010). *Matching with a handicap: The case of smoking in the marriage market* (IZA Discussion Paper). Retrieved from <http://ftp.iza.org/dp5392.pdf>
- Christiansen, S. L., & Palkovitz, R. (2001). Why the “good provider” role still matters: Providing as a form of paternal involvement. *Journal of Family Issues*, 22(1), 84–106.
- Cohen, P. N. (2002). Cohabitation and the declining marriage premium for men. *Work and Occupations*, 29(3), 346–363.
- Collewet, M., & de Koning, J. (2011). Working time and happiness in Dutch panel data. In *EALE Conference*.
- Connell, R. W. (1987). *Gender and power: Society, the person and sexual politics*. Stanford: Stanford University Press.
- Connelly, R. (1992). The effects of child care costs on married women's labor force participation. *The Review of Economics and Statistics*, 74(1), 83–90.
- Cooke, L. (2014). Gendered parenthood penalties and premiums across the earnings distribution in Australia, the United Kingdom, and the United States. *European Sociological Review*, 30(3), 360–372.
- Correll, S. J., Benard, S., & Paik, I. (2013). Getting a job : Is there a motherhood penalty? *American Journal of Sociology*, 112(5), 1297–1339.
- Crompton, R. (1999). *Restructuring Gender Relations and Employment: The Decline of the Male Breadwinner*. Oxford: Oxford University Press.

- Dannefer, D. (2003). Cumulative advantage/disadvantage and the Life Course: Cross-fertilizing age and social science theory. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 58(6), S327–S337.
- Datta Gupta, N., Smith, N., & Stratton, L. S. (2007). Is marriage poisonous? Are relationships taxing? An analysis of the male marital wage differential in Denmark. *Southern Economic Journal*, 74(2), 412–433.
- Davies, H., Joshi, H., & Peronaci, R. (2000). Forgone income and motherhood: What do recent British data tell u? *Population Studies*, 54(3), 293–305.
- De Beer, J., & Deven, F. (2000). *Diversity in family formation: The 2nd Demographic Transition in Belgium and The Netherlands*. Dordrecht: Springer Netherlands.
- De Bruijn, S., Hogerbrugge, M. J. A., & Merz, E.-M. (2012). *Cumulative codebook of the Netherlands Kinship Panel Study, Wave 1 to 3, 2002-2011*. The Hague.
- De Jong, A., & Liefbroer, A. C. (1998). *Scales in the PSIN: Results of scale analyses using panel study*. The Hague: NIDI.
- De Linde Leonard, M., & Stanley, T. D. (2015). Married with children: What remains when observable biases are removed from the reported male marriage wage premium. *Labour Economics*, 33, 72–80.
- De Ruijter, E. H. M. (2005). *Household outsourcing*. (I. D. Series, Ed.). Utrecht.
- DeSalvo, K. B., Bloser, N., Reynolds, K., He, J., & Muntner, P. (2006). Mortality prediction with a single self-rated health question. *Journal of General Internal Medicine*, 21(3), 267–275.
- Deutsch, F., Lussier, J., & Servis, L. (1993). Husbands at home: predictors of paternal participation in childcare and housework. *Journal of Personality and Social Psychology*, 65, 1154–1166.
- Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29(1), 94–122.
- Dorius, S. F., & Alwin, D. F. (2010). The global development of egalitarian beliefs — A decomposition of trends in the nature and structure of gender ideology. *Population Studies Center Research Report No 10-723*.
- Dykstra, P., & Wagner, M. (2007). Pathways to childlessness and late-life outcomes. *Journal of Family Issues*, 28(11), 1487–1517.
- Ekert-Jaffé, O. (2010). Are the real time costs of children equally shared by mothers and fathers? *Social Indicators Research*, 101(2), 243–247.
- Elder, G. H. (1994). Time, human agency, and social change: Perspectives on the Life Course. *Social Psychology Quarterly*, 57(1), 4–15.
- Elder, G. H., & Shanahan, M. J. (2006). The Life Course and Human Development. In *Handbook of Child Psychology*.
- Engbersen, G., & De Haan, J. (2006). *Balans en toekomst van de sociologie*. Amsterdam: Amsterdam University Press.
- Esping-Andersen, G. (1999). *Social foundation of post-industrial society*. Oxford: Oxford University Press.
