Ann Evans
Janeen Baxter   *Editors*

Negotiating the Life Course

Stability and Change in Life Pathways

Springer

Negotiating the Life Course

Life Course Research and Social Policies

Volume 1

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Life course research has been developing quickly these last decades for good reasons. Life course approaches focus on essential questions about individuals' trajectories, longitudinal analyses, cross-fertilization across disciplines like life-span psychology, developmental social psychology, sociology of the life course, social demography, socio-economics, social history. Life course is also at the crossroads of several fields of specialization like family and social relationships, migration, education, professional training and employment, and health. This Series invites academic scholars to present theoretical, methodological, and empirical advances in the analysis of the life course, and to elaborate on possible implications for society and social policies applications.

Ann Evans • Janeen Baxter
Editors

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Editors
Ann Evans
Australian Demographic and
    Social Research Institute
The Australian National University
Canberra, ACT, Australia

Janeen Baxter
School of Social Science and Institute
    for Social Science Research
The University of Queensland
St. Lucia, QLD, Australia

Printed on acid-free paper

Contents

Chapter 1
Introduction

Janeen Baxter and Ann Evans

Pathways through the life course have undergone considerable change in recent years. Compared to previous generations, young adults today face a very different set of choices and constraints to their parents and grandparents. The typical life course trajectory of leaving school, dating, becoming engaged, marrying and having children has been turned upside down so that it is now almost as common to have children prior to marriage as afterwards, and certainly much more common to live together before marrying than to marry directly without a period of defacto cohabitation. In the mid-1970s in Australia, just 16% of couples lived together before marrying. Now, more than three-quarters do. In the 1950s in Australia, approximately one in every 25 children was born outside marriage. Now, the corresponding figure is one in three. About 32% of Australian marriages end in divorce (Australian Bureau of Statistics 2005), and the traditional nuclear family, with a full-time male earner and a full-time female housewife and mother is now less common in Australia than a household in which both partners work for pay (De Vaus 2004).

Changes in pathways into and out of family relationships have been accompanied by major changes in the structure and organization of the labour market, perhaps most critically, the large scale entry of married women into the labour market. This has brought both new opportunities and new challenges to the lives of women and their families over the last 30 years. Most Australian children now live in households where both parents are in paid employment and many will witness the increased pressures faced by parents attempting to juggle the dual demands of paid employment and household responsibilities (Hayes et al. 2010). In a society where labour market

Janeen Baxter (✉)
School of Social Science and Institute for Social Science Research,
The University of Queensland, St. Lucia, QLD 4072, Australia
e-mail: j.baxter@uq.edu.au

A. Evans
Australian Demographic & Social Research Institute, Australian National
University, Canberra, ACT, Australia
e-mail: ann.evans@anu.edu.au

institutions have made few adjustments to the rigid time schedules and work-day patterns that dominated in an era when men could count on a fulltime stay-at-home wife to take care of domestic duties, many Australian mothers opt for part-time employment in order to accommodate their competing responsibilities at home and at work. Part-time work, between 1 and 35 hours per week, is the most common form of employment for mothers in Australia with 58% of employed women whose youngest child is aged under 6 years employed part-time in 2002 (ABS 2007). This is much higher than the OECD average of 38% or the United States where in 2002 only 29% of employed mothers with their youngest child under 6 years of age worked part-time (Australian Bureau of Statistics 2007). But part-time employment often comes at a cost, including reduced pay and promotion opportunities, fewer benefits and entitlements and less security of tenure (Vosko et al. 2009).

Individual life course trajectories do, of course, vary from country to country. In order to understand the opportunities and constraints faced by individuals as they move through the life course it is essential to focus on specific national settings. While the patterns described above are broadly similar to those observed across many countries in Europe and North America, and are consistent with the broad heuristic frameworks of macro level theories such as the second demographic transition and globalization theory, it is important to understand country specific outcomes. As Mills and Blossfeld point out in Chapter 2 of this volume, countries follow path specific trajectories in relation to their different starting points and specific historical and institutional settings. The high rate of part time employment for Australian mothers in comparison to other OECD nations is just one example of a path dependent response to combining work and family.

What are the impacts of these changing patterns on gender equity? Have we seen a decline in gender inequality or a reshaping and emergence of new areas of inequality? And how do men and women negotiate these new arrangements within households across different stages of the life course? The chapters in this book address these questions. Our aim is to both describe some of the key changes in life course pathways in the Australian context and to examine the implications of these changes for patterns of gender equity in households and the labour market. In doing so, we address some of the issues raised by Mills and Blossfeld in Chapter 2 by examining country – specific trends with a focus on gender equity outcomes.

All chapters draw on two broad insights or themes. First that it is important to examine changing links between home and work using a life course perspective. This requires not only investigating trends at different stages of the life course, but also developing an approach that recognizes the importance of the timing, sequence and patterning of events for individuals. Second, that the effect of these changes on individuals is not gender neutral. Understanding the gendered nature of changing life course patterns and outcomes is central to the analyses reported here. Despite the rise of the second wave women's movement in the late 1960s and early 1970s, and the influx of married women into paid employment, gender inequality has remained stubbornly resilient over the past few decades. There are many examples of this resilience, including the continuing gender pay gap, continuing concentrations of women in certain kinds of "female-typed" occupations, and continuing barriers to women's promotion to the upper echelons of organizations and management

hierarchies (Van Gellecum et al. 2008). For example, in 2008 women comprised only 11% of the Australian Stock Exchange top 200 (ASX200) company executive managers and 8% of board directors, while 51% of ASX200 companies did not have any female board directors (EOWA 2008). And within households, there is ample evidence that women continue to bear the brunt of the bulk of unpaid housework and care work (Baxter et al. 2005; Craig 2006). Despite some evidence that men are spending a little more time on housework than in the past, and quite a lot more time on childcare, women are also spending increasing amounts of time on childcare so that the gender gap in unpaid work time has narrowed very little in Australia over recent years (Craig 2006; Chesters et al. 2009).

The analyses reported here examine data from the Negotiating the Life Course project, an Australian longitudinal survey begun in 1996, designed to assess how individuals negotiate paid and unpaid work across the early stages of the adult life course.[1] The project was one of the first in Australia to collect comprehensive longitudinal data on relationship and employment histories and paved the way for the development and funding of later larger scale government funded panel studies. The Negotiating the Life Course data provide unique insight into the changing life course trajectories and household and labour market experiences of a national sample of Australians aged between 18 and 54 years in 1996. Respondents were re-interviewed in 2000, 2003 and 2006 providing a rich and detailed set of panel data on pathways from young adulthood into relationships, marriage, parenthood, the labour market and beyond. The chapters included here were all presented at a conference held in Canberra in September 2008 marking 10 years of the Negotiating the Life Course project. The conference was both a celebration of a decade of collaborative research amongst a group of sociologists, demographers and economists who had commenced the project whilst colleagues at the Australian National University in the mid 1990s, but also an opportunity to reflect on the insights and further questions posed from analyses of 10 years of unique panel data on the social and economic challenges faced by individuals transitioning along relationship, family and labour market pathways in Australia.

We commence the volume with an outline of two broad heuristic frameworks that have been used to explain recent trends in family and labour market patterns in western societies – the second demographic transition (Van De Kaa 1987) and globalization theory. Mills and Blossfeld compare and contrast these two theoretical approaches with the aim of identifying ways in which the two approaches might be developed and synthesized to provide a more powerful theoretical framework to understand contemporary social change. Although both are primarily aimed at explaining recent demographic and social change, each approach identifies fundamentally different mechanisms as the main drivers of social change. The second demographic transition focuses primarily on ideational or cultural changes in values and attitudes that influence decisions about family life, relationships and fertility, while globalization theory takes a broader approach focusing on institutional contexts, welfare regimes and economic change. Mills and Blossfeld argue for a synthesis in order to overcome common problems with both approaches including the lack

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[1] See Appendix for details of the Negotiating the Life Course surveys.

of clear definitions and explicit hypotheses, the lack of attention to trends and developments in non-western societies, and insufficient attention to gender systems and gender equity.

In contrast to arguments about increasing diversity and uncertainty in pathways into and out of relationships, Thomson, Winkler-Dworak and Kennedy argue that a standard family life course is the goal and outcome for the majority of individuals across a variety of welfare regimes. This chapter provides a useful opportunity to reflect on the assumptions and arguments of much recent demographic and family research by presenting evidence for a degree of stability and continuity in life course pathways. In this case, a standard family life course is defined quite broadly as finding an intimate partner regardless of whether this is through cohabitation or marriage, having a child with that partner, and remaining with that partner until death. Thomson, Winkler-Dworak and Kennedy use data from France, Sweden and the United States for the cohort born in the 1950s to examine the proportion who follow a standard family life course and the relationship between education and life course trajectories. They show that about half the population achieve this standard and that for many it remains an ideal.

These two chapters provide two somewhat different ways of understanding recent trends. On the one hand, Mills and Blossfeld focus on increased uncertainty, risk and diversity in life course pathways brought about by the interaction of broad global trends with country specific political and historical settings. On the other, Thomson, Winkler-Dworak and Kennedy argue that although there is some diversity at the margins, in broad terms the majority of people follow the same standard pathways and that these pathways are broadly consistent across national contexts. Where does Australia fit? Are life course pathways in Australia characterized by diversity or uniformity, and how do the patterns vary by gender? The remaining chapters in the volume provide insights into these questions.

Chapters 4, 5, 6 and 7 each examine patterns of relationship formation, relationship dissolution, fertility and employment transitions in Australia. The first two of these chapters draw on elements of second demographic transition theory in the form of changing ideas of social liberalism, and globalization theory in terms of the effects of economic deregulation and strategies to alleviate increasing risk and uncertainty. Evans explores the changing timing of events in the early adult life course. The chapter looks at the timing of leaving school, entering the labour market and leaving home. The findings show that there has been a shift to later school leaving and later entry into full-time employment. However, part-time employment has emerged as a normal transition, usually alongside full-time study. This doubling-up of roles (student and worker) contributes to greater complexity in the transition to adulthood for contemporary young Australians. The transition out of the parental home has also been delayed. This delay is associated with prolonged education, as well as changes in the timing and type of first relationship.

McDonald and Reimondos examine changes in relationship pathways in Australia from young adulthood to first birth. This chapter charts changes in relationship pathways and the timing of first births over a 40 year period to argue that Australian men and women have increasingly adopted a more cautious approach to relation-

ships and parenting, evidenced by trends toward cohabitation rather than marriage and greater investment in personal human capital such as education and employment. The result has been much more varied and complex pathways amongst recent cohorts, and consequent delays in childbearing, in many cases unintentional delays as individuals search for lifetime partnerships. The chapters by Evans and McDonald and Reimondos thus achieve many of the aims articulated by Mills and Blossfeld through a combination of insights from second demographic transition and globalization approaches to explain a specific set of path- dependent demographic and social changes in Australia.

Jennifer Baxter takes up the same themes but adds employment and education to the analyses. This chapter examines growth in female employment in Australia focusing in particular on the links between employment and different aspects of education, relationship formation and fertility. Baxter shows the strong effect of increasing periods of time in education for women on delays in entry to full-time employment. This relationship is apparent for each of the birth cohorts examined here. At the same time, her analyses indicate that having children continues to be one of the very strong predictors of women's employment status, a relationship that holds across all birth cohorts, with much greater use of part-time employment apparent for younger cohorts.

While these chapters focus primarily on pathways into relationships and patterns of family formation in relation to employment transitions, Hewitt takes a closer look at pathways out of relationships and patterns of family dissolution. Hewitt's chapter shifts the focus to individual-level explanations to understand the factors that drive marital separation in Australia, including normative and cultural characteristics, the quality of the relationship and barriers to termination of the relationship. Her analyses show that all three are important in understanding why some marriages end and others survive and points to the importance of understanding how personal characteristics interact with broader social, demographic and economic contexts to shape individual behavior.

The remaining chapters all turn to the effects of life course transitions on gender inequality in the home and the labour market. Janeen Baxter, Hewitt, Haynes and Western investigate the effects of transitions to marriage and parenthood on men's and women's time on domestic labour and perceptions of fairness of the domestic division of labour. Their results show few changes in household patterns for marital transitions, but quite large effects for parenthood transitions. Parenthood is a major life course transition that deepens gender divisions in the household and increases perceptions of unfairness. In contrast, the transition from cohabitation to marriage is less consequential, suggesting that the critical point in establishing household arrangements is when the couple first move in together, rather than when they transition to marriage.

These results are supported by Gray's analyses in Chapter 9 showing that fatherhood increases men's time in employment. The findings here show that having a first child increases men's time in paid employment by around 4.5 hours per week, while the arrival of a second or third child does not change men's paid work hours. These results, in combination with those in the previous chapter, provide further

evidence that becoming a parent is a critical juncture in the life course. It is at this point that gender divisions of labour become most traditional with negotiations between couples invariably leading to women assuming increased responsibility for housework and childcare and men taking on a stronger breadwinning role. Thus despite increased diversity in life course pathways leading to parenthood it appears that this transition point results in broadly similar patterns of gender divisions of labour across households.

The focus on trends in employment hours is continued in Chapter 10 by Van Wanrooy who examines the working hours and working hour preferences of men and women across household types. Wanrooy notes that Australia has some of the longest working weeks in the OECD, but also some of the highest levels of part-time employment. This variation in working hours, in combination with the limited provision of public childcare, means that Australians have a different set of options available to them when making choices about working hours, compared to workers in other welfare regimes. As suggested by others in this volume, Van Wanrooy's analyses indicate that in households with children, couples tend to adopt a specialization approach with women specializing in domestic and care duties and men specializing in paid employment. But this strategy is not necessarily the most desirable one, with one quarter of women in dual earner households and almost half of men preferring to work fewer hours. Van Wanrooy concludes that Australia's working time regime constrains the choices available to couples who wish to balance the care of children and paid employment, and leads to most opting for a neo-traditional one-and-a-half earner strategy, despite preferences for other arrangements in many cases.

The final chapter interrogates the nature of women's employment experiences more closely by examining whether women who move into part-time employment experience occupational downgrading. This is a critical issue given the finding of previous chapters in this volume that a key strategy couples adopt to accommodate the competing demands of paid and unpaid labour is for women to reduce their paid hours. Chalmers shows that Australian women are compelled to move into lower ranked occupations in order to secure part time hours, indicating that the Australian part-time labour market is segmented with a lack of family-friendly conditions in the more highly ranked occupations. Although women who return to full time employment after a period working part time may be able to regain their occupational standing, particularly if they have been able to stay with the same employer, women's ability to return to full time employment consistent with their skills and previous experience is hindered by the lack of full time employment that allows work-life balance.

Overall the chapters in this volume chart both change and stability in employment, family and relationship experiences for Australian men and women over the last 40 years or so. The analyses place Australia in line with most of Western Europe and the United States of America with regard to the timing and sequencing of major demographic events. Relationship formation and fertility have been well and truly delayed so that young people can engage with education that will equip them with the skills to compete in a modern globalized workforce. Where Australia differs to other regions is in the wide use of part-time work. Part-time work is used across all

stages of the life course. For the young it is used alongside education and for mothers it is used to negotiate their work-life balance. The impact of part-time work has also been shown to be different across the life course with a benefit to young people in terms of income and skills, while the future career opportunities and income of women caring for children can be negatively affected by part-time work.

What is surprising is that although many aspects of the life course have changed markedly over time, with more diversity in pathways, new stages added, changes in the timing of relationships and parenthood, and changes in patterns of participation in higher education and the labour market, the gender division of labour has remained remarkably resilient. This is undoubtedly due, in part, to the institutional constraints placed on individual choices and strategies about how best to manage paid and unpaid work over the life course. The challenge for policy makers in the future is how to support a diversity of choices and pathways across the life course that do not rely on traditional gender divisions of paid and unpaid work. Working hours are one mechanism whereby governments, employers, families and individuals can support and exercise choice in the work-family sphere. The key will be developing policy that allows all players, from governments to individuals, to negotiate life course pathways that accommodate changing patterns of work-family arrangements without relying on traditional gender divisions. We hope that the analyses presented here provide some insights into ways to achieve this goal.

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Chapter 2
The Second Demographic Transition Meets Globalization: A Comprehensive Theory to Understand Changes in Family Formation in an Era of Rising Uncertainty

Melinda Mills and Hans-Peter Blossfeld

Abstract Since the late 1960s, there have been significant changes in partnership, fertility and family formation in many Western societies, first described in the concept of the second demographic transition (SDT). Since the 1980s, however, an additional series of broader transformations occurred, often termed globalization, which is characterized by increasingly volatile financial markets, accelerating speed of change and interdependence of networks. This chapter compares and contrasts the two large-scale heuristic frameworks of the SDT and globalization, with the goal of producing a more comprehensive theory to understand family formation and pathways to adulthood. We first define these two approaches, followed by a comparison of differences and overlapping features. We conclude with a critical reflection of the added-value of comparing and synthesizing the two approaches and provide suggestions for future extensions.