- European Commission. (2014). *Parents at work: men and women participating in the labour force*. Retrieved from http://ec.europa.eu/justice/gender-equality/files/documents/140502_gender_equality_workforce_ssr3_en.pdf
- European Commission. (2010). *Why socio-economic inequalities increase? Facts and policy responses in Europe*. Brussels: European Commission.
- Eurostat. (2015). Eurostat statistics explained: social protection statistics. Retrieved from http://ec.europa.eu/eurostat/statistics-explained/index.php/Social_protection_statistics
- Evertsson, M., & Neremo, M. (2004). Dependence within families and the division of labour : comparing Sweden and the United States. *Journal of Marriage and the Family*, 66(Dec), 1272–1286.

- Fu, H., & Goldman, N. (1996). Incorporating health into models of marriage choice: Demographic and sociological perspectives. *Journal of Marriage & the Family*, 58(3), 740–758.
- Fuwa, M. (2004). Macro-level gender inequality and the division of household labor in 22 countries. *American Sociological Review*, 9, 751–767.
- Fuwa, M., & Cohen, P. N. (2007). Housework and social policy. *Social Science Research*, 36(2), 512–530.
- Gerstel, N. R., & Sarkisian, N. (2006). Marriage: The good, the bad, and the greedy. *Contexts*, 5(16), 16–21.
- Glauber, R. (2008). Race and gender in families and at work: The fatherhood wage premium. *Gender & Society*, 22(1), 8–30.
- Gornick, J. C., & Hegewisch, A. (2014). Gender, employment, and parenthood: The consequences of work–family policies. In *Lessons from Europe? What Can Americans Learn from European Public Policies* (pp. 17–42).
- Gornick, J. C., & Meyers, M. K. (2008). Creating gender egalitarian societies: An agenda for reform. *Politics & Society*, 36(3), 313–349.
- Gough, M., & Noonan, M. (2013). A review of the motherhood wage penalty in the United States. *Sociology Compass*, 7(4), 328–342.
- Gray, J. S., & Vanderhart, M. J. (2000). On the determination of wages: Does marriage matter? In L. J. Waite (Ed.), *The ties that bind: Perspectives on marriage and cohabitation* (pp. 356–367). New York: Aldine de Gruyter.
- Greenstein, T. (1996). Husbands' participation in domestic labor: Interactive effects of wives' and husbands' gender ideologies. *Journal of Marriage and the Family*, 58(3), 585–595.
- Grossman, M. (1972). On the concept of health capital and the demand for health. *Journal of Political Economy*, 80(2), 223–255.
- Hagestad, G. O., & Dykstra, P. A. (2016). Structuration of the life course: Some neglected aspects. In J. T. Mortimer, M. J. Shanahan, & M. K. Johnson (Eds.), *Handbook of the Life Course* (Second). New York: Springer.
- Hausman, J. (1978). Specification tests in econometrics. *Econometrica: Journal of the Econometric Society*, 46(6), 1251–1271.
- Hawkins, D. N., & Booth, A. (2005). Unhappily ever after: Effects of long-term, low-quality marriages on well-being. *Social Forces*, 84(1), 451–471.
- Hersch, J., & Stratton, L. S. (2000). Household specialization and the male marriage wage premium. *Industrial and Labor Relations Review*, 54(1), 78–94.
- Hertz, R., & Marshall, N. L. (2001). *Working families: the transformation of the American home*. Berkeley: University of California Press.
- Hill, M. S. (1979). The wage effects of marital status and children. *The Journal of Human Resources*, 14(4), 579–594.
- Hiller, D. V. (1984). Power dependence and division of family work. *Sex Roles*, 10(11–12), 1003–1019.
- Hochschild, A., & Machung, A. (1989). *The second shift: working families and the revolution at home*. New York: Viking.
- Hu, Y. R., & Goldman, N. (1990). Mortality differentials by marital status: an international comparison. *Demography*, 27(2), 233–50.
- Huerta, M. C., Adema, W., Baxter, J., Han, W.-J., Lausten, M., Lee, R., & Waldfogel, J. (2013). *Father's leave, father's involvement and child development: Are they related? Evidence from four OECD countries* (Social, Employment and Migration Working Papers No. 2012(11)).
- Huijts, T., & Kraaykamp, G. (2011a). Marital status, nation marital status composition, and self-assessed health. *European Societies*, 13(2), 279–305.

- Huijts, T., & Kraaykamp, G. (2011b). Religious involvement, religious context, and self-assessed health in Europe. *Journal of Health and Social Behavior*, 52(1), 91–106.
- Huisjes, M., Van Kolschooten, F., & Van Maanen, H. (2011). *De Nederlandse Wetenschapsagenda*. Retrieved from <https://www.knaw.nl>
- ICSU, & ISSC. (2015). *Review of targets for the Sustainable Development Goals: The science perspective*. Paris: International Council for Science. Retrieved from <http://www.icsu.org/publications/reports-and-reviews/review-of-targets-for-the-sustainable-development-goals-the-science-perspective-2015/SDG-Report.pdf>
- ILO. (2015). International Labour Organization social security expenditure database. Retrieved from <http://www.ilo.org/dyn/sesame/ifpses.socialdbexp>
- Ishii-Kuntz, M., & Coltrane, S. (1992). Predicting the sharing of household labor: Are parenting and housework distinct? *Sociological Perspectives*, 35(4), 629–647.
- ISSP Research Group. (2014). *International Social Survey Programme: Family and Changing Gender Roles IV* (ZA5900 Data file Version 2.0.0 No. ZA5900 Data file version 2.0.0). *GESIS Data Archive*. Cologne.
- Iversen, T., & Rosenbluth, F. M. (2010). *Women, work and politics*. New Haven: Yale University Press.
- Jakobsson, N., & Kotsadam, A. (2013). Does marriage affect men's labor market outcomes? A European perspective. *Review of Economics of the Household*.
- Kahn, J. R., García-Manglano, J., & Bianchi, S. M. (2014). The motherhood penalty at midlife: Long-term effects of children on women's careers. *Journal of Marriage and Family*, 76(1), 56–72.
- Kahneman, D., Krueger, A., & Schkade, D. (2004). A survey method for characterizing daily life experience: The day reconstruction method. *Science*, (December), 1776–1781.
- Kalmijn, M. (2010). Country differences in the effects of divorce on well-being: The role of norms, support, and selectivity. *European Sociological Review*, 26(4), 475–490.
- Kalmijn, M., Bernasco, W., & Weesie, J. (1999). *Households in the Netherlands*. Gorcum.
- Kamo, Y. (1988). Determinants of household division of labor: Resources, power, and ideology. *Journal of Family Issues*, 9(2), 177–200.
- Katz-Wise, S. L., Priess, H. a., & Hyde, J. S. (2010). Gender-role attitudes and behavior across the transition to parenthood. *Developmental Psychology*, 46(1), 18–28.
- Kaufman, G., & Bernhardt, E. (2014). Gender, work and childbearing: couple analysis of work adjustments after the transition to parenthood. *Community, Work & Family*, 18(1), 1–18.
- Keeley, M. C. (1977). The economics of family formation. *Economic Inquiry*, 15, 238–250.
- Keizer, R. (2016). *Waar staat papa? Over grenzen denken*.
- Keizer, R., Dykstra, P. A., & Jansen, M. D. (2008). Pathways into childlessness: evidence of gendered Life Course dynamics. *Journal of Biosocial Science*, 40(6), 863–878.
- Keizer, R., Dykstra, P. A., & Poortman, A.-R. (2010). The transition to parenthood and well-being: the impact of partner status and work hour transitions. *Journal of Family Psychology*, 24(4), 429–38.
- Keizer, R., & Komter, A. E. (2015). Are “equals” happier than “less equals”? A couple analysis of similarity and well-being. *Journal of Marriage and Family*, 77(4), 954–967.
- Kennedy, B. S. (2001). Repeated hospitalizations and self-rated health among the elderly: A multivariate failure time analysis. *American Journal of Epidemiology*, 153(3), 232–241.
- Kiecolt-Glaser, J. K., & Newton, T. L. (2001). Marriage and health: his and hers. *Psychological Bulletin*, 127(4), 472–503.
- Killewald, A. (2012). A reconsideration of the fatherhood premium: marriage, coresidence, biology, and fathers' wages. *American Sociological Review*, 78(1), 96–116.