Since the late 1960s, there have been significant changes in partnership, fertility and family formation in many Western societies, a phenomenon first described by the concept of the second demographic transition (Lesthaeghe and van de Kaa 1986; van de Kaa 1987). The core of the second demographic transition framework is falling fertility rates, ideational change in the motivation to have children and a shift to an 'individualistic family model'. However, since the 1980s, a series of broader global transformations emerged which recently culminated in one of the most dramatic global economic recessions experienced in recent memory. To understand how the more recent global societal transformations impact the life course, a globalization

M. Mills (✉)
Department of Sociology, University of Groningen,
Groningen, The Netherlands
e-mail: m.c.mills@rug.nl

H.-P. Blossfeld
Fakultät Sozial- und Wirtschaftswissenschaften,
Otto-Friedrich-Universität Bamberg,
Bamberg, Germany

framework has been developed characterized by awareness of new developments such as increasingly volatile financial markets, accelerating speed of change and interdependence of networks (Mills and Blossfeld 2005). The speed of change, volatility and uncertainty is a key feature of this framework and arguably, has important implications for understanding changes in patterns of family formation and pathways to adulthood. Both of these large-scale heuristic frameworks are what van de Kaa (1996) termed 'narratives' to define large ideational, cultural and economic changes in many Western societies. The aim of this chapter is to compare and contrast these complementary approaches, with the goal of producing a more comprehensive theory to understand family formation and pathways to adulthood. It is not our aim to develop a testable theory, but rather to develop a broad framework that might guide analyses, or be developed further into more specific testable propositions in future research. We first define these two approaches, followed by a comparison of differences and overlapping features. We conclude with a critical reflection of the added-value of comparing and synthesizing the two approaches and provide suggestions for future extensions.

The Second Demographic Transition

The concept of the second demographic transition introduced by Lesthaeghe and van de Kaa (1986) and further developed by van de Kaa (1987) and Lesthaeghe (1995) was developed in the late 1980s to describe changes in partnership behaviour, fertility and family formation since the late 1960s in Western and Northern Europe. The decline in fertility rates below replacement level is a central feature of this framework. In addition to lower birth rates, the authors identified the weakening of the family as an institution, evidenced by increased divorce, cohabitation and contraceptive use. Further extensions incorporated cultural changes, such as the rise of individualization and secularization, growth of the welfare state and technological changes such as modern contraception and assisted reproduction (van de Kaa 1996). The second demographic transition framework has been a central narrative used to understand large scale demographic change (see Sobotka 2008 for a review).

There are several defining characteristics of the second demographic transition perspective that distinguish it from other approaches. Perhaps the most important feature is the *focus on ideational and cultural change*. The argument here is that life course decisions are not only conditioned by economic factors, but also the emergence of self-fulfilment, choice, personal development and emancipation as guiding forces in life decisions. Lesthaeghe and Meekers (1986) demonstrated that family formation is highly conditioned by ideational changes with individuals and couples making the transition to parenthood to satisfy their own private needs. These needs include factors such as personal development, but also parenthood as an expression and extension of one's self.

A second unique aspect of the second demographic transition approach is the view of technology and specifically the *role of the contraceptive revolution*. The introduction of highly effective contraception effectively severed the link between sexuality

and procreation, which some sociologists much later referred to as 'plastic sexuality' (Giddens 1992). The use of effective contraception in many Western societies has become so standard that many individuals today would find it hard to imagine that they cannot engage in virtually 'perfect' contraception and control of parenthood. Contraception affords not only more power to couples and particularly women, but also enables postponement of parenthood. The flipside of this sometimes extreme postponement is, however, a growth in older parents and a rise in the use of new reproductive technologies of assisted reproduction.

The *changing role and position of children* in influencing changing patterns in family formation is a third key feature of the second demographic transition approach. Following the seminal work by Ariés (1980) and Van De Kaa (1987), the second demographic transition perspective incorporated the view that the role of children had irrevocably changed. In contrast to their need to provide economic support and labour to support parents, the decline in the birth rate in the late eighteenth century was related to the child becoming a locus of emotional and financial investment or the 'child-king'. The child, they argued, was increasingly occupying a less central place in couples' lives. As Liefbroer (2005) shows, children emerged as something to be carefully planned that might influence the partnership, lifestyle and further economic well-being of parents. Consequently, the transition into parenthood increasingly emerged as an extended expression of individualism and self-expression of the individual (Mills 2007).

Finally, *changes in living arrangements and partnership formation* are another important element in the second demographic framework, and particularly the rise of cohabitation. Liefbroer and Fokkema (2008) recently demonstrated, using data from the International Social Surveys Program, that a majority of young respondents between the ages of 18–35 across 20 different countries viewed cohabitation without an intention to marry as acceptable behaviour. Although as Pongrácz and Spéder (2008) show, while attitudes toward unmarried cohabitation are favourable, actual levels of cohabitation remain low in certain countries, with cohabitation still often viewed as a 'trial marriage'. More tolerant attitudes to extramarital childbearing have also meant that pathways to adulthood have increasingly changed. However, this should be seen in relation to a rise in childbearing within stable cohabiting unions rather than by single parents, with the latter continuing to hold a less favourable social position.

Defining Globalization and the Rise of Uncertainty

Like the second demographic transition, globalization is an inherently complex framework that represents a set of economic, political and cultural processes that change and operate simultaneously (Guillén 2001; Held et al. 1999; Raab et al. 2008). Globalization is often viewed as the intensification of worldwide social relations, where the local meets the global or a compression of time, space, communication and the horizons of the world market (Jameson and Miyoshi 1998). Our definition follows the specification originally outlined by Mills and Blossfeld (2005) as four

interrelated structural shifts, which are linked with domestic institutions (welfare regimes, employment, education, transnational production systems) and in turn impact the individual life course and family formation. These structural shifts are: (1) the declining importance of national borders for all kinds of economic transactions; (2) accelerated worldwide interconnectedness through the information and technology revolution; (3) tougher tax competition between countries accompanied by the deregulation, privatization and liberalization of domestic industries and markets; and, (4) the rising importance and exposure to a volatile world market with unpredictable disruptions. This definition is rooted in the globalization literature and captures the contemporary period of globalization since the late 1980s.

As Table 2.1 illustrates, although there are some key similarities between this framework and the second demographic transition, a principal difference is that on the one hand there is a rise in individual choice, but that choice is characterized by rising uncertainty. The promises of globalization and the second demographic transition, such as more competitive prices, more choice, greater freedom, higher living standards and prosperity (Edwards 1998) appear to be accompanied by painful adjustment consequences, in particular in the more advanced industrial societies. Salary cuts, lost jobs, layoffs, bankruptcies and failing companies have resulted in the perception that globalization is eroding the welfare state, decreasing job security and increasing job mobility and job hopping, signalling a break with the internal labour markets of the past. The volatile markets and deep economic recessions that started in 2007 only worked to reemphasize the view that the neo-liberal globalization forces were unpredictable and out of control.

Together these global mechanisms have generated an unprecedented level of structural uncertainty in modern societies and life courses. When making vital life course decisions, individuals face growing uncertainty in the form of economic, temporal (i.e., the ability to making long-term binding decisions) and employment-relationship uncertainty, which in turn impact on early employment experiences, type and timing of partnership formation and the timing of parenthood.

A first feature of globalization is the *internationalization of markets and subsequent decline of national borders*. The engine behind this phenomenon is changes in laws, institutions, or practices that make various transactions (in terms of commodities, labour, services and capital) easier or less expensive across national borders. It refers to the growth of international regulatory institutions and political agreements that facilitate capital flows, which also have generally liberalized financial markets (Fligstein 1998). The result is the internationalization of trade and the liberalization of financial transactions. This includes key areas such as the deregulation of interest rates, privatization of government-owned banks and financial institutions, as well as the removal of credit controls (see Raab et al. 2008). During the past decades, most countries also recognized that economic openness is good for their productivity growth (Edwards 1998) and that the erection of barriers to prevent the spread of new knowledge and advanced technology would have severe adverse consequences. Not being a 'global player' in the globalization process severely limits economic growth (see Raab et al. 2008).

Internationalization also means the integration of previously isolated nations into the world economy that were closed to global forces for reasons such as fascist

Table 2.1 Key characteristics of family formation according to the second demographic transition and globalization frameworks

	Second demographic transition	Globalization
Time period	Since late 1960s	Since late 1980s
Central content	Falling fertility, changes in partnership and family formation, related to larger changes in family trends and living arrangements	Changes in partnership and family formation linked institutional contexts, work-family conflict and uncertain labour market position
Key structural determinants	Ideational and cultural changes	Broader institutional changes in welfare regimes, education, employment, family and gender systems
Role of national institutions and inequality	Less prevalent in earlier work, increased in latter extensions	Importance of historically-grown, path-dependent national institutions that 'filter' large-scale changes and channel uncertainty to specific social groups
Technology	Viewed more in relation to advances in contraception and assisted reproduction	Viewed more in relation to ICTs, speeding up of processes and information transfers and diffusion of innovative behaviour
Role of individual agency	Role of increased choice, personal freedom and individual agency in shaping life course decisions	Choice and agency viewed as highly contingent and uncertain and highly unequal for particular social groups or nations
Trajectory of change	Stable change over time	Accelerated change
	Linear trajectory where all countries will eventually converge	Diverse trajectories of converging-divergence of regions due to historical path-dependence
Partnership formation	Rise of alternative forms of living arrangements, fall of marriage and rise of cohabitation and non-marital births as result of ideational change	Rise of cohabitation as 'flexible' partnership response to growing labour market uncertainty; fall in partnership formation (and specifically) marriage due to inability to make long-term binding commitments due to labour market uncertainty
Children and parenthood	Focus on changing role, position of children as result of ideational change	Focus on work-family conflict and competing careers, lack of institutional support and growth of labour market uncertainty as main factors in postponement of parenthood and forgoing parenthood

(Franco in Spain) or communist (East Germany, Estonia, Hungary, Czech Republic) rule. For these countries, integration into the world economy has resulted in rapid technological catch-up processes and periods of painful social and economic adjustments. For the rest of the highly industrialized countries in the world market, in particular for the countries in Western Europe, the integration of former socialist

countries from the East means increasing international competition from low-income countries where labour costs and labour rights are less stringent (Standing 1997).

The internationalization of markets and decline of national borders may therefore impact family formation by affecting workers via several processes. Countries may feel coerced to converge to lower standards to become competitive thereby resulting in less protection and lower working conditions and pay for employees in low-income countries This also means that inequality between groups of workers will persist due to the widening gap between the wages of higher- and lower-educated workers in the industries that are more exposed to trade and international competition.

Globalization can also be characterized by the *intensification of competition*, or the notion that capital and labour is increasingly mobile. The internationalization and interconnectedness of financial, goods and service markets translates into increased exposure to international competition for national firms and economies. To this point, nation-states have mainly been affected in terms of a modification of the tax structure rather than through retrenchment of the welfare state (Schulze and Ursprung 1999). To enhance competitiveness, governments may enact what they envision as successful liberal models and policy measures to remove or relax regulation of economic activities (deregulation), shift toward reliance on the price mechanism to coordinate economic activities (liberalization), and transfer private ownership and control of assets or enterprises that were previously under public ownership (privatization). Tax cuts, measures to keep inflation in check (even at the risk of increasing unemployment), strict control on organized labour, reduction of public expenditures and downsizing of government are all part of these neo-liberal measures. These transformations copy the notions of efficiency, productivity and profitability, and often mean a push to adjust prices, products, technologies and human resources more rapidly and extensively (Montanari 2001; Regini 2000).

The intensification of competition also has consequences for individual employment careers and subsequent family formation. First, the copying of neo-liberal tactics often means deregulation of employment protection legislation. Less employment protection means fewer constraints from downsizing, layoffs and ease in introducing further labour market flexibility measures (Auer and Cazes 2000). Second, privatization often results in changes from more to less protected public sector jobs, who are farther removed from the productivity and profitability of global competition (Standing 1997).

Mills et al. (2005) summarized country-specific findings across 14 countries showing that youth are increasingly vulnerable to labour market uncertainty, which means high concentration in more precarious and lower-quality employment such as fixed-term contracts, part-time work or lower occupational standing. Youth are increasingly more exposed to the forces of globalization and become the 'losers of globalization', which is related to postponement of entry into partnerships and parenthood. Youth were found to more likely postpone commitments of partnership and parenthood when they were in a more precarious labour market situation. The empirical studies in Blossfeld et al. (2005) demonstrated that youth often took longer to find a first job, had fewer opportunities to transform fixed-term contracts into a more stable permanent job and experienced higher rates of unemployment.

A third feature of globalization is the *diffusion and impact of global networks on people, firms and financial markets linked by information communication technologies*

(ICTs) such as microcomputers, the Internet, new satellite systems, fiber-optic cables and wireless systems (Castells 2001). These new technologies not only accelerate the liberalization of financial transactions, but also breed the opportunity for convergence and adoption of certain life course behaviour by creating an instant common worldwide standard of comparison. Information communication technologies have fundamentally altered the scope (through widening the reach of networks of social activity and power), intensity (through regularized connections), velocity (through speeding up interactions and processes), and impact (through local contexts impacting the global context) of transformations (Held et al. 1999).

As Table 2.1 shows, the second demographic approach focussed on technology primarily in relation to the introduction of new effective contraceptives and assisted reproductive technologies. In the globalization framework, the diffusion of information communication technologies is seen to have deep consequences for the world of work, early employment careers and family formation behaviour. Globalization forces rationalization processes and reorganization to produce a more streamlined labour force. Technological change has accelerated the decline in employment devoted to agriculture and manufacturing, and substantially increased the rise in the shares of both marketed and non-marketed services. It has also shifted the demand away from the less skilled toward the more skilled by promoting a 'knowledge-based economy' (Burton-Jones 1999). New technologies can also be used to increase efficiency through the automation of low-skilled positions thereby fostering redundancy for workers from the unskilled manual classes. Some have also argued that changes in national labour markets and production systems are the consequences of pressures induced by both increased international competition and the diffusion of information communication technologies that enable organizational restructuring (Castells 1996; Soskice 1998). Information communication technologies have also strengthened interdependencies between markets and market participants, and as a result, a disturbance in one market segment or one country is likely to be transmitted more rapidly throughout the world economy than was evident in previous eras. This was readily apparent in the recent global financial crisis which rapidly diffused across many countries. Finally, the rise of global communication and exchanges such as international discussion groups means that individuals are more easily able to see how others across the world shape their life courses and make family formation decisions.

Globalization not only speeds up the process of real-time exchange and immediate communication across national borders but, owing to the intensification of global competition, also increases the relevance of markets in the coordination of decisions in all modern societies. These developments inherently strengthen the worldwide interdependence of decision-making. In a globalizing market, individual suppliers and consumers are increasingly exposed to a rising number of traders on each side of the market and become 'price-takers', able to buy and sell any quantity at a price that they in essence cannot influence (Useem 1996). Thus, prices produced by globalizing markets progressively set the standards to which individuals, firms and nations then try to comply.

However, globalization does not only indicate that actors are increasingly in the hands of coercive anonymous global markets. What is equally important is that changes within these markets are becoming more dynamic and less predictable. First, the globalization of markets endogenously intensifies competition between firms, forcing them to be innovative, to use new technological developments or to invent new

products. This in turn increases the instability of markets (Streeck 1987), which is increasingly apparent in recent years. Second, modern information communication technologies and deregulation and liberalization measures allow individuals, firms and governments to react faster to observed market changes and simultaneously accelerate market transactions (Castells 1996). This in turn makes long-term developments of globalizing markets inherently harder to predict. Third, global prices in all kinds of markets, tend to become exogenously more liable to fluctuations because worldwide supply, demand, or both are becoming increasingly susceptible to random disruptions caused somewhere on the globe for example, sub-prime mortgage crisis, problems in the financial sector which spread to other industries, major scientific discoveries, technical inventions, new consumer fashions, major political upsets such as wars and revolutions and economic upsets. In other words, the increasing speed, dynamics and volatility of outcomes of globalizing markets makes it more difficult for individuals, firms and governments to predict the future and to make choices between alternatives and strategies. This generates a ubiquitous environment of uncertainty at all levels.

The Importance of Path-Dependent Institutional Filters

Another central feature of the globalization framework is the importance of domestic institutions, which effectively 'filter' the impact of globalization and rising uncertainty and channels uncertainty to certain social groups. As Table 2.1 shows, this is perhaps one of the central differences between the globalization and second demographic transition frameworks and for this reason is described in more detail in this section. National polices and employment systems are historically based and country-specific and determine the degree to which people are affected by the structural changes brought about by globalization (Mayer 2004). In contrast to the more linear and convergent theory of the second demographic transition, the forces of globalization are seen to generate different problems for each country, demanding diverse policy measures, which in turn reinforces strong path-dependence over time and diverse reactions to family formation. An encompassing framework to describe nation-specific institutions is the notion of welfare regimes which consist of specific packages of contributions by the state, market and family (Esping-Andersen 1990, 1993). The institutions that impact the pathways to adulthood and family formation are employment systems, education systems, national welfare regimes and family systems.

Welfare Regimes

Welfare regime constellations filter the market forces of globalization by offering varying levels of decommodification of workers via income supports and influencing whether children are required as an economic 'support' (Alderson and Nielsen 2002; Esping-Andersen 1990; Brady et al. 2005). Differences between welfare regimes are

manifested by the level of active employment-sustaining labour market policies (e.g. subsidized employment), welfare-sustaining employment exit policies (e.g. support for unemployment), the scope and generosity of family allowances and services (e.g. maternity/paternity leave, childcare) and the share of the public sector that comprises the labour force (DiPrete et al. 1997).