- Killewald, A., & Gough, M. (2013). Does specialization explain marriage penalties and premiums? *American Sociological Review*, 78(3), 477–502.
- Kitson, G. C., & Morgan, L. a. (1990). The multiple consequences of divorce: A decade review. *Journal Of Marriage And The Family*, 52(4), 913–924.
- Klebba, A. J. (1970). Mortality from selected causes by marital status United States. B. *Vital and Health Statistics Series 20 Data from the National Vital Statistics System*, (8), Suppl:1-47.
- Knudsen, K., & Waerness, K. (2007). National context and spouses' housework in 34 countries. *European Sociological Review*, 24(1), 97–113.
- Kotsadam, A., & Finseraas, H. (2011). The state intervenes in the battle of the sexes: Causal effects of paternity leave. *Social Science Research*, 40(6), 1611–1622.
- Kravdal, O. (2007). How community family structure affects individual mortality in Norway. *Demography*, 44(3), 519–537.
- Kremer, M., Bovens, M., Schrijvers, E., & Went, R. (2014). *Hoe ongelijk is Nederland?* (A. U. Press, Ed.). Amsterdam. Retrieved from <https://decorrespondent.nl/3913/Ook-onze-statistiek-wordt-nu-bepaald-door-de-waan-van-de-dag/431799413045-9feb46da\npapers3://publication/uuid/0194F2C3-8EED-468F-B2C3-D21FBCA0F781>
- Lane, R. E. (1992). Work as “disutility” and money as “happiness”: Cultural origins of a basic market error. *The Journal of Socio-Economics*, 21(1), 43–64.
- Leisering, L. (2004). Government and the life course. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the Life Course* (pp. 205–229). New York: Springer.
- Leitner, S. (2003). Varieties of familialism: The caring function of the family in comparative perspective. *European Societies*, 5(4), 353–375.
- Lewis, J., Knijn, T., Martin, C., & Ostner, I. (2008). Patterns of development in work/family reconciliation policies for parents in France, Germany, the Netherlands, and the UK in the 2000s. *Social Politics*, 261–286.
- Liefbroer, A. C., & Billari, F. C. (2010). Bringing norms back in: a theoretical and empirical discussion of their importance for understanding demographic behaviour. *Population, Space and Place*, 16, 287–305.
- LIS. (2015). Luxembourg Income Study Database. Retrieved from www.lisdatacenter.org
- Lohmann, H., & Zagel, H. (2015). Family policy in comparative perspective: The concepts and measurement of familization and defamilization. *Journal of European Social Policy*.
- Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2004). Unemployment alters the set point for life satisfaction. *Psychological Science*, 15(1), 8–13.
- Maasoumi, E., Millimet, D. L., & Sarkar, D. (2009). Who benefits from marriage? *Oxford Bulletin of Economics and Statistics*, 71(1), 1–33.
- Mackenbach, J. P., Stirbu, I., Roskam, a J., Schaap, M. M., Menvielle, G., Leinsalu, M., & Kunst, a E. (2008). Socioeconomic inequalities in health in 22 European countries. *N.Engl.J.Med*, 358(1533–4406 (Electronic)), 2468–2481.
- Mamun, A. A. (2012). Cohabitation premium in men's earnings: Testing the joint human capital hypothesis. *Journal of Family and Economic Issues*, 33(1), 53–68.
- Mare, R. D. (2011). A multigenerational view of inequality. *Demography*, 48(1), 1–23.
- Marshall, V. W., & Bengtson, V. L. (2011). Theoretical perspectives on the sociology of aging. In *Handbook of Sociology of Aging* (pp. 17–33). New York: Springer.
- Mastekaasa, A. (2006). Is marriage/cohabitation beneficial for young people? Some evidence on psychological distress among Norwegian college students. *Journal of Community & Applied Social Psychology*, 165(October 2005), 149–165.
- Mathieu, J. E., Aguinis, H., Culpepper, S. a., & Chen, G. (2012). “Understanding and estimating the power to detect cross-level interaction effects in multilevel modeling”: Correction to Mathieu, Aguinis, Culpepper, and Chen (2012). *Journal of Applied Psychology*, 97(5), 981–981.

- Mayer, K. U. (2009). New directions in life course research. *Annual Review of Sociology*, 35(1), 413–433.
- Mayer, K. U., & Müller, W. (1986). The state and the structure of the Life Course. In A. B. Sorensen, F. E. Weinert, & L. R. Sherrod (Eds.), *Human Development and The Life Course* (pp. 217–245). London: Lawrence Erlbaum Associates.
- Mayer, K. U., & Schoepflin, U. (1989). The state and the Life Course. *Annual Review of Sociology*, 15(1), 187–209.
- Merens, A., & van den Brakel, M. (2014). *Emancipatiemonitor 2014. Emancipatiemonitor*.
- Mills, M., Präg, P., Tsang, F., Begall, K., Derbyshire, J., Kohle, L., ... Hoorens, S. (2014). *Use of childcare in the EU Member States and progress towards the Barcelona targets*.
- Mincer, J. a. (1974). *Schooling, experience, and earnings*. New York: National Bureau of Economic Research.
- Moen, P. (2003). *It's about time: couples and careers*. Ithaca, NY: ILR Press.
- Moen, P., Elder, G. H., & Lüscher, K. (1995). *Examining lives in context: perspectives on the ecology of human development*. Washington, D.C.: APA Press.
- Monna, B., & Gauthier, A. H. (2008). A review of the literature on the social and economic determinants of parental time. *Journal of Family and Economic Issues*, 29(4), 634–653.
- Moss, P. (2013). International review of leave policies and related research 2013, (June). Retrieved from <http://dera.ioe.ac.uk/9285/1/file52778.pdf>
- Musick, K., & Bumpass, L. (2012). Re-examining the case for marriage: Union formation and changes in well-being. *Journal of Marriage and the Family*, 74(1), 1–18.
- Nakosteen, R. A., & Zimmer, M. A. (1987). Marital status and earnings of young men. *The Journal of Human Resources*, 22(2), 248–268.
- Noailly, J., & Visser, S. (2009). The impact of market forces on child care provision: Insights from the 2005 child care act in the Netherlands. *Journal of Social Policy*, 38(3), 477.
- O'Donoghue, C., & Sutherland, H. (1999). Accounting for the family in European income tax systems. *Camb. J. Econ.*, 23(5), 565–598.
- OECD. (2012). *Closing the gender gap: Act now*. OECD Publishing.
- OECD. (2016). Family Indicators. OECD Social and Welfare Statistics (database).
- Olafsson, A., & Steingrimsdottir, H. (2016). *How does daddy at home affect marital stability?* Retrieved from http://arnaolafsson.weebly.com/uploads/2/3/7/5/23754531/marital_stability.pdf
- Petersen, T., Penner, A., & Hogsnes, G. (2006). *The male marital wage premium: Sorting versus differential pay*. Berkeley.
- Petersen, T., Penner, A., & Høgsnes, G. (2014). From motherhood penalties to husband premia: The new challenge for gender equality and family policy, lessons from Norway. *American Journal of Sociology*, 119(5), 1434–1472.
- Plantenga, J. (2002). Combining work and care in the polder model: an assessment of the Dutch part-time strategy. *Critical Social Policy*, 22(1), 53–71.
- Plantenga, J., Schippers, J., & Siegers, J. (1999). Towards an equal division of paid and unpaid work: the case of the Netherlands. *Journal of European Social Policy*, 9(2), 99–110.
- Poortman, A.-R., & Van Der Lippe, T. (2009). Attitudes toward housework and child care and the gendered division of labor. *Journal of Marriage and Family*, 71(3), 526–541.
- Portegijs, W., Cloin, M., Oom, I., & Eggink, E. (2006). *Hoe het werkt met kinderen*. Den Haag.
- Pouwels, B. (2011). *Work, family, and happiness - Essays on interdependencies within families, life events, and time allocation decisions*.
- Presland, P., & Antill, J. K. (1987). Household division of labour: The impact of hours worked in paid employment. *Australian Journal of Psychology*, 39(3), 273–291.

- Ribar, D. C. (2004). What do social scientists know about the benefits of marriage? A review of quantitative methodologies. Retrieved from <http://papers.ssrn.com/abstract=500887>
- Ridgeway, C. L. (2008). Framed before we know it: How gender shapes social relations. *Gender & Society, 23*(2), 145–160.