Using Esping-Andersen's (1990) classifications as a base, we distinguish between five welfare regime types. Countries such as Germany, Austria and (in relation to family policies), the Netherlands, represent a conservative or corporatist welfare regime that is strongly transfer oriented, with decommodifying effects for those who are economically inactive. Social policies are not designed to promote employment opportunities or job mobility, but to ensure that (often male) workers who earn family wages and exit employment are protected against serious declines in living standards. This type of regime is committed to the traditional division of labour in the family, often referred to as the 'male-breadwinner' or 'one-and-a-half-earner' model. It supports women who give priority to family activities and work either in the home or on a part-time basis (Blossfeld and Drobnič 2001). A variation on the conservative regimes is the 'southern' or family-oriented welfare regimes of Italy, Spain and Mexico (Castles and Ferrera 1996). A central difference however is the strong ideological and practical involvement of family and kinship networks in protecting its members against economic and social risks.

The impact of the welfare regime constellation on family formation in both of these regimes is evidenced by the postponement and the forgoing of parenthood due to the inability of women to combine work and family. Furthermore, since both the conservative and family-regime welfare systems largely rely on a male-breadwinner model we found that when men in these regimes were in an uncertain labour market position (e.g., unemployed, fixed-term contract) they postpone entry into both partnerships and parenthood (Mills et al. 2005).

Social-democratic regimes include Sweden and Denmark. Active labour market and taxation policies in these countries are aimed at full employment for both men and women, gender equality in the workplace and home, and a 'fair' income distribution with a high degree of wage compression. The high participation of women and mothers in employment and the ability for youth to fall back on a relatively generous safety net, combined with other factors such as higher gender equality better enabled youth to make the transition to partnership and parenthood with the essential ability to combine work and family.

Central and Eastern European countries have experienced rapid and extreme transformations since the early 1990s (Sobotka 2003; Pongrácz and Spéder 2008). Since they share the same origin of a communist regime, they can be classified as a post-socialist regime, but in many ways are 'evolving' and represent the most heterogeneous cluster. Hungary and the Czech Republic, for example, provide more generous support for the family and promote a dual-earner family model by favoured fiscal arrangements such as in a social-democratic regime. Conversely, Estonia has taken a more liberal direction, characterized by low state intervention.

The liberal regime (e.g., Australia, Canada, United States, United Kingdom) is characterized by passive labour market policies, marginal support for the underprivileged,

and relatively small public sector employment (Gallie 2004). Although we have not specifically compared and contrasted the positioning of Australia in relation to other countries, they are often classified closely with the liberal welfare regimes. Later chapters in this volume will also address the position of Australia more deeply. The comparatively high employment performance in these regimes is often linked to high flexibility, limited union power, and weaker labour legislation. Youth and those making the transition to family formation have therefore been viewed as more 'exposed' to global forces, resulting in higher levels of inequality and a lack of choice and individual agency for all as proposed by the second demographic transition.

Employment Systems

Nations also significantly differ with respect to employment systems in the form of industrial or employment relations. Country-specific differences surface in elements such as types of work councils, collective bargaining systems, strength of unions versus employer organizations, labour legislation or administrative regulations. This produces distinct national variations of occupational structures and industries, patterns of labour-capital negotiations, strike frequencies and collective agreements on wages, job security, labour conditions, and work hours (Streeck 1987). How these systems diverge has been characterized as 'coordinated' and 'uncoordinated' market economies (Soskice 1998), 'individualist' or 'collective' regimes (DiPrete et al. 1997), or 'open' and 'closed' employment relations (Sørensen 1983).

The open employment relationship (e.g., United States, Australia, United Kingdom), is characterized by employment based on the free market system. Shielding of workers (employment protection legislation) is at a minimum, with labor market resources or human capital such as education, social origin and labour force experience playing a crucial role (DiPrete et al. 1997). This extreme exposure to market forces may be apparent in higher unemployment rates and overall job mobility, destabilizing the long-term employment relationship, and exacerbating family formation and other long-term binding life course decisions (Gallie et al. 1998).

Many European countries are characterized by closed employment relations with coordinated, centralized economies that have stronger unions, collective bargaining coverage and employment protection legislation. In these contexts, a network of institutions (e.g., unions, workers' council, collective bargaining) maintains long-term cooperative employment relationships and more centralized wage-setting mechanisms based on trust. This type of employment system also protects those already in the labor market and can also foster an extreme variant of an 'insider/outside' labour market, which is the case, for instance, in Spain and Italy. This tends to create a large segment of precarious employment and unemployment, while (generally male) employees have levels of job security and high 'family' wages, reminiscent of dual and segmented labor market theories (Piore 1969). There is a high persistence of inequality due to the fact that precarious forms of employment (for example, fixed-term contracts) are highly concentrated among specific groups seeking access

to the labour market (e.g. women, younger workers, minorities and unemployed). Entry into the labour force is more problematic and unemployment is usually of a longer duration with low rates of job mobility (Gallie et al. 1998). For family formation, this forces youth to undergo a longer period of uncertainty and postpone the transition to partnerships and parenthood.

Post-socialist regimes experienced not only a severe political and economic 'shock' from a socialist to a market-driven economy, but also incredible transformations from an agricultural to industrial society, coupled with sudden exposure to the accelerated and volatile global market at the beginning of the 1990s. This meant a rapid shift from closed to open employment systems. Older cohorts grew up in a system where employment was guaranteed, with extraordinarily high job security, even for women, youths and older workers, who were then exposed to a tumultuous period of change. This resulted in dramatic changes in family formation (e.g., Sobotka 2003).

Educational Systems

Something that has received less attention under the second demographic transition framework, is the importance of educational systems in shaping family formation and pathways to adulthood. There are large differences between nations in the way they (1) differentiate the maximum number of school years attended by all and tracking (stratification), (2) value certificates or ability-based learning (qualification versus organizational), (3) standardize the quality of education (standardization), and (3) link education with entry into the labor market. Using Maurice and Sellier's (1979) regimes of school-to-work transitions, we can think of differences in terms of 'qualification' versus 'organizational' space and, following Allmendinger (1989), the degree of educational 'standardization' or 'stratification' (see also Shavit and Müller 1998).

In unstratified systems, all children have the opportunity to attend school, which may lead to post-secondary education until the age of 18, with the same range of options (theoretically) open to all students. In these countries, a larger proportion of a cohort attains the maximum number of school years provided by the general educational system. Countries with more destratified systems include Australia, the United States, Canada, Great Britain, Sweden, post-1960s Italy, post-1970s Spain and post-1990s Estonia. Whereas in the 'stratified' systems that exist in Germany, the Netherlands, and Hungary, educational opportunities of youth are stratified as they are streamed into specific educational tracks at a younger age.

The way in which countries combine theoretical learning with practical work experience has direct implications for early labor market transitions, and thus ultimately family formation (Blossfeld and Stockmann 1998/99). In a system of organizational space, education is academic or general in character with specific occupational skills learned on-the-job. These are often the destratified systems such as Australia, and the United States. Whereas in systems where qualifications are more highly valued, education is closely tied to job requirements in the vocational system with more importance placed on diploma requirements and certificates. In

the countries that value qualifications (e.g., Germany), nationwide standardized certificates are easily understood by employers. Here it is important to make a distinction between countries which organize training mainly through (1) 'theoretical' training in vocational schools (France, the Netherlands, Hungary, Ireland, Estonia, Mexico), (2) 'practical' on-the-job training (Australia, the United States, Great Britain, Canada, Italy, Spain, Sweden, Norway) or (3) the so-called 'dual' system, a pragmatic combination of theoretical learning at school and job experience at the work place (Germany).

Theoretical training in vocational schools promotes a broader understanding of occupational activities, but does not confront youth with real work situations. The 14- country comparative study of Blossfeld et al. (2005), summarized in Mills et al. (2005) showed the following results. Since practical experience is shifted to the period after theoretical vocational training, youth engaged in training from these systems had a relatively more difficult transition from school to work. In the organizational system of practical on-the-job training, young workers were less restricted to narrowly defined occupational fields, and had fewer structural barriers in terms of recognized certificates, and a weaker link between the type of qualification earned and the type of job obtained. Due to the heterogeneous quality of on-the-job training, however, a lack of shared definitions and standards with respect to skills, income and job requirements increased the risk of worker movement between firms. Although the transition from school to work was relatively easy in these systems, there was intense mobility and a protracted duration for youth to find a suitable and permanent job match. These differences in educational systems are not only related to the time that individuals remain in the education system, but also their ability to find a job, which is highly related to postponement of family formation.

A related point also addressed by the second demographic transition approach is the degree of educational expansion. There has been a prolonged extension of school participation over time across many Western countries. A longer stay in school proxies the degree to which the transition to economic independence has been postponed across birth cohorts in different countries. This belated timing in reaching economic independence is particularly important for the study of partnership formation and the transition to parenthood. Educational expansion and increasing youth unemployment also means that education can take an alternative role to employment for youth. In Blossfeld et al. (2005) we also found a tendency among young adults to opt for - if this is structurally possible in a given educational system – the role of student than becoming unemployed in the process of transition from youth to adulthood. The educational system then serves as a reservoir for otherwise unemployed youth, which was strong in Southern European countries like Italy and Spain.

In the globalized, knowledge-based society, education and labor force experience become the most important types of human capital. Since youth are generally lacking the latter they have to focus on the former, which is evident in educational expansion across most of the industrialized world, also addressed by the second demographic transition. Those lacking human capital, such as youth with lower education, weak occupational standing or lacking experience, were shown to be less shielded from globalization (Mills et al. 2005). In other words, they were at a

higher risk to enter a more precarious, flexible and uncertain employment situation (e.g., fixed-term contract, part-time, irregular hours). We therefore found that the large-scale change of globalization accentuated or even cultivated inequality by offering better opportunities to the better educated youth and constraining the chances of the less educated. In contrast to the second demographic transition framework, inequality was viewed as a central feature within life course formation and choices.

Family Systems and Work-Life Conflict

Although the second demographic transition framework addresses changes in family systems in a much more comprehensive manner than the globalization approach, it fails to adequately integrate the central importance of work-life conflict in postponing family formation. The family system and the interdependence between family, education and employment careers have direct consequences for the transition to adulthood, specifically the transition to first partnership and parenthood. Family systems regulate the degree of pluralization of private living arrangements. Pluralization refers to lifestyles beyond the traditional marital couple or nuclear family to include non-marital cohabitation, remaining single, or postponement or forgoing of parenthood (Corijn and Klijzing 2001).

As has also been chronicled, a north–south divide in the pluralization of private living arrangements emerges due to institutional, but also cultural differences (Blossfeld 1995). Scandinavian countries like Sweden and Norway have a pioneering role, while countries like Germany, France, the Netherlands, United Kingdom, United States, Australia and Canada appear to follow this trend. Familistic countries such as Italy, Spain, Ireland and Mexico are even less affected. The strong institutionalization of marriage in Southern Europe and Mexico, translates into small numbers of non-marital unions and one-person households among youth (Nazio and Blossfeld 2003), low divorce and extra-marital birth rates as well as into an asymmetrical relationship between the sexes within the family.

The growth of qualified women in particular means that women will have their first child later due to extended education, effective contraception and the competing demands of employment and childcare. Highly educated individuals have different values and preferences such as independence, autonomy and a higher attachment to career building and the labor force (Liefbroer 1991; Mills 2004). Those with higher education are thus more willing and able to adopt flexible and innovative behavior that leads to the pluralization of living arrangements (e.g., cohabitation, voluntary childlessness). Countries with poor maternity or parental leave and particularly childcare arrangements, such as the conservative or Southern European welfare regimes, reduce the opportunity for women to have interdependent careers (Mills et al. 2008a, b).

Due to growing uncertainty since the 1980s, consensual unions represent a 'rational' reply to growing uncertainty that surrounds the transition to adulthood in

a globalizing world. To reduce uncertainty, youth are more likely to bind themselves to the more flexible union of cohabitation as it is largely independent of the future (Mills 2004; Smock 2000). These living arrangements permit the postponement of long-term commitments and self-binding decisions such as marriage at least for the time being. Reminiscent of Easterlin's (1976) theory of economic deprivation, this applies in particular to historical periods of general economic uncertainty and rising unemployment, when the tendency to marry and have children appears to diminish. This also relates to Oppenheimer's (1988, 2003; Oppenheimer et al. 1997) work on the impact of uncertainty in social and economic roles on the timing of family transitions. As Oppenheimer (1988: 583) states: "Cohabitation gets young people out of high-cost search activities during a period of social immaturity but without incurring what are, for many, the penalties of either heterosexual isolation or promiscuity, and it often offers many of the benefits of marriage, including the pooling of resources and the economies of scale that living together provide." In many ways, the flexibility of cohabitation matches the flexible labor market circumstances that many youth experience during the era of globalization.

Decision-Making in an Era of Uncertainty

Many decisions in the early stages of the life course have long-term implications. People have to opt for educational and professional tracks, enter job careers or make long-term binding family and fertility decisions. However, higher levels of uncertainty for youth generate insecurity and potential conflict and make it increasingly difficult to make such choices. Young people respond and adapt to the complex structural shifts brought about by globalization. A central hypothesis and finding in the globalization research is that the uncertainty generated by globalization at the social-structural level reduces or delays the propensity of youth to enter long-term binding commitments such as partnerships and parenthood (Blossfeld et al. 2005).

As Table 2.1 shows, the second demographic transition has a higher reliance on the growth of choice and autonomy in shaping the life course. We propose an alternative model using a dynamic rational choice approach to understand individual decision-making under conditions of increasing uncertainty (Blossfeld and Prein 1998). We do not advocate a model of individual action as deterministic behavior, but rather as a tool to find regularities among a larger number of actors. A dynamic rational choice model assumes in particular that typical actors try to act rationally. Following Elster (1989), such rational decision makers are characterized by trying to achieve three optimizations: (1) finding the best action that fits with their given beliefs and desires, (2) developing the most appropriate belief given the evidence at hand; and, (3) collecting the correct amount of evidence while taking into account their given desires and prior beliefs. Yet due to the process of globalization described above, such as the accelerating pace of change, volatility and unpredictability of social and economic developments, and deluge of information, youth now face three major decision problems.

First, there is rising uncertainty about the behavioral alternatives themselves. This issue becomes more important when young actors have to make rational choices among alternatives that become progressively more blurred. For instance, due to the increased uncertainty that has emerged at the macro level it becomes more difficult for young adults to compare and rank the various options for educational, professional or partnership careers, simply because they know less and less about future alternatives. The problem here is not only which alternative to choose but increasingly when to choose it. Second, there is growing uncertainty about the probability of behavioral outcomes. This problem is especially acute when actors are less and less able to assign in a reliable manner subjective probabilities to the various outcomes of their future courses of action. In the process of globalization, this uncertainty becomes particularly severe when a decision requires beliefs about choices to be made by other people in the future (e.g., partner, employer). Third, there is increasing uncertainty about the amount of information to be collected for a particular decision. Collecting information is necessary, but costly and time-consuming. With the accelerated spread of global networks and knowledge, the question of how much information one should optimally collect before one is ready to form an opinion becomes more serious because the marginal costs and benefits for further information searches are increasingly unclear. One has therefore to assume that actors – whether consciously or not – will set certain threshold limits, which, once satisfied, stop the search for additional information.

Decision-making and risk calculations to cope with uncertainty are firmly embedded within the social context of the nations in which the perceptions of risk are maintained. As Regini (2000:8) states: "The institutional context, in fact, provides actors with a set of resources and constraints that they must necessarily take into account when choosing among different alternatives and consequently shapes their actions." Lindenberg (1983) and Esser (1991) use the terms 'habits' and 'frames' as nation- or class-specific ways to interpret decision situations. Heiner (1983) argues that cultural traditions, social institutions or norms serve as rule-mechanisms that restrict the flexibility to choose potential courses of actions, or which produce a selective alertness to information. Country-specific institutions and national norms generate effective decision 'heuristics', which are not thoughtlessly repeated (as in the 'homo sociologicus'), but used as problem-solving tools.

Types of Uncertainty in the Transition to Adulthood

To empirically measure the impact of growing uncertainty on partnership formation and entry into parenthood during family formation, we developed a schema consisting of three types of uncertainty: economic, temporal, and employment relations (Mills and Blossfeld 2005).

First, *economic uncertainty* is defined as the caliber of economic precariousness of an individuals' employment and educational circumstances. We anticipate that labor market positions with high degrees of economic uncertainty will inhibit youth

from making long-term binding commitments such as partnerships, and particularly marriage, or parenthood that require a secure economic basis (Oppenheimer 1988). Youth require a necessary minimum or what Rindfuss and Vandenheuvel (1990) refer to as the 'affordability clause' to enter into a binding relationship or to have a child. As Oppenheimer (1988) argues, we expect that youth will avoid commitments such as marriage and parenthood, but still desire the rewards of having a relationship (i.e., consensual union). Economic uncertainty can be measured by factors such as earnings, benefits or broader indicators such as an activity status indicator of education and employment and occupational class.

Second, according to Breen (1997: 477) "*Temporal uncertainty* reduces the attractiveness of long-term commitment and increases that of 'contingent asymmetric commitment.*" In other words, due to temporal uncertainty, youth are less able to make long-term binding commitments which may translate into, for example, opting for cohabitation instead of marriage or forgoing partnership and parenthood until they feel they have obtained adequate certainty for their future life path. Temporal uncertainty and the concept of 'long-term commitment' is reminiscent of Elster (1989) notion of 'self-binding'. In order to reduce choice complexity of long-term courses of action under uncertainty, individuals tend to constrain or bind their own future actions (i.e., commit themselves to a specific action in the future). Self-binding is an effective technique to make one's promises to significant others (e.g., partners, actors in industrial relations) more credible. This technique makes communication about what one is going to do under still unknown future conditions more reliable. According to Elster (1989), this credibility enhances the trust that actors will have in each other and enables them to interact and cooperate more effectively than without such self-binding commitments. Self-binding, however, is also paradoxical, particularly in a life phase in which the transition to adulthood takes place. On the one hand, it is a pre-requisite for creating certainty for young people as well as credibility and trust in one's dealings with others. On the other hand, it diminishes the ability to react in a flexible manner during later stages of the life course, which clashes with the rapidly changing demands of a globalizing society.

Third, employment relationship uncertainty is characterized by whether youth are in the more stable position of being dependent workers or the more insecure position of being self-employed or a contract worker. This is highly related to the previous discussion on the protection afforded in different employment regimes.

The lone self-employed worker has a higher degree of uncertainty, due to lower protection measures. Depending on the labor market context, uncertainty for dependent workers is examined by whether they are in: (a) public or private sector employment, and, (b) a less precarious relationship such as a permanent versus a temporary contract (in closed employment systems). Whether an individual is employed in the public or private sector is a key factor in determining how they are sheltered from risk, with those employed in the public sector 'relatively isolated from the operation of market forces' (Esping-Andersen 1993). Employment in the public sector is much farther removed from the impetus of productivity and profitability of global competition.

Those with lower levels of relationship security (i.e., self-employed, private sector, temporary contract) experience higher levels of uncertainty, which in turn generates a

similar response of postponement or forgoing binding life course commitments (see Mills et al. 2005). The effects of uncertainty also differ for men and women, particularly those from conservative welfare regimes. In countries where the male-breadwinner model was predominant, it is more important for males to establish themselves in a more secure job as opposed to females (Oppenheimer et al. 1997). For this reason, there is a stronger effect of uncertainty on men than women, particularly in the male-breadwinner countries of the conservative and family-oriented welfare regimes.

The Second Demographic Transition Meets Globalization: Towards a Comprehensive Theory

In order to build a more comprehensive theoretical framework to understand changes in family formation, we propose an integrative approach. To describe this, we contrast the second demographic transition and globalization approach, summarized in Table 2.1, which are two large-scale theories that have both attempted to understand changes in family formation.

The first central difference between the two approaches is the *time period* that they cover. The second demographic transition approach looks at changes since the beginning of the late 1960s, whereas the globalization framework considers changes since the late 1980s. The second demographic transition and its building blocks were largely developed in the 1980s, which was a period at the end of an economic boom in many countries and the beginning of educational expansion and significant changes in the role of women. The globalization framework reflects changes in the aftermath of the mid-1980s. By virtue of this, it can offer additional insight into why increasing numbers of youth postpone fertility. For instance, although many young people report that they want to have more children, they often do not achieve this goal. Why is this the case? The answer, we believe, is that although we see that living standards have increased over time, the gains are disproportionately channelled to certain groups such as labour market insiders and those who have acquired rights. It is these groups that have the luxury of catering to their higher personal needs and engaging in individualistic behaviour. The unprotected either do not experience increases in living standards or do so on a weaker level. Instead of a shift to individualization, they experience increased uncertainty and thus postpone fertility due to their disadvantaged position.

This is also related to *differences in the central content* and *key structural considerations* of each approach. Whereas the second demographic transitions approach focuses on declines in fertility and changes in family formation in relation to ideational and cultural change, the globalization framework has a considerably different focus on economic and institutional changes such as employment and uncertain labour market positions across different institutional contexts. The globalization framework could gain from placing family formation transitions within a broader family and demographic perspective (e.g., in relation to divorce, mortality, migration), but also acknowledging ideational and cultural changes.

A central divergent factor between these perspectives is the *role of agency and individual choice*, particularly in relation to inequality. The second demographic transition approach focuses on increases in individual freedom and the ability to voluntarily shape the life course, which gives a sense that all individuals have the agency and power to achieve this. The globalization approach offers a more constrained view of agency, arguing that the ability to shape one's life course is highly contingent on human capital (e.g., education) and institutional context, which afford a certain 'power' to choose. This results in clear and persistent patterns of inequality both between, but particularly within countries (for a review see Mills 2009).

Where the two approaches also differ is in their perspective of the *type and trajectory of change*. As others have also argued (e.g., Cliquet 1991), the second demographic transition approach views changes over time as continuous without any discontinuity since the late 1960s. However, as Cliquet (1991: 28) argues, there has been "a new acceleration in relational and reproductive patterns". This refers to trends such as growing non-marital fertility, cohabitation without marriage and voluntary childlessness. This also fits with one of the central tenants of the globalization approach, which is a speeding-up or rapid change of social processes, which has been attributed to the accelerated diffusion of knowledge and spread of global networks, which in turn impacts behaviours in family formation.

Another criticism often raised against the second demographic transition is the notion that there is a linear trajectory or final state where all societies will eventually converge. The underlying assumption is that there is a particular direction of change that is shared across all countries, which hints at general similarities and potential convergence. Or, as Sobotka (2008: 173) maintains: "the notion of common cross-country trends suggests that the differences between countries are likely to diminish". Conversely, as Mills et al. (2008a, b) recently illustrated, a central finding of more recent work using the globalization framework shows that countries do not converge in either institutional or behavioural characteristics. Rather, we find evidence of 'converging divergences'. When we examine key institutions in nations such as welfare regimes, family, cultural and gender systems, educational systems and employment systems, we see a high degree of historical path-dependence. Each nation has a different starting point and package of contributions. Path-dependent histories, cultures and institutions operate as a strong 'filter' or intervening variable between large macro-level changes such as globalization and responses at the individual micro-level.

Economies, historical and cultural systems of regional or subgroups of countries remain more similar and integrated with one another than the larger European or global society. These regions consist of supra-entities such as Europe, North America or Asia. Similar welfare regimes, industrial relation systems, gender systems and cultural traditions, which are highly implicit, allow them to easily coordinate with one another. The result is therefore not a linear trajectory of path dependence leading up to a final demographic state, but rather a grouping of 'converging divergences'. This approach fits with researchers such as Micheli (2004), who have argued that family formation patterns are strongly geographically and regionally embedded. Others have persistently highlighted diversity in family formation and patterns across Europe, largely based on deep-seated historical differences (e.g., Kuijsten 1996; Reher 1998).

Finally, the central difference between the two approaches is *the engine or driving factor behind changes in partnership formation and transitions into parenthood*. Whereas the second demographic transition approach situates changes in family formation as primarily resulting from an evolution of ideational and cultural change, the globalization framework views it as institutional incompatibility of combining work and family and particularly growing labour market uncertainty. The second demographic transition approach explains change largely in relation to changes in values via the theory of 'ideational shift'. For example, Lesthaeghe's work on fertility examines the acceptability of fertility and the perceived social and economic circumstances that reduced fertility poses for couples. For a reduction of fertility, there must be an appropriate ideational context that directs individual preferences to warrant the feeling of individual control over fertility and the desire to have a smaller family. Using the work of Maslow (1970) and Inglehart (1977), the second demographic transition approach assumes that personal needs are increasingly important, which leads to a tendency toward individualization that in turn impacts fertility behaviour and more liberal and secular values. In contrast, our globalization hypothesis explains change as connected to structural shifts in increased uncertainty, with institutions at the centre of this process. In our approach, change is thus not described as one general trend among societies. Globalization offers a supplementary explanation of changes in fertility and family formation. If combined, these two perspectives could offer a particularly strong explanation.

Problems, Challenges and Future Directions

Although it is informative to contrast these two approaches in order to develop a more comprehensive approach, it is also essential to focus on the problems that both perspectives have faced and suggest future directions for research.

A criticism that both the second demographic transition and globalization frameworks have suffered is the very fundamental problem of definition. Not only have definitions been diverse, but also fluid with certain features gaining more salience at different times (Cliquet 1991; Guillén 2001; Coleman 2004). Globalization has been often defined solely in relation to economic globalization, which may be particularly important for certain research questions or periods and less relevant for others. Another related and common point of dispute is the timing or onset of this era of globalization and the second demographic transition. Some have disputed the timing of the second demographic transition (e.g., van Bavel 2007), and others have proposed many alternative moments for the onset of the current era of globalization (Guillén 2001).

This is related to the second criticism often faced by both, and other broader heuristic frameworks to describe social change. The broadness of each perspective means that they evade explicit and concrete empirical examination and direct hypothesis testing. Both have used more 'middle-range' theories that operationalize aspects to proxy the second demographic transition and globalization, such as the

measurement of certain life course behaviours, values or uncertainty. However, in recent years, both have begun to answer these claims. The development of a second demographic transition empirical index that includes both a behavioural and attitudes and value dimension, has been shown in recent work (Sobotka 2008). A GLOBALINDEX was also recently developed by Raab et al. (2008), which provides a sociological measurement of the globalization framework, including the measurement of dimensions of economic, (socio) -technological, cultural and political dimensions of global change.

A third criticism, which Coleman (2004) also raised in relation to the second demographic transition approach is that concepts are largely embedded in a very European perspective of demographic change. Although the globalization framework introduced by Mills and Blossfeld (2005) arguably also suffers from a dominantly 'Western' perspective, it provides a more encompassing framework to include other regions such as Eastern Europe, Australia and North America. Yet both perspectives could clearly benefit from a broader non-Western approach. It would be interesting to examine whether the focus on shifts to secularization and particularly individualization of the second demographic transition approach is relevant in non-Western societies. The strong focus of the second demographic transition approach on changes in values and attitudes about family life, sex, contraception, children, parenthood, non-marital childbearing, cohabitation and alternative living arrangements may be less appropriate for non-Western contexts. The focus on the importance of structured welfare regimes, and the role of uncertainty within the globalization framework could also be challenged in different contexts.

Although both frameworks are large overarching narratives that include many economic, social and cultural factors, certain aspects have received less attention, which may emerge as central features to understand contemporary changes in family formation patterns. The first is a lack of attention to biological factors that impact family formation. Although the second demographic transition framework clearly addresses this aspect in a more direct manner than the globalization approach, further development would be desirable. In lieu of the relatively extreme postponement of the transition into parenthood in many European societies, aspects of fecundity need to be addressed. Fecundity refers to actual biological fertility, often measured by the time to pregnancy. We know relatively less about whether male and female fecundity is also dropping and how postponement may be related to unintended childlessness. Instead of an innovation, the call would be rather to a return to a focus on biological factors to create a twenty-first century version of Bongaarts (1978) 'proximate determinants' of fertility. Here the focus could be on the impact of uncertainty on postponement and fecundity.

A second area where both approaches suffer is a lack of dedicated attention to the role of gender systems and gender equity in family formation. Gender equity has been posited as an essential link in understanding low fertility (McDonald 2000; Cooke 2003; Mills et al. 2008a). The changing position of women, including women's increased participation in education and the labour force, has been seen as vital to interpret decreases in fertility. The 'gender system' in each country, which entails the different rights and obligations provided to men and women, also plays a key

role in family formation. Gender systems are increasingly viewed as the missing link in understanding the persistence of low fertility (Mason and Oppenheim 1997). McDonald (2000, 2006) proposes that this disparity is attributed to varying levels of gender equity in different social institutions. Countries such as the Netherlands, Denmark, Finland, and Sweden for instance, maintain both relatively high levels of total fertility of around 1.8, coupled with high levels of gender equity. Whereas countries such as Italy, Spain and Greece have very low total fertility rates of around 1.3, coupled with high gender inequality (McDonald 2006: 499). The dominant male-breadwinner family model, accompanied by tax and state benefits for families that favour one-earner couples, and a lack of available or affordable institutionalized childcare make it difficult for women to combine work and parenthood (Kreyenfeld and Hank 2000). When they do attempt this, they take on not only the role of paid worker, but also remain the largest contributor to housework and caring tasks.

There are undoubtedly further directions that this study could take and further aspects lacking in one or both of the frameworks presented here. The aim of this chapter was to compare and contrast the earlier framework of the second demographic transition approach with the more contemporary theory of globalization to investigate whether the two could produce a complementary framework to understand family formation. We conclude that a synergy of these approaches offers a more coherent perspective to understand changes in family formation since the late 1960s. The second demographic transition approach suffers from a lack of attention to key institutional features, the role of labour market uncertainty, over-reliance on a model of equal individual agency and choice, and a predicted linear trajectory or end point of all nations. Conversely, the globalization approach largely ignores the key features of ideational, value and cultural change, attention to advances in contraception and assisted reproductive technologies, and other demographic processes taking place within the realm of the family (e.g. divorce patterns) and in other areas (e.g. migration, mortality). Both approaches need to work on sharper definitions, a firmer empirical grounding, and extensions to non-Western contexts, biological processes and embracing the importance of gender equality and gender systems. If these challenges were met and these two perspectives were to be combined, we would have a powerful large-scale theory to understand contemporary demographic social change and specifically, family formation.

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Chapter 3
The Standard Family Life Course: An Assessment of Variability in Life Course Pathways

Elizabeth Thomson, Maria Winkler-Dworak, and Sheela Kennedy

Abstract Despite dramatic changes in family life over the past several decades, survey data demonstrate that a 'standard' family life course remains a goal for the vast majority. The ideal family life course is to have a stable partnership with two or more children, and to have all of one's children with the same partner. Achievement of a standard family life course may, however, depend on the opportunities and constraints encountered along one's life path, in particular those associated with the pursuit and attainment of higher education. Analyses of survey data from France, Sweden and the United States document the family experiences to age 40 of persons born in the 1950s. Overall, about half of the cohorts had experienced a standard family life course. For women, education had both positive and negative influences – greater childlessness but more stable childbearing unions. For French and Swedish men, fatherhood and union stability were both associated with higher education. Educational differences in family transitions – especially childbearing out of union and dissolution of unions with children – are much greater in the U.S. than in the other countries, resulting in a significant educational gap in the likelihood of achieving a standard family life course that is not observed in Sweden or France.

E. Thomson (✉)
Department of Sociology, Demography Unit, Stockholm University,
Stockholm, Sweden

Department of Sociology, University of Wisconsin-Madison,
Madison, WI, USA
e-mail: elizabeth.thomson@sociology.su.se; thomson@ssc.wisc.edu

M. Winkler-Dworak
Vienna Institute of Demography, Austrian Academy
of Sciences, Vienna, Austria

S. Kennedy
University of Minnesota, Minnesota Population Center,
St. Paul, MN, USA

A fundamental principal of life course theory and research is that circumstances and events early in life have life-long implications for an individual's opportunities, choices and outcomes (Elder et al. 2003; Mayer 2005). Pathways from childhood through young adulthood to adult economic attainments have been intensively studied. Research on the consequences of early life experiences for adult health and survival is more recent but already quite well developed. When it comes to a third key component of the life course – attainment of a stable and nurturing family life – we have a considerable portfolio on relationships between early life experience and particular family transitions in adulthood. But we do not have the cumulative picture of family experience over the life course as has been developed for wealth and health.

Educational attainment is the key marker of advantage on the threshold of the adult life course. Education is without doubt the most important determinant of economic well-being later in life. Education is also strongly associated with better health throughout life and greater longevity. Furthermore, the gap between the less well and better educated on both dimensions appears to accumulate over the life course. Differences by education in the timing or occurrence of most family transitions – cohabitation and marriage, childbearing, separation – are also well documented. It is less clear, however, that education produces a smooth pathway toward the most advantaged or normative family life course.

In this chapter, we argue that – despite dramatic changes in family life and the broader contextual factors driving those changes, such as those documented in the previous chapter – a 'standard' family life course remains a goal for the vast majority. Achievement of a standard family life course may, however, depend on the opportunities and constraints encountered along one's life path, in particular those associated with the pursuit and attainment of higher education. We use data from surveys conducted in the 1990s in France, Sweden and the United States to document the family experiences to age 40 of persons born in the 1950s. We find that, overall, about half of the cohorts had experienced a standard family life course, that educational differences in family transitions and the standard family life course are much greater in the U.S. than in the other countries, and that education has different implications for the family life courses of men and women.

Pathways Through the Family Life Course

In the conjugal family systems that characterize wealthy countries, partnership and parenthood are the key dimensions of family life courses. The standard family life course in such societies consists of finding an intimate partner, having children with that partner, and remaining with the partner until death. As documented by Mills and Blossfeld (Chap. 2, this volume), the Second Demographic Transition – increases in cohabitation, non-union births and union dissolution combined with falling fertility – suggests that the standard has weakened and that family transitions are increasingly de-standardized.