- Ridgeway, C. L., & Correll, S. J. (2004). Unpacking the gender system: A theoretical perspective on gender beliefs and social relations. *Gender & Society, 18*(4), 510–531.
- Rogers, S., & DeBoer, D. (2001). Changes in wives' income: Effects on marital happiness, psychological well-being, and the risk of divorce. *Journal of Marriage and Family, 63*(May), 458–472.
- Ross, C. E., Mirowski, J., & Goldsteen, K. (1990). The impact of the family on health: The decade in review. *Journal of Marriage and the Family, 52*(4), 1059–1078.
- Saraceno, C. (2011). Childcare needs and childcare policies: A multidimensional issue. *Current Sociology, 59*(1), 78–96.
- Saraceno, C., & Keck, W. (2010). Can we identify intergenerational policy regimes in Europe? *European Societies, 12*(5), 675–696.
- Sayer, L. C., England, P., Bittman, M., & Bianchi, S. M. (2009). How long is the second (plus first) shift? Gender differences in paid, unpaid, and total work time in Australia and the United States. *Journal of Comparative Sociology*.
- Schenk, N. (2013). *Multiple Links: Public policy, family exchanges, well-being and policy endorsement*. Retrieved from <http://repub.eur.nl/pub/50181/>
- Schmidt-Catran, A. W., & Fairbrother, M. (2015). The random effects in multilevel models: Getting them wrong and getting them right. *European Sociological Review*, online.
- Schoeni, R. (1995). Marital status and earnings in developed countries. *Journal of Population Economics, 8*(4), 351–359.
- Sigle-Rushton, W., & Waldfogel, J. (2007). Motherhood and women's earnings in Anglo-American, Continental European, and Nordic Countries. *Feminist Economics, 13*(2), 55–91.
- Silverstein, M., & Giarrusso, R. (2011). Aging individuals, families and societies: micro-meso-macro linkages in the Life Course. In R. A. Settersten & J. L. Angel (Eds.), *Handbook of Sociology of Aging* (pp. 35–49).
- Simon, R. W. (1995). Gender, multiple roles, role meaning, and mental health. *Journal of Health and Social Behavior, 36*(2), 182–194.
- Soons, J. P. M., & Kalmijn, M. (2009). Is marriage more than cohabitation? Well-being differences in 30 European countries. *Journal of Marriage and Family, 71*(5), 1141–1157.
- Soons, J. P. M., & Liefbroer, A. C. (2008). Together is better? Effects of relationship status and resources on young adults' well-being. *Journal of Social and Personal Relationships, 25*(4), 603–624.
- Soons, J. P. M., Liefbroer, A. C., & Kalmijn, M. (2009). The long-term consequences of relationship formation for subjective well-being. *Journal of Marriage and Family, 71*(5), 1254–1270.
- Spencer, D. A. (2004). Deconstructing the labour supply curve. *Metroeconomica, 55*(4), 442–458.
- Stack, S., & Eshleman, J. R. (1998). Marital status and happiness: A 17-nation study. *Journal of Marriage and the Family, 60*, 527–536.
- Stegmueller, D. (2013). How many countries for multilevel modeling? A comparison of frequentist and Bayesian approaches. *American Journal of Political Science, 57*(3), 748–761.
- The Fatherhood Institute. (2010). *The Fatherhood Report 2010-11: The Fairness in Families Index*. Retrieved from http://www.cite.gov.pt/pt/destaques/complementosDestqs/FI-FiFI-Report-2010_FINAL.pdf
- Thompson, L., & Walker, A. (1989). Gender in families: Women and men in marriage, work, and parenthood. *Journal of Marriage and the Family, 51*(4), 845–871.

- Tichenor, V. (2005). Maintaining men's dominance: Negotiating identity and power when she earns more. *Sex Roles, 53*(3-4), 191-205.
- Townsend, N. W. (2002). *The package deal: marriage work and fatherhood in men's lives*. Philadelphia: Temple University Press.
- Treas, J., Van der Lippe, T., & Tai, T. -o. C. (2011). The Happy Homemaker? Married women's well-being in cross-national perspective. *Social Forces, 90*(1), 111-132.
- Umberson, D. (1987). Family status and health behaviors: social control as a dimension of social integration. *Journal of Health and Social Behavior, 28*(3), 306-19.
- Umberson, D., Pudrovska, T., & Reczek, C. (2010). Parenthood, childlessness, and well-being: A Life Course perspective. *Journal of Marriage and the Family, 72*(3), 612-629.
- Umberson, D., Williams, K., Powers, D. a, Liu, H., & Needham, B. (2006). You make me sick: marital quality and health over the life course. *Journal of Health and Social Behavior, 47*(1), 1-16.
- Umberson, D., Wortman, C. B., & Kessler, R. C. (1992). Widowhood and depression: Explaining long-term gender differences in vulnerability. *Journal of Health and Social Behavior, 33*(1), 10-24.
- United Nations. (2010). *Demographic Yearbook 2010*. New York: United Nations. Retrieved from <http://unstats.un.org/UNSD/demographic/products/dyb/default.htm>
- United Nations. (2013). *Inequality matters*. New York.
- United Nations. (2015). The Millennium Development Goals Report. *United Nations, 72*.
- United Nations Development Programme. (1995-2008). Human Development Report. New York: Oxford University Press.
- Van Wissen, L. J. G., & Dykstra, P. A. (1999). Introduction: The life course approach as an interdisciplinary framework for population studies. In *Population issues. An interdisciplinary focus. The plenum series on demographic methods and population analysis*. (pp. 1-22).
- Viazzo, P. P. (2010). Family, kinship and welfare provision in Europe, past and present: commonalities and divergences. *Continuity and Change, 25*(1), 137-159.
- Waite, L. J. (1995). Does marriage matter? *Demography, 32*(4), 483-507.
- Waite, L. J., & Gallagher, M. (2000). *The case for marriage: why married people are happier, healthier and better off financially*. New York: Broadway Books.
- Waldfogel, J. (1997). The effect of children on women's wages. *American Sociological Review, 62*(2), 209-217.
- Walker, J. D., Maxwell, C. J., Hogan, D. B., & Eby, E. M. (2004). Does self-rated health predict survival in older persons with cognitive impairment? *Journal of the American Geriatrics Society, 52*(11), 1895-900.
- Weichselbaumer, D., & Winter-Ebmer, R. (2005). A meta-analysis of the international gender wage gap. *Journal of Economic Surveys, 19*(3), 479-511.
- Wendt, C. (2009). Mapping European healthcare systems: a comparative analysis of financing, service provision and access to healthcare. *Journal of European Social Policy, 19*(5), 432-445.
- Wilcox, V. L., Kasl, S. V., & Idler, E. L. (1996). Self-rated health and physical disability in elderly survivors of a major medical event. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 51B*(2), S96-S104.
- Williams, D. R., Takeuchi, D. T., & Adair, R. K. (1992). Marital status and psychiatric disorders blacks and whites. *Journal of Health and Social Behavior, 33*(2), 140-157.
- Winkelmann, L., & Winkelmann, R. (1998). Why are the unemployed so unhappy? Evidence from panel data. *Economica, 65*, 1-15.
- Winslow-Bowe, S. (2006). The persistence of wives' income advantage. *Journal of Marriage and Family, 68*(4), 824-842.

- Wood, R. G., Goesling, B., & Avellar, S. (2007). *The effects of marriage on health: A synthesis of recent research evidence*.
- World Bank. (2015a). World Bank female labor force participation rate. Retrieved from <http://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS>
- World Bank. (2015b). World Bank GDP per capita. Retrieved from <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>
- World Bank. (2015c). World Bank GINI index. Retrieved from <http://data.worldbank.org/indicator/SI.POV.GINI>
- Worldbank. (2014). Databank Worldbank. Retrieved from databank.worldbank.org
- Wunder, C., & Heineck, G. (2013). Working time preferences, hours mismatch and well-being of couples: Are there spillovers? *Labour Economics*, 24, 244–252.
- WVS. (2015). World Values Surveys. Retrieved from <http://www.worldvaluessurvey.org/wvs.jsp>
- Yerkes, M. (2013). Choice or constraint? Women's weekly working hours in comparative perspective. *Sociologica*, 72, 9–30.
- Yu, W. (2015). Placing families in context: challenges for cross-national family research. *Journal of Marriage and Family*, 77(1), 23–39.