Fig. 3.1 Critical pathways in the family life course
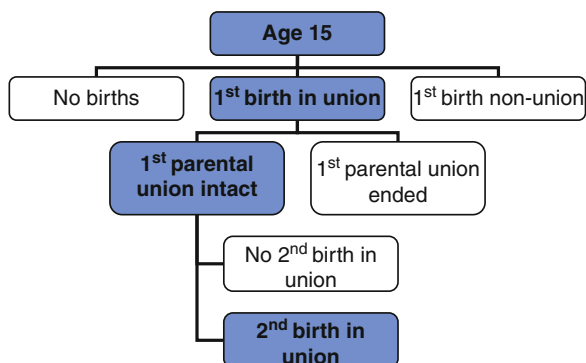
Certainly the behavioral changes that comprise the Second Demographic Transition are accompanied by increasing acceptance of alternative pathways through family life. For example, several surveys show quite high acceptance of having a child without a partner or in a cohabiting relationship, even in countries where only a small proportion of births occur out of marriage (Thomson 2005). It is important to keep in mind, however, that such questions are not designed to identify personal preferences or ideals with respect to partnership formation and stability. The fact that no surveys even ask about an ideal partnership reflects an underlying assumption that almost everyone would like to achieve a good and stable partnership and prefer to avoid the pain of separation and divorce.

When it comes to having children, we have a long history of the right sort of question – what is the ideal number of children to have? Although individuals may for a variety of reasons prefer a different number for themselves, they are usually willing to express their views of a normative family size. In the most recent Eurobarometer surveys, the vast majority of respondents in their childbearing years consider two or more children ideal, with most selecting exactly two. The key exception was Austria, one of the countries with lowest-low fertility, where a substantial proportion thought one child would be ideal (Testa 2006; see also Goldstein et al. 2003).

Figure 3.1 illustrates what we see as the critical junctures in standard and non-standard family life courses. The first transition that matters is the birth of a child. One may first step off the path to a standard family life course by having no children at all or by having the first child without a co-resident partner. From the middle position, having a first child in a union, one may step off the standard pathway by separating from that partner before a second child is born. If we define the standard as having at least two children in the partnership, couples who have only one child step off even though their partnership remains intact. Once a couple has had two children together, the final path of departure from the ideal is for that union to end. If one child is sufficient for a standard family life course, however, only the dissolution of the first parental union produced a non-standard life course. In that case, non-standard family life courses arise either from childlessness or the dissolution of a parental union, before or after the first birth.

Note that we ignore features of the family life course that are considered key components of the Second Demographic transition – cohabitation versus marriage and dissolution of childless partnerships. We argue, first, that the significance of cohabitation for cumulative family experience lies entirely in cohabiting couples' greater likelihood of separation compared to married couples. The end of a childless partnership may be emotionally and financially difficult, but its significance for the family life course is, we argue, captured through subsequent events we do observe. Early union disruptions may indicate low capacity for intimate relationships and therefore be reflected in higher likelihood of the disruption of a subsequent parental union. The significance of early disruptions is also reflected in childlessness because of the time it takes to find a new partner and the ongoing experiences that may reduce preferences for children.

Theoretical Links Between Education and the Family Life Course

Why would we expect education to play a critical role in pathways through the family life course? In early adulthood, pursuit of higher education requires time and effort that might otherwise be devoted to developing intimate partnerships and having children. In the long run, the skills and credentials provided by education produce steady employment, higher income, social networks and problem-solving skills that can support the search for a partner and the maintenance of partner and parental relationships. At the same time, however, the economic and social opportunities created by education may compete, especially for women, with the formation and maintenance of families.

Theoretical effects of education on the formation and stability of intimate unions are usually linked to their economic base. Becker (1991) claims that the utility of marriage depends on "gains to trade" in which women specialize in home production, men in paid employment. Highly educated women are thought to have less to gain from marriage and therefore to be more likely to avoid it or to have the resources to leave an unsatisfactory marriage. An alternative view (Oppenheimer 1994) asserts that specialization leaves couples at greater risk when one or the other partner is unable to perform her/his role and leaves one or the other partner (usually the woman) at greater economic disadvantage if the relationship dissolves. From this point of view, high education leading to shared economic responsibility is a valued commodity for both women and men, increasing the risk of union formation and decreasing the risk of separation. Although both arguments were developed in the context of a choice between marriage or singlehood, they could be argued to apply reasonably well to cohabiting partnerships, especially those that produce children.

Explanations for education's influence on childbearing are based in part on opportunity costs arising from incompatibility between childrearing and paid employment. In most contexts, higher educated women pay a greater price in lost

earnings for becoming mothers. Positive effects of education may arise on the other hand because highly educated persons have more economic, resources for rearing children, especially when social policies reduce the opportunity costs for paid employment.

When it comes to having children outside partnerships, Willis and Haaga (1996) argue that when the opportunity costs of having children are low, women have sufficient resources to raise children alone, and the supply of men able or willing to take on the financial burdens of parenthood is limited, more children will be born to lone mothers. These are the conditions that face low-educated women in the United States who also have relatively high rates of non-union births. Highly educated women face higher opportunity costs associated with childrearing but also enjoy a greater supply of potential partners with steady incomes and are therefore more likely to postpone childbearing and to have children in a cohabiting, usually a marital union (Ellwood and Jencks 2004; Willis and Haaga 1996).

Beyond its economic implications, education may facilitate the achievement of a standard family life course through social networks of similarly advantaged friends or increased cognitive and emotional resources for maintaining a stable partnership and rearing children. On the other hand, education provides opportunities for life experiences that may be as fulfilling as family life. Education is also associated with individualism and non-conformity, both of which could support the decision to remain childless, to have a child outside a co-resident union and/or to separate or divorce. It is not clear which form of non-economic mechanism would prevail and they may cancel each other out.

Empirical Evidence on Education and The Family Life Course

As noted above, most studies of educational influences on the family life course focus on a single event. An increasing number have investigated selection processes underlying the formation and stability of unions and their relationship to childbearing. And a few have studied selection processes in the attainment of higher education and family formation. Overall, however, direct effects of education on family transitions remain when simultaneity is taken into account (e.g. Aassve et al. 2006; Brien et al. 1999; Coppola and DiCesare 2008).

Although educational attainment is usually associated with delayed union formation, much of that effect can be accounted for by the longer period of enrollment required to attain higher education (Baizan et al. 2003; Bracher and Santow 1998; Coppola 2004). Net of enrollment, educational attainment may be positively associated with union formation, especially with the choice of marriage over cohabitation (Kravdal 1999; Statistiska centralbyrån 1995a). Positive effects are emerging or have become stronger in several wealthy countries (Goldscheider et al. 2001; Martin 2004), consistent with a resource-based, dual-earner model of union formation (Oppenheimer 1994).

Almost all research on separation and divorce finds lower risks among those with higher education (e.g., Hoem 1997; Jalovaara 2002; Olah 2001; Raley and Bumpass 2003; but see Aassve et al. 2006). Studies in Sweden (Hoem 1997) and the United States (Martin 2006; Raley and Bumpass 2003) indicate that educational differentials in separation or divorce have increased. Cohabiters are more likely to separate than married couples (Andersson 2002) and, as noted above, the less well educated are more likely to cohabit than are those with high education. Thus the studies that do not include cohabiters underestimate educational differentials in union stability.

The most comprehensive comparative data on women's education and union dissolution are presented by Härkönen and Dronkers (2006). The well educated were less likely to separate in Austria, Lithuania and the USA. Higher separation rates among the well educated were found in France, Greece, Italy, Poland and Spain. The positive gradient is, according to the authors, associated with higher costs of separation and divorce, the negative gradient with less generous welfare provisions. The latter result is contrary to the authors' hypothesis but consistent with the differential in economic strain experienced in countries with little state support for poorer families.

All of the studies referenced so far deal with the stability of all unions. According to our concept of the standard family life course, it is only the dissolution of parental unions that matters for experiencing a standard family life course. Studies in Sweden (Hoem 1997) and in the United States (Raley and Bumpass 2003) have shown that education is also associated with lower disruption rates among parental unions. The association between education and delayed parenthood is, as for delayed union formation, in large part due to enrollment in higher education (e.g., Hank 2001; Kantorová 2004; Kravdal 2001; Santow and Bracher 2001). Of course, highly educated women and men have time to 'catch up' in childbearing after completing study, particularly when the less well educated are having only one or two children. But delay also opens up opportunities for meaningful alternatives to parenthood and increases earnings that might be lost to childrearing. As a result, women with higher education are more likely to remain childless than those with lower education (Hoem et al. 2006a; Kravdal 2001; Kreyenfeld 2004; Neyer and Hoem 2008; Paar 2005; Statistiska centralbyrån 2002). Where public policy and private practices make it easier to reconcile work and family life, educated women have more resources with which to raise children and may be more likely to do so. Recent studies in the Nordic countries (Andersson et al. 2009; Kravdal and Rindfuss 2008; Lappegård 2000) and in the USA (Martin 2000) suggest that educational differentials in childlessness are on the decline due to increasing childlessness among less well educated women or decreasing childlessness among the highest educated. A recent study by Kravdal and Rindfuss (2008) in Norway shows that the positive educational differential in fatherhood has increased over time as less well educated men have increasingly been childless.

Although the average number of children has usually been negatively associated with education, that gap may also be narrowing (Kravdal 1992; United Nations 2003). Several studies have found positive effects of education on the risk of a second

or higher-order birth, among women with at least one child (Hoem et al. 2001, 2006b; Köppen 2006; Kravdal 2001, 2004, 2007; Oláh 2001; Paar 2007; Statistiska centralbyrån 1995b) but the relationship often varies across cohorts and models. None of this research distinguishes higher-order births in terms of whether they occur in the first birth union or in stepfamilies. In addition, any small advantages in conditional likelihood of second birth are not nearly as large as the differences by women's education in childlessness. Thus, women's education is, overall, associated with lower likelihood of having at least two children, while higher-educated men have a greater likelihood of doing so.

Most studies of union status and births separate marital from non-marital births, including births in cohabitation, and do so only for women. Studies in several wealthy countries find a negative association between educational enrollment or attainment and non-marital childbearing (Brien et al. 1999; Bumpass and Lu 2000; Ermisch 2001; Upchurch et al. 2002. Comparative analyses by Kiernan (2001) and Kennedy (2004) distinguished births to cohabiting couples from those to single women. Taken together, the studies showed that education was negatively associated with non-union childbearing in East Germany, France, the UK, Norway, Sweden and the US. In four of these countries (France, the UK, Sweden and the US), education was also negatively associated with having children while cohabiting rather than in marriage. In Austria, Italy, Spain, Switzerland and West Germany, education was only weakly associated or in some cases positively associated with non-marital births. No educational differences were found in cohabiting versus marital births, however.

Educational differences were not investigated by Wu and Li (2005) in their study of family trajectories of U.S. women. They did, however, distinguish race/ethnic groups having, on average, quite different levels of education. Compared to white non-Hispanic women born 1945–1954, for example, African-American women were much less likely to have been married once, with children, and not separated by age 35 (15% versus 51%). Education is not all that distinguishes these groups, however. Hispanic women – who in that cohort had lower education than African-American women, had much higher likelihood of a standard life course (48%). Excluding women who had only one child and remained married did not change the relative order of the three ethnic groups.

To sum up, it appears that the biggest educational divide occurs at first birth – better educated women are less likely to have a first child, but more likely to have a first birth in a union. For men, the evidence on non-union births is sketchy and likely under-estimated because non-union births are under-reported. The gap in childlessness has been smaller for men and may be reversing as the least well educated men cannot find partners. Variable and small educational differences are found in continuation to a second birth, while parental separation favors the highly educated, both men and women. The opposing forces at first birth and after first union birth may produce a relatively equal distribution of the standard family life course among women but should provide an advantage to better educated men in achieving the standard.

Data on Family Life Courses in France, Sweden and the United States

In our analyses, we compare family life courses observed to age 40 for the cohort born in the 1950s in France, Sweden and the United States. Sweden and the United States represent the extremes of different types of welfare regimes in terms of social and economic inequality and public support for the reconciliation of work and family demands. France has been classified as exemplifying a relatively 'conservative' welfare regime with moderate levels of economic inequality and work-family reconciliation but its family patterns have become increasingly close to those of the Nordic countries. The French data offer advantages, however, that outweigh the possibility that France should be viewed as an unrecognized Nordic sibling.

Data for France come from the French `Etude de l'Histoire Familiale´ (EHF) 1999, which was conducted together with the census in March 1999 (Cassan et al. 2000). In this study, 235,000 women and 145,000 men completed an additional questionnaire on their origin, children, partnerships, working life, social origin and languages spoken in the family. We limit our analysis to native born women and men or immigrants who arrived in metropolitan France before they reached age 15, i.e. who experienced the transition to adulthood in France. We also excluded respondents who experienced a birth or union formation before age 15. Analytic samples for the 1950s birth cohort include 35,645 women and 23,183 men. Respondents provided complete birth histories and reported start and ending dates for their first and most recent union.

For Sweden, we use data from the Level of Living Survey (LNU), first conducted in 1968, and repeated in 1974, 1981, 1991, and 2000. The original sample was a 1/1,000 random sample of the Swedish population ages 15–75. Each subsequent wave aimed to create a new cross-section representative of the population at the time of the survey, while maintaining a longitudinal component. In the 2000 survey, complete birth and union histories were collected, with some data provided in the 1991 survey for panel respondents. Our Swedish sample includes 439 women and 425 men.

Family life courses in the United States are derived from the 1995 National Survey of Family Growth and are therefore available only for women. The 1995 NSFG is based on a nationally representative sample of 10,847 women ages 15–44 in 1995, meaning that we can observe the 1950–1954 birth cohort to age 40. Our analytic sample is comprised of 1,840 women. The survey includes complete union and birth histories.[1] Despite the limitations by sex and cohort, the U.S. is an important comparative case, having been identified as relatively extreme among wealthy nations in terms of non-union childbearing and union dissolution.

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[1] We are unable to use the more recent 2002 NSFG survey because an error in the interview schedule omitted questions about the end date of a previous union for a non-random set of women. Although men were surveyed for the first time in the 2002 NSFG, they were not asked to provide complete birth and union histories.

We measure educational attainment according to international standards as 'low', 'medium' and 'high'. In all countries, 'high' education is defined as the receipt of a university or 4-year college degree. Those with 'low' education have no additional vocational or academic training after approximately age 18, i.e., after completing an upper secondary course of study or, in the U.S., high school education. The fact that we must measure education at the end of the family life courses we observe is due to lack of comparable data on history of educational enrollment and attainment of certification. We recognize that some of the educational differentials we observe may arise from effects of early family events (or absence thereof) on educational attainment or enrollment. It is also possible, however, that unobserved plans for further education do influence choices along the family life course and that completed education is a good proxy for such plans.

Experiencing the Standard Family Life Course

Our analyses produce what can be called 'deep description'. We show educational differences in the percentage who step off the pathway to a standard family life course at each of the critical junctures defined in Fig. 3.1. In preliminary analyses we separated French and Swedish respondents born in 1950–1954 and 1955–1959 for closer comparisons with the U.S. data. Because we found virtually no differences in the experience of the two 5-year cohorts, we combined them into a single 10-year cohort. We present our results in figures. Tables with absolute numbers of observations and weighted percentage distributions are available from the authors.

Figure 3.2 shows the successive percentages of French, Swedish and U.S. women who stepped off the standard family life course at each critical juncture. To ease visual comparisons, we use continuous lines rather than columns. The nodes represent the percentage of women who remained on the path to a standard family life course at each critical juncture. The slopes indicate the conditional likelihood of stepping off at one juncture, given having remained on the pathway at the previous juncture. The first node represents the percentage of all women who had a first birth by age 40. The second is the percent of women who had a first child in a union. Third is the percentage of women whose first parental union remained intact at age 40. And the final node is the percent of women who had a second birth in that union, i.e., who by age 40 had experienced the standard family life course.

The figure shows that experiences of Swedish and French women born in the 1950s were quite similar. Childlessness in the cohort at age 40 was 12% in France, 14% in Sweden. Although French women were somewhat less likely than Swedish women to have a first child in a union, fewer of those unions dissolved. Swedish women 'caught up' with French women in experiencing a standard family life course by being more likely to have two or more children in a stable parental partnership. If a one-child family is included in the standard, French women had a better chance than Swedish women to attain it, 62 versus 58%. On the other hand, if the
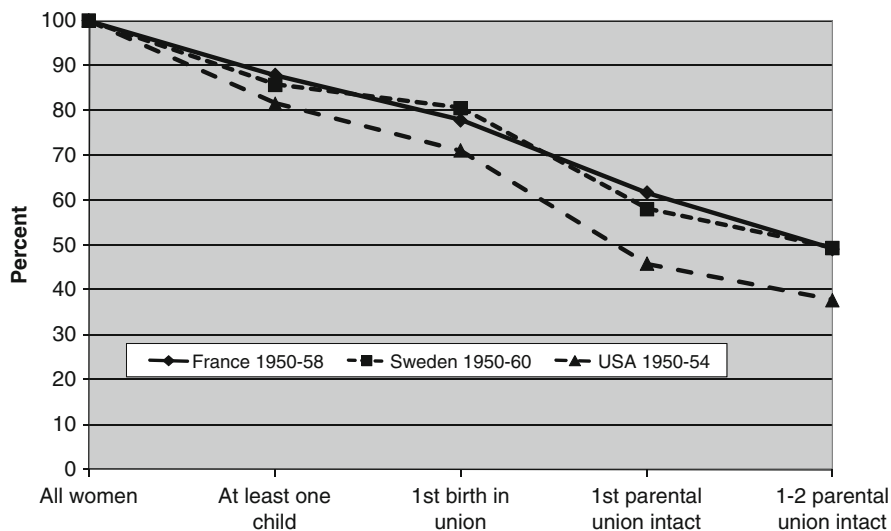
Fig. 3.2 Family life course to age 40, women born 1950s

standard requires a second child, French and Swedish women were equally likely, 49%, to have experienced a standard family life to age 40.

The picture looks much different in the United States, as we would expect given previous studies of events leading toward or away from a standard family life course. First, U.S. women are more likely than Swedish or French women to be childless at age 40, about 18%. Non-union births are about as common as in France, however. First parental unions were much less stable in the U.S. than in France or Sweden but second births in stable unions were as common as in the other countries. The result is that less than half of U.S. women experienced a standard family life course defined in terms of one child, only 37% defined in terms of two or more.

Figure 3.3 illustrates the situation for French and Swedish men born in the 1950s. Despite the fact that men typically experience family life events a few years later than women, by age 40 the differences have evened out, with about the same percentage of 40-year-old men as 40-year-old women having experienced a standard two-child family life course (50% in France, 48% in Sweden). Considerable differences are seen, however, in the pathways toward a standard family life course and in its attainment as defined in terms of one child. First, French men were less likely to be childless at age 40 compared to Swedish men (18 versus 25%). More than 90% of men's first births occurred in a union in both countries, but separation was more likely for Swedish than for French men. Thus if the standard is a stable one-child union, French men were much more likely to attain it (63%) than were Swedish men (54%). The higher probability of second births in stable Swedish unions produces the comparable rates in both countries when the standard is defined in terms of two children.
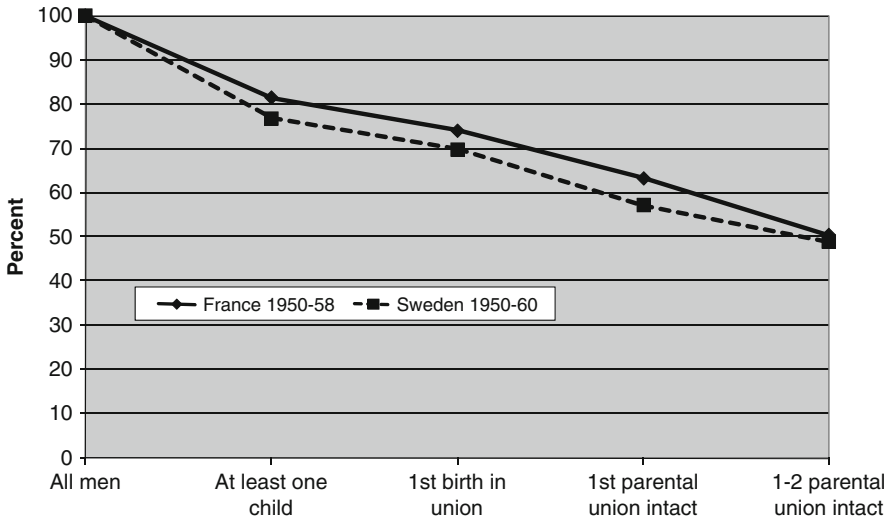
Fig. 3.3 Family life course to age 40, men born 1950s

Education and Life Course Pathways

Figure 3.4a–c shows that educational differences in pathways toward a standard family life course are found for women in all three countries, but in France and Sweden they even out by age 40. In both countries, women's education is associated with higher probability of being childless at 40, but lower likelihood of having a non-union first birth. The combination of these opposing patterns leaves the least and best educated women at the same position after the first union birth, women with middle-level education most likely to have remained on the standard path (80% in France, 84% in Sweden). Separation rates for first parental unions are relatively similar by education, with a slight gradient (higher education, fewer separated) in Sweden. In Sweden, second births are more likely for the least well educated in stable unions, while no educational differences were found for this transition in France. The result of these opposing educational forces is virtually no educational gradient in either country for having a standard family life course at age 40.

Again, the U.S. is different. Educational differences are much more marked for several junctures in the path toward a standard family life course. First, the educational gradient in childlessness is very pronounced, less than 9% for the least well educated, more than 22% for the highest educated. These differences are more than compensated for by opposing educational gradients in non-union births (22, 14, and 5%, respectively, of all first births to women with low, medium and high education) and parental separation (55, 40 and 25%, for low to high education). A one-child standard family life course was experienced by less than a third of women with low education, just over half of women with high education. Because the least well educated women were more likely to have a second child in a stable union, the
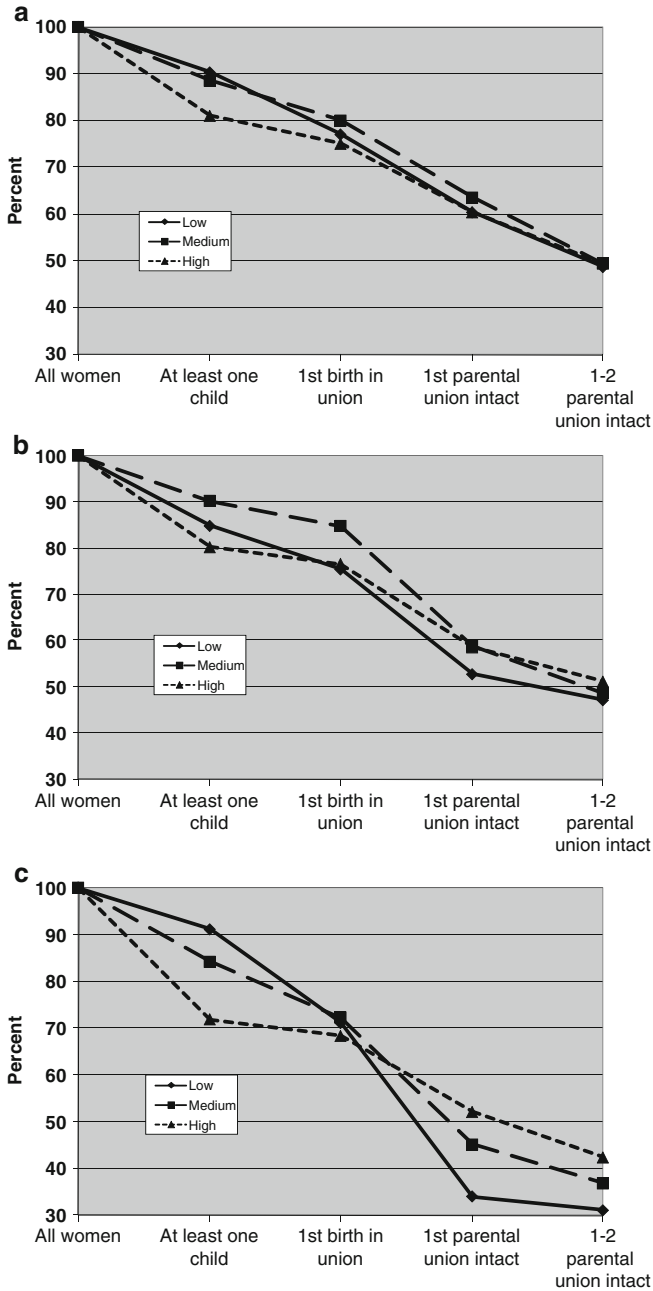
Fig. 3.4 (**a**) French women born in 1950s by education. (**b**) Swedish women born in 1950s education. (**c**) U.S. women born in 1950s by education
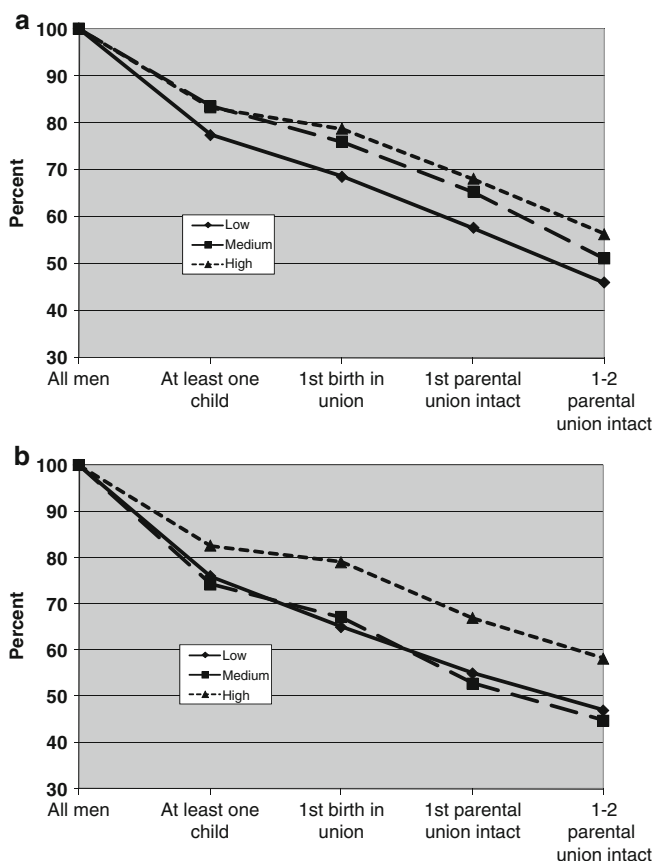
Fig. 3.5 (**a**) French Men born in 1950s by education. (**b**) Swedish Men born in 1950s by education

educational gradient for a two-child standard family life course is slightly less but still very large.

As shown in Fig. 3.5a,b educational differences in the likelihood of a standard family life course are much more pronounced for men than for women in France and Sweden. Less than half (45 and 41%, respectively) of the least well educated men end up with a stable two-child partnership at age 40, compared to 55% of the highest educated men. These differences arise from the fact that men's education is consistently positively associated with remaining on the standard path – first birth, birth in union, stable union, and second birth in union. In a real sense, men's education provides cumulative advantage in terms of achieving a standard family life course while women's educational advantage in union births and stable unions is offset by higher levels of childlessness and, in Sweden and the United States, slightly lower probability of having a second child in a stable union. Note that in France, differences are found mostly between the low and medium levels of education, in Sweden between medium and high. This may be an artifact of the countries' different educational systems.

Summary and Discussion

We have argued in this chapter that despite the dramatic changes in family life courses over the past several decades, a 'standard' family life course remains an ideal: to have at least one child, preferably more children, in a single life-long relationship. Although increasing majorities accept non-standard life choices – childlessness, non-union childbearing, parental separation or divorce – no one has argued or demonstrated that any of the alternatives to the standard are ideal from a societal or individual point of view. Certainly each of these choices presents problems, either for individuals or for society.

One might quibble with the term 'standard' when at least half the population does not achieve it. On the other hand, the vast majority born in the 1950s became parents, the vast majority of first children were born to parents living together, a smaller majority of those unions survived to age 40, and of those that did, the vast majority produced two or more children. Furthermore, no other pathway through the family life course was experienced by anywhere near the proportion who experience the 'standard'.

We must, of course, note that had we defined the standard in terms of a stable marriage, we would have found much lower proportions achieving it, especially in Sweden and to a lesser extent in France and the U.S. Our point of view is that the significance of a cohabiting union in the life course is not its legal status but its stability. By ignoring marriage we are able to make theoretically appropriate comparisons across countries with different legal and cultural conditions for co-resident partnerships. That is, the composition of unions may differ across the countries we observed, but the definition of stability does not.

Some scholars might also object to our defining childlessness or one-child families as steps toward a non-standard family life course. If we did not, our 'standard' would be defined entirely in terms of parental separation, either before or after a child's birth. While both phenomena are of great interest, especially for the welfare of children, we find it useful – particularly in relation to educational differences – to consider together the most common ways in which individual lives depart from the standard.

For the 1950s cohort, pathways toward a standard family life course had a great deal in common across the three national contexts, particularly France and Sweden. In these countries, childlessness and parental separation contributed more to a non-standard life course than did non-union childbearing or the one-child family. The fact that in both countries, almost exactly half of women and half of men experienced the standard family life course by age 40 is quite remarkable. The very different story in the United States demonstrates again that country's unique position in the Second Demographic Transition – a much greater contribution of non-union childbearing and parental separation to departures from the standard with more similar patterns of childbearing per se.

The fact that educational differences in France and Sweden were relatively small in comparison to those for women in the United States may perhaps be attributed to welfare regimes that provide more similar opportunities and resources for those with lower and higher education. In the United States lower levels of education are strongly associated with non-union childbearing and parental divorce. Differences

in childlessness are, in fact, entirely composed of differences in non-union childbearing. On the other hand, we find that education provides a moderate advantage to Swedish and French men. Because the relationship between education and childlessness is reversed for men – higher educated men are more likely to become fathers – it adds to rather than offsets differentials in non-union childbearing and parental separation.

Not only the overall patterns but also educational differences might be different if we had observed the cohorts beyond age 40. We would not expect much change in childlessness or non-union childbearing (almost all of which takes place before age 30), but we would expect to observe additional parental separations at older ages. Because highly educated women and men form partnerships and have children at relatively older ages, they may also experience 'delayed' union disruption. That is, of all parental unions that eventually end, those among the highly educated may be more likely to end after than before age 40, at least in comparison to the unions of less well educated men and women. By observing to age 50, the slopes of the line between 1st union births and intact parental unions might become steeper, producing a smaller educational gradient at the end point. It is less likely that observations beyond age 40 would increase the proportion in stable unions who had two children.

While comparative analyses of the separate family life course transitions have been most informative about the underlying causes of family change, we think it is also fruitful to consider the accumulation of family experience across the life course. A standard family life course may be as important a yardstick for success in life as the accumulation of wealth and health, about which we know a great deal more. In addition, the distribution of family experience in the middle years contributes to the reproduction of family ideals that may influence family transitions in the next generation. The concept of a standard family life course also provides a template for the analysis and evaluation of social institutions, i.e., to what extent are they oriented toward the 'standard' family life course or to its primary 'non-standard' variants? A cumulative view of the family life course is not, of course, an alternative to the very important studies of change and variation in key family transitions. It does, however, give us a more holistic picture of family change.

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Chapter 4
Generational Change in Leaving the Parental Home

Ann Evans

Abstract The transition to adulthood and family life in Western industrialized countries has changed dramatically over the past 30 years. This chapter examines leaving home and seeks to understand whether the drivers of changing age patterns in leaving home are motivated by ideational change or by institutional effects on the lives of individuals. By comparing birth cohorts from the 1950s through to the 1980s the analyses examine the changing timing of home leaving and its correlates, including education, labour force participation and relationship formation. The analyses find support for the thesis that ideational change has made it possible for young people to choose cohabitation over marriage when leaving home to enter a live-in relationship. However, institutional constraints have made it more important for young people to prolong education, to work part-time while studying, and to leave home to study when higher educational opportunities are not available, such as outside major urban areas, and to delay family formation due to the increasing demands of study and work.

The transition to adulthood and family life in Western industrialized countries has changed dramatically over the past 30 years. There is a growing body of literature describing the sorts of changes that characterize this modification of the early life course. These changes include a growing diversification in the temporal sequence of events and a delay in experience of many of them (Corijn and Klijzing 2001; Lloyd 2005; Osgood et al. 2005; Settersten et al. 2005; Shanahan 2000). Australia has now experienced many of the changes in family formation and the early life course experienced in other countries (van de Kaa 1987; Liefbroer 1991; Keirnan 2001; Gauthier 2007). We see greater numbers of young people accessing post-secondary

A. Evans (✉)
Australian Demographic & Social Research Institute, Australian National University, Canberra, ACT, Australia
e-mail: ann.evans@anu.edu.au

education and there is much greater emphasis on formal qualifications now than in the past. We have also seen a rise in cohabitation, a delay in marriage, and an increase in childbearing outside of marriage (McDonald 2003).

Chapter 2 proposed two theoretical frameworks to understand these changes. First, second demographic transition theory suggests that events in early adulthood will change as a result of ideational change and the need for individuals to realize their own family formation aspirations. Second, the globalization framework suggests that family formation decisions are made in a situation where institutions limit and constrain the choices of individuals so that the society can effectively globalize. This chapter takes the approach that both ideational shifts and institutional constraints impact the decisions made by individuals in the early life course.

It is important to consider that social and economic movements, such as globalization and modernization, occur in cross-sectional time and individual birth cohorts will experience the effect of social change differently at different points in the life course. To exemplify the impact of social movements on birth cohorts we can compare the expected experience of two cohorts—those born from 1955 to 1964 and those born from 1975 to 1984. One of these cohorts falls into the popularly termed generation of baby boomers, whereas the younger cohort forms part of generation Y. Those born in the 1955–1964 birth cohort will have reached adolescence during the period of economic modernization. We would expect that their early life course behaviour would be impacted by changing economic and social conditions such that they would have experienced free tertiary education and high levels of employment as they entered adulthood (McDonald and Evans 2003). This is a period of changing ideology surrounding family formation (van de Kaa 1987) and while many of this cohort would not have experienced different family formation behaviours, cohabitation, delayed parenthood and smaller families would become part of the social dialogue during their early adulthood. They will also be the first cohort to access modern contraceptives such as the contraceptive pill.

On the other hand, people born in the 1975–1984 cohort entered adolescence during the late 1980s and early 1990s during the period of globalization. They are a cohort who witnessed enormous financial collapses and a recession. Their early adulthood is characterized by risk and uncertainty and their response is to delay life events such as leaving school and family formation (Beck 1992; Mills et al. 2005; Mills and Blossfeld, Chap. 2, this volume). Delayed school leaving equips individuals with the skills to enter a globalized labour force. Delayed family formation follows from increased investments in education and skill building, and is easier to manage within a globalized society. Unlike the older cohort, this cohort have witnessed the result of changing family norms: divorce, cohabitation and births outside marriage are commonplace.

As well as impacting directly on cohorts as they live through social changes there is also the intergenerational impact of social and economic change. As cohorts experience social change their parents (or children) are also being affected by the same changes but at a different stage of the life course. A young person considering the shape and nature of their future career is likely to be influenced by the experience of their parents financial or employment instability in periods of recession.

Similarly, the attitudes of older people to newer social phenomenon, such as childbearing within cohabiting unions, may be moderated by the experience and behavior of their children (Evans and Gray 2005).

This chapter will describe the process of leaving home in Australia for cohorts born between 1945 and 1985. During the 1980s the age of leaving the parental home was increasing in many developed countries after a period of decline (Billari et al. 2001; Molgat 2002; Young 1987; Corijin and Klijzing 2001). A recent Australian study has found that leaving home still occurs during early adulthood and has not been delayed to the same extent as other demographic or lifecourse events (Kilmartin 2000). Leaving home is not an event that occurs in isolation but is influenced by education, employment and relationship formation at both the macro and individual levels. In order to contextualize leaving home, this chapter will explore these three additional factors in combination with leaving home.

Data and Method

The chapter uses data from four waves of the Negotiating the Life Course project. The total sample size is 4,321 respondents which includes the 2,231 original respondents from Wave 1 as well as the 2,000 new respondents introduced in Wave 4. A person-period data set was constructed, so that each individual has multiple records of data representing their experience at every age. For each of the outcomes of interest, leaving home, leaving full-time education and entering the labour market, individuals are followed until the outcome of interest occurred. If they did not experience the event they were followed to the age of the last interview or up to age 35 – whichever occurred first. For leaving home and entering the labour market the initial starting point for observing individuals was set at 15 years of age, while for leaving full-time education the initial starting point was set at 14. Throughout the chapter, analysis is conducted separately for males and females to account for the possible interaction effects between gender and the other variables, such as age, on the outcomes of interest. The following sections describe the measurement of the main events covered in this chapter; leaving home, exiting education and entering the labour market.

Age at Leaving Home and Reason for Leaving Home

The age the respondents left home was identified using both retrospective information from the first interview as well as prospective information at subsequent waves. At the first interview[1] respondents were asked if they were still living in their parent's home. If they were not living with their parents they were asked how old they were when they *las*t left their parent's home. A broad assumption was made that this was the

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[1] Wave 1 for the original sample members and Wave 4 for the new sample members.

age at which individuals first left their home, although in reality from the given information it is not possible to tell whether the respondent had left their parental home once, or whether they had left and returned multiple times. In the former case the age at which the respondent last left their parents would be equal to the age of first home leaving. In the latter case however the age of first home leaving is unknown.

If the respondents were living at home in the first wave they were asked if they have ever lived away, and if yes, at what age they last returned to live with their parents. For individuals in this situation the age at which they first left home is unknown and is therefore set to missing. If respondents were living at home in the first wave, and had never lived away from home, they were tracked over the subsequent waves. At each subsequent wave respondents who had previously lived at home were asked if they had now moved out, if they had moved out since the previous interview but had returned home, or if they had remained with their parents for the whole time since the previous interview. Those who were now living away from their parents, or who had done so at least once since the previous interview, were asked at what age they left the parental home. This is taken as the age of first leaving home.

Two separate pathways out of the parental home were identified, leaving home to enter a relationship or leaving home for another reason. Leaving home to enter a relationship was further sub-divided into leaving home to enter a cohabiting union or leaving home to enter a marriage. The distinction between the two main pathways was made by comparing the date of home leaving with the date at which the first live-in relationship (cohabitation or marriage) occurred. The date at which the first relationship occurred was known down to both the month and year in most cases. The date of leaving home was not given in as much detail, and was approximated by the date of birth plus the age of first home leaving converted into months. Due to the discrepancy in the level of detail between these two dates a 6 month window was used so the reason for leaving home was classified as being due to a relationship if a relationship started up to and including 6 months before or after the date of home leaving. If the start of a co-residential relationship did not coincide with leaving home, the respondent was classified as leaving home for other reasons.

Age of First Exit from Full-Time Education

The age at which the respondents' first exited full-time education was also identified using retrospective and prospective information. The age was derived by combining information from the study calendar and also from the questions on highest level of schooling and post-school education. The study calendar collects information on individuals' study history at every year from the year they turned 15 up to the current year. For each of the relevant years individuals could note if they were studying full-time, studying part-time or not studying at all. The age at which the first exit from full-time study occurred is taken to be the age at which the person was in full-time education for the last time before experiencing a break in education. If respondents indicated on the study calendar that they were not in full-time education at the age

of 15, but that they had completed secondary school they were assumed to be in full-time education up to age 18. If they had incomplete secondary schooling and were not in school at age 15 they were assumed to have been in full-time education up to and including age 14.

Age of First Entry into the Labour Market

The age at which the respondents first entered the labour market (full-time labour market, part-time labour market and full-time and part-time combined) was identified using the work history calendar. Similar to the study calendar, the work calendar recorded whether individuals were working full-time, part-time or not at all for every year since they turned 15 up to and including the current year at the time of the survey.

To examine the patterns of early life course events we use Kaplan-Meier survival curves in order to plot the change in timing across the cohorts. To model timing of leaving home we use logistic regression, using discrete-time event history. This method is appropriate given that time is recorded in discrete intervals (yearly ages) rather than in continuous format (Singer and Willet 2003). The existence of 'ties' in the data, when two or more subjects in the sample experience the event at the same time, would have introduced bias in parameter estimates for alternative approaches developed for continuous time data, such as Cox regression (Yamaguchi 1991). To fit the logistic regression of leaving home, the data was organized into a person-year format.

For the first model examining leaving home, a logistic model was fitted where the dependent variable was whether or not the respondent left home at time *t*, given no previous event occurrence. The model also included both time varying and fixed independent variables. To examine the determinants of the two different reasons for leaving home, to enter a relationship, or for other reasons, a competing risk framework was used. Two logistic models were fitted, one for each reason. In each case the dependent variable in the logistic regression was whether the person left home for that reason. As before, people who had not yet left home at the last period of observation, or age 35, were treated as censored. Individuals were also treated as censored if they left home for the alternative, competing reason.

For each model, analyses were conducted separately for males and females to account for the possible interaction effects between gender and the other variables, such as age, on the outcomes of interest.

Generational Changes in the Timing of Early Life Course Events

As we move from the period of modernization to the period of globalization and a more individualized life course, we would expect to see changes in the timing of early life course events. The changes we would expect to see are a delay in the age
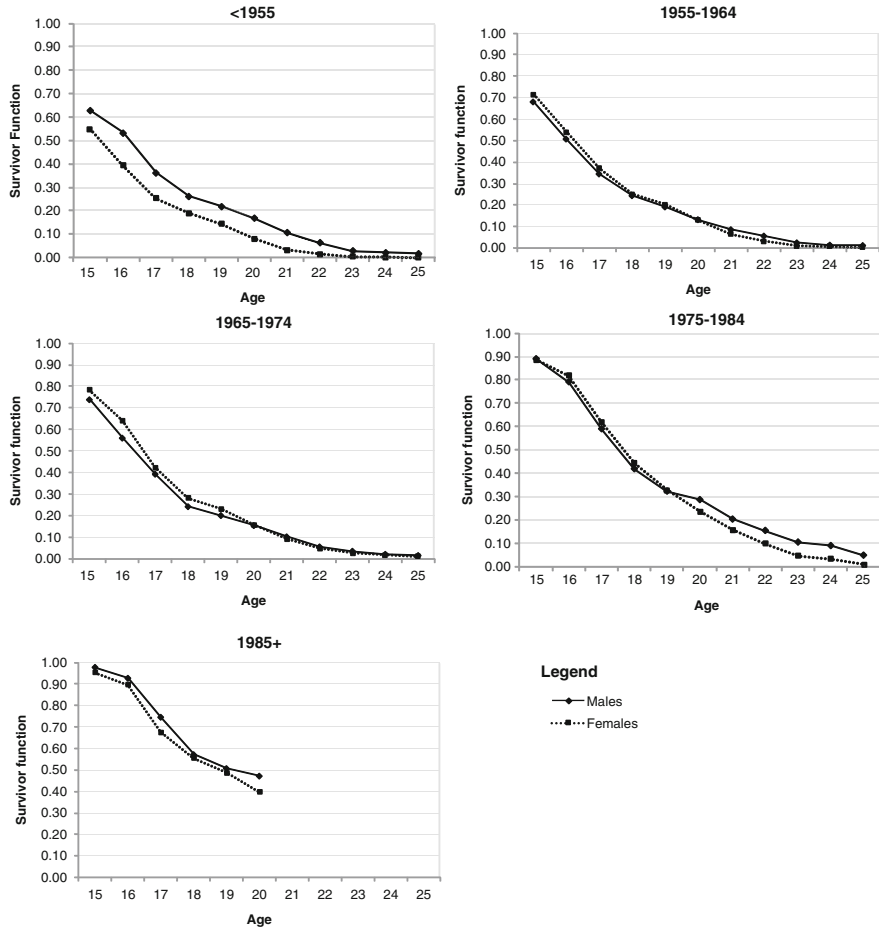
Fig. 4.1 Timing of exit from full-time education, by birth cohort and sex. (Note: Figures show the proportion remaining in full-time education at each age)

of leaving school as formal qualifications become increasingly important in a globalized economy, an associated delay in the timing of entry into the labour market, and a delay in the timing of leaving home as more young people stay in education longer. The following section describes the pattern in timing of these events using Kaplan-Meier survival curves.

For exit from full-time education we see a dramatic pattern of delay across cohorts and a convergence in the pattern between men and women (Fig. 4.1). There is a marked difference in the age of exiting full-time education between men and women born before 1955. On average there is a two year difference with women leaving before men.

The 1955–1964 cohort stayed in school longer with women showing the same pattern of school leaving as men. At age 16, 50% of the cohort had left school.

The 1965–1974 cohort are very similar to the 1955–1964 cohort with slightly greater school retention at ages 15 and 16, particularly for women. The 1975–1984 cohort experienced a marked delay in school leaving before age 18 compared with previous cohorts. In this cohort 60% were still in school at age 17, compared with 40% of the previous cohort. There is also greater retention in the tertiary education years (ages 18–21). For men in this cohort there is evidence of an even longer prolongation of education through the early 1920s. The most recent cohort, those born from 1985, continues the trend of delaying leaving education with a majority still in full-time education at age18.

The pattern of entry into the labour market shows that, apart from some modest delays at ages 16 and 17, there is very little change in the timing of entry into the labour market. However, if we split labour market entry into first full-time and first part-time entry we see a profound change in the labour market behaviour of young people over the past half century. Across the cohorts there has been a delay in the pattern of entry into full-time employment corresponding to the delay in exit from full-time education (Fig. 4.2). The two most recent cohorts display the most dramatic changes in timing of entry into the full-time labour market. Women in the pre-1955 cohort entered the full-time labour market earlier than men. As the participation of women in education at secondary and post-secondary levels increases, we see this trend changing with men entering the full-time labor market earlier. For the most recent cohort, there is no discernible difference between the pattern of entry to full-time employment between men and women.

Part-time employment has become a more important labour market activity for young people across the cohorts. For the pre-1955 cohort only 50% experienced part-time employment by age 25. For the 1975–1984 cohort 88% had worked part-time by age 25 and 88% of the 1985+ cohort had worked part-time by age 20.

These changes in education and labour market activity clearly show a pattern of delayed exit from full-time education and delayed entry to full-time employment. There has also been convergence in the experience of men and women so that there are virtually no differences between men and women in education and employment experiences in the late teens and early twenties. Another change over this time period is the increasing importance of part-time employment. For the majority of part time workers this work is occurring alongside full-time education leading to increasing complexity in this early part of the life course (Fussell et al. 2007).

The survival curves for leaving home show a continual pattern of delayed home leaving (Fig. 4.3). There is little change for men between the first two cohorts but evidence of delay is seen through the changing pattern of home leaving for women particularly after age 20.

By the 1975–1984 cohort some divergence between men and women reappears as men delay leaving home into their mid-twenties. For women the pattern of leaving home in their early twenties, is more rapid than men, but has still been delayed across the cohorts. The 1985+ cohort shows a significant delay in home leaving compared to the previous cohorts and the pattern for men and women is nearly identical up to age 20. There is evidence of the beginning of a diverging pattern at

Fig. 4.2 Timing of entry into the full-time labour market, by birth cohort and sex. (Note: Figures show the proportion entering full-time employment at each age)

age 20 that would correspond to the differences between men and women seen in the previous cohort. However, it remains to be seen whether this cohort follows previous cohorts or if they forge a new pattern of timing of home leaving.

Generational Changes in the Reason for Leaving Home

The delayed timing of leaving home across the cohorts (Fig. 4.3) corresponds closely to the increased time spent in education as shown in Fig. 4.1. However, the different patterns for women are not fully explained by differences in education as the
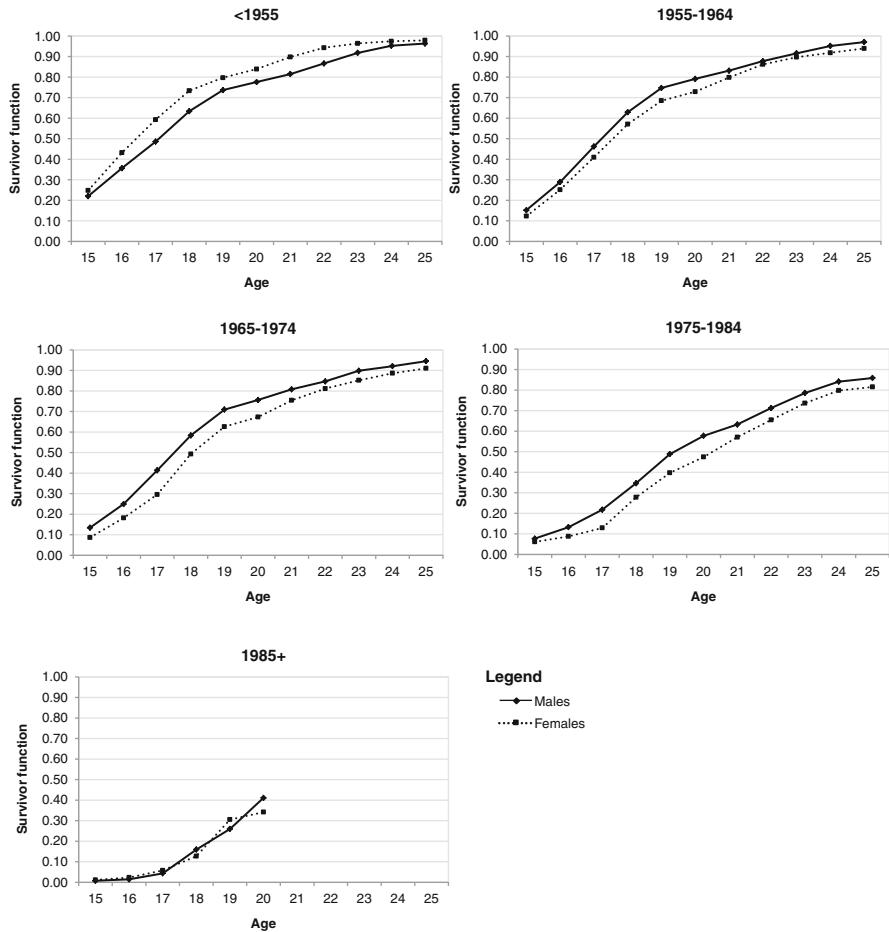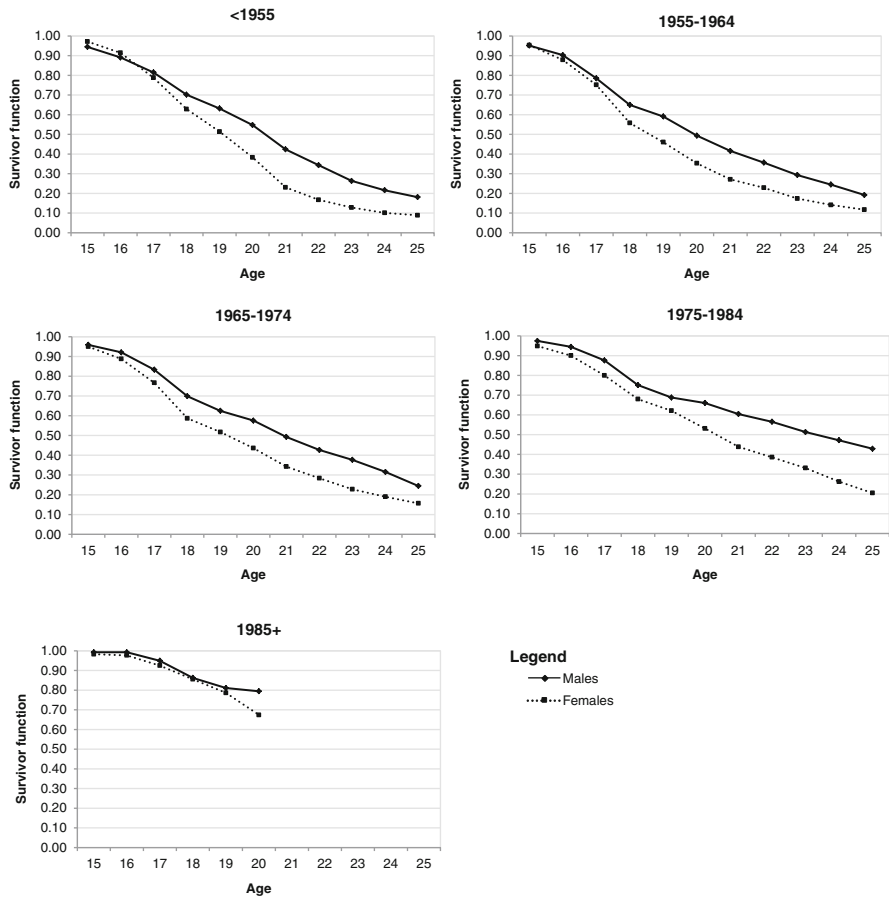
Fig. 4.3 Timing of leaving the parental home, by birth cohort and sex. (Note: Figures show the proportion entering full-time employment at each age)

educational patterns for men and women have converged. The other reason suggested for changes in home leaving is the changing timing and nature of relationship formation. This section investigates the changes in the reasons for leaving home. The reasons for leaving home are classified as either to enter a live-in relationship, or for any other reason.

Across the cohorts, there is a decline in the proportion of people who leave home to directly enter a relationship (Fig. 4.4). For men this decline occurs between the first two birth cohorts and then plateaus. Close to a fifth of the pre-1955 cohort left home to enter directly into a live-in relationship. This fell to 9% for the 1975–1984 cohort. For women there has been a more gradual decline starting with close to a quarter of women in the pre-1955 cohort leaving home to enter a live-in relationship to 15% of the 1975–1984 birth cohort.
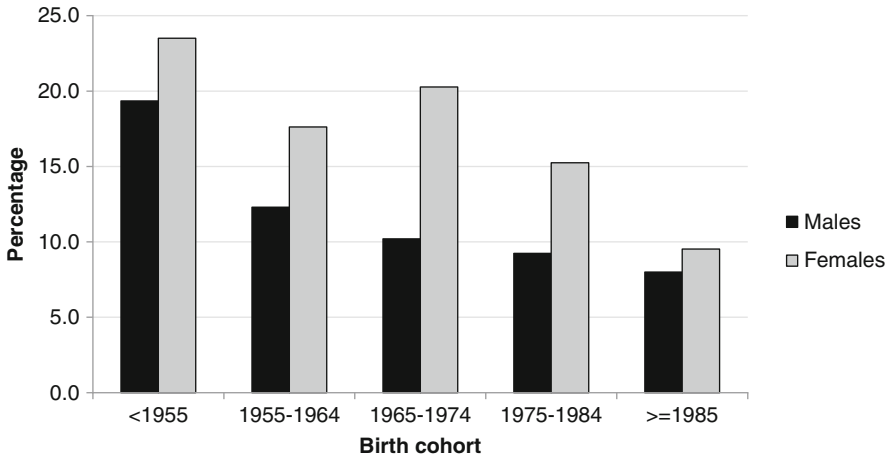
Fig. 4.4 Leaving the parental home to enter a relationship, by birth cohort and sex

Table 4.1 Relationship type of directly entered union (%), by birth cohort and sex

Type of relationship left home to enter	<1955	1955–1964	1965–1974	1975–1984
Marriage	89	65	42	27
Cohabitation	11	35	58	73
Total %	100	100	100	100
Total (N)	239	175	137	56

While we can identify a change in the propensity to leave home to enter a live-in relationship, the nature of the relationships entered after leaving home has seen an even more dramatic change. Table 4.1 shows the distribution of type of relationship, whether a cohabiting union or marriage, for those who moved directly from the parental home to a relationship. There is an almost complete reversal in the type of first live-in relationship where people moved directly from the parental home into the relationship. For the pre-1955 birth cohort, 11% of the people who left home to enter a live-in relationship entered into a cohabiting union. This figure increased steadily across each cohort to 73% in the 1975–1984 cohort.

Over time young people have become a bit more likely to leave home for reasons other than relationship formation. However, the most dramatic change is the type of union they move to. These findings go against the idea that young people have been increasingly likely to live independently before forming co-residential relationships. They are moving into live-in partnerships at a slightly lower rate, and at a slightly higher age, but the relationships are now much more likely to be cohabitations rather than marriage. This may reflect a desire for less permanent and flexible relationships in the early adult years, saving marriage till later in the life course.

Factors Associated with Changes in Leaving
the Parental Home

The final section of this chapter examines the factors associated with leaving the parental home. In order to look at factors associated with leaving home we run three discrete-time event history logistic regression models. All three models control for a variety of factors found to be associated with leaving home. Birth cohort and age left home are used to control for the changing impact of social and economic change on the timing of leaving home. Respondents education and parental education and occupation are used to account for differences in socio-economic status, while parental birthplace (non-English speaking country or not) controls for differences in cultural background as well as other factors that may be associated with migration and settlement. City of residence when growing up (in the teenage years) was included to examine differences that may be due to rural/ urban differentials. These could be either attitudinal or practical. For instance it may be necessary to leave home early in rural areas to continue education or to seek employment. We also include whether or not the respondent was working or studying in each year.

The first model (Table 4.2 columns 1 and 2) compares leaving home to staying at home. We see fairly similar patterns for both males and females. As expected, each successive birth cohort left home later. The odds of leaving home for individuals in cohorts born before 1965 are greater than the odds of leaving home for those born between 1865 and 1974. Similarly, those born in cohorts after 1974 show a decreasing likelihood of leaving home. Age left home shows that as age increases the likelihood of leaving home also increases. However, there is a decrease for women aged 25 years or over.

Socio-economic status has an impact but is not as clear as might be expected and significance levels vary. Higher levels of education are associated with increased odds of leaving home and post secondary education of mothers is associated with increased propensity to leave home for females. Having a parent born in a non-English speaking country is associated with decreased likelihood of leaving home.

Location when growing up shows a fairly linear association with leaving home. Compared to growing up in a major capital city, the likelihood of leaving home rises as the location becomes smaller and more remote. Working is associated with increased likelihood of leaving home and studying full-time is associated with a decreased likelihood of leaving home.

The second and third models are competing risk models that compare leaving home to enter a relationship with leaving home for other reasons. We find the reason for leaving home is associated with different factors. First, age at leaving home is associated with leaving home to partner but not for leaving home for other reasons. Second, completed level of education is associated with leaving home to partner for women, but not for men. The odds of leaving home to go directly into a live-in relationship rise for women as level of education rises. While the education level of men is not associated with leaving home to partner it is associated with leaving home for other reasons. Men's likelihood of leaving home increases as their education level increases.

Table 4.2 Factors associated with leaving home (odds ratios)

	Leaving home		Leaving home to enter a relationship		Leaving home for other reasons	
	Males	Females	Males	Females	Males	Females
Cohort						
<1955	1.21*	1.10	2.44***	1.23	1.04	1.06
1955–1964	1.27**	1.18**	1.38	1.01	1.23*	1.22**
1965–1974 (reference)	–	–	–	–	–	–
1975–1984	0.63***	0.72***	0.85	0.65**	0.61***	0.77***
1985+	0.40***	0.36***	1.01	0.31**	0.36***	0.38***
Age group						
15–17	0.40***	0.38***	0.19***	0.24***	0.44***	0.46***
18–19 (reference)	–	–	–	–	–	–
20–21	1.15	1.39***	2.68***	2.20***	0.97	1.14
22–23	1.43**	1.18	4.12***	1.94***	1.07	0.93
24–25	1.78***	1.15	3.56***	1.23	1.41*	1.07
25+	1.53	0.68*	2.53	0.51*	1.21	0.72
Highest education						
Incomplete secondary	0.94	0.88	1.55*	1.48**	0.83	0.72***
Complete secondary (reference)	–	–	–	–	–	–
Trade/certificate	1.01	0.96	1.08	1.15	1	0.9
Diploma	1.47*	1.16	0.99	1.54*	1.57**	1.03
University degree	1.49***	1.15	1.33	1.46*	1.56***	1.07
Mother has post secondary education	1.07	1.17**	0.7	1.23	1.12	1.13
Father has post secondary education	1.09	0.93	0.77	1.00	1.15	0.92
Father's occupation						
Labour, production	1.07	1.12	0.80	1.39*	1.13	1.04
Trade	1.00	1.16*	1.27	1.41**	0.96	1.08
Clerical & assoc. professional	1.07	0.97	0.96	1.00	1.09	0.97
Professional and managerial (reference)	–	–	–	–	–	–
Unknown	1.15	1.19*	0.62	1.07	1.27	1.20*
One or both parents born in NES-country	0.72***	0.70***	0.86	0.81	0.72***	0.69***
Location when growing up						
Sydney, Melbourne, Brisbane, Adelaide or Perth (reference)	–	–	–	–	–	–
Canberra, Newcastle, Wollongong, Hobart, Geelong, Darwin	1.30*	1.22*	1.01	1.04	1.32*	1.27**
Large country town of 10,000+ population	1.40***	1.76***	1.26	1.10	1.38***	1.91***
Smaller place in Australia	1.84***	2.24***	0.92	1.25	1.97***	2.44***
In another country	1.76***	1.48***	1.27	0.99	1.81***	1.60***
Working	1.39***	1.14**	1.58	1.37*	1.38***	1.11
Studying full-time	0.80**	0.65***	0.42***	0.43***	0.86	0.72***
Number of respondents	1,661	2,480	1,661	2,480	1,661	2,480
Number of person years	12,669	16,084	12,669	16,084	12,669	16,084
Prob>chi2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Note: *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Location when growing up appears to be associated with leaving home for other reasons, and not to partner. This would lead to speculation that it is more likely to be opportunity driven than to be associated with different attitudinal factors.

And finally, employment increases a woman's likelihood of leaving home to partner and a man's likelihood of leaving home for other reasons. Studying full-time is associated with later home leaving for other reasons for women but not for men.

Discussion

This chapter explores the earliest stages of the adult life course and charts changing patterns in the transition to adulthood of young Australians. The chapter uses information from the Negotiating the Life Course survey both retrospectively and prospectively to explore the timing of school, work, and leaving home transitions. It is apparent that successive cohorts of young Australians are experiencing similar changes in the life course that have been experienced in other Western industrialized societies. First, time in education is being prolonged and men and women are now sharing the same educational timing experience. Second, entry into the full-time labour market has been delayed, corresponding to the increase in education. However, part-time employment has become part of the normal experience for young people and is usually combined with full-time study. As the period of time in education is prolonged, the transition out of the parental home is also being delayed. This change is associated with reduced financial resources due to later full-time labour market entry. Across the cohorts it is becoming less common for people to leave home to enter directly into a live-in relationship. Even more dramatic though, is the form of the relationship entered when leaving home to enter a relationship. These are now most likely to be in the form of a cohabiting union, rather than a marriage. This reversal of relationship types has occurred only in the cohorts born in the second half of the twentieth century.

The competing-risk event history models used in this paper show that the factors that influence home leaving to enter a relationship are different to those where home leaving is for another reason. These finding show similar patterns to those found in the US, Netherlands and West Germany (Mulder et al. 2002). Education is associated with delayed home leaving for women. However, when a woman does leave home she is more likely to leave home to partner than to live independently. Education is also associated with delayed home leaving for men, but men are leaving home for reasons other than to partner irrespective of their level of education.

The other strong relationship found was for residential location during the high school years. Location when growing up is associated with leaving home for other reasons but not to partner. This is true for both men and women. This finding suggests that people are more likely to leave home for reasons such as study and to find employment if they do not live in a major urban area. While educational opportunities have increased over the past two decades, in regional areas of Australia there is still an overwhelming probability that a young person will need to leave home to attend a tertiary institution if they live in small or remote locations. Once finished education,

there is also a strong pull away from smaller locations in order to enter the labour market, particularly for those with tertiary qualifications.

The findings suggest that the changes in behavior identified in the literature on the second demographic transition and globalization can both be seen to be impacting on the structure of the early life course. For example, ideational change has made it possible for young people to choose cohabitation over marriage when leaving home to enter a live-in relationship. However, institutional constraints have made it more important for young people to prolong education, to work part-time while studying, and to leave home to study when higher educational opportunities are not available, such as outside major urban areas, and to delay family formation due to the increasing demands of study and work. But, while the institutional structures imposed by a globalizing society may impact on an individual's choices, their range of choices are only available due to the ideational change that has already been occurring.

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Chapter 5
Relationship Pathways and First Birth in Australia

Peter McDonald and Anna Reimondos

Abstract This chapter examines how relationship pathways to the first birth changed in Australia over a 40-year period using data from the Negotiating the Life Course project. During this period, 1975 to 2005, the age at first birth rose substantially and a higher proportion of women did not have a first birth. It is a period in which divorce rates rose and cohabitation before marriage became commonplace. We observe that the preferred normative sequence shifted from single-married-birth to single-cohabitation-marriage-birth. However, for many and increasingly across time, the first cohabitation ended and the individual concerned sought a new relationship. This led to much greater diversity in relationship pathways. The more that people had multiple relationships, the less likely it was that they had had a child before the age of 35. While it may be the case that some people set out to have multiple relationships and not to have a child, it is much more likely that this pathway was unintended. Throughout the analysis period, having a first child by age 35 was highly associated with marriage, albeit in the latter part of the period, marriage preceded by cohabitation.

Making use of the rich longitudinal information on relationships in the Negotiating the Life Course Survey, this chapter examines how relationship pathways to the first birth have changed in Australia over a 40-year period. During this period, the age at first birth has risen substantially and a higher proportion of women do not have a first birth. It is a period in which divorce rates rose considerably before falling again and cohabitation before marriage became commonplace. After a discussion of theories associated with these changes, we examine the relationship histories of Australian women prior to their first birth and how these have varied across time.

P. McDonald (✉) • A. Reimondos
Australian Demographic and Social Research Institute,
Australian National University, Canberra, Australia
e-mail: peter.mcdonald@anu.edu.au; anna.reimondos@anu.edu.au

The Backdrop to Demographic Change: Social Liberalism and Economic Deregulation

Two waves of social change have had profound effects upon family formation behavior in the past 40 years (McDonald 2006). The first was a wave of social liberalism that began in the 1960s and was consolidated in the 1970s. The second was a sharp shift to economic deregulation including labor market deregulation beginning in the 1980s and consolidated in the 1990s. Some of these trends and the theoretical frameworks developed to understand them, have been discussed in detail by Mills and Blossfeld in Chap. 2 (this volume). We provide only a brief overview here, focusing on specific issues relevant to the Australian context and the empirical analyses reported in this chapter.

Social Liberalism

The wave of social liberalism consisted of the values shift and associated institutional and legislative changes that van de Kaa and Lesthaeghe (Lesthaeghe and van de Kaa 1986; van de Kaa 1987) describe as the second demographic transition. Emergent from the rigid social regime of the male breadwinner model of the family that held sway in the 1950s and 1960s, it brought a sharply increased capacity for individuals to pursue personal autonomy and to construct their own identities rather than having those identities defined for them by societal norms and institutions. Individuals were freed from institutional and normative constraints, and they became more responsible for the outcomes of their actions. In this latter sense, the risk to individuals was increased and society, in Beck's (1992) terms, became risk society. Mills and Blossfeld (2005; Chap. 2 this volume) use the term "uncertainty" to characterize these changes and their implications for individual life courses. Individuals became more sensitive to risk and most became risk averse. For example, at the personal level, women aware of the high risk of divorce became more cautious in the selection of a husband and more likely to seek labor market qualifications and a work history that would enable them to be economically independent should the need arise.

Consequently, in the 1970s, the pattern of early marriage and early childbearing that characterized the 1950s and 1960s gave way rapidly to cohabitation outside marriage and delayed childbearing. Various institutionalized rights were extended to cohabiting couples and to children born outside of marriage. Couples who chose to live together rather than to marry immediately were seeking to maintain their personal autonomy while testing the relationship for the stronger and more altruistic commitments involved in marriage. The rise of the cohabiting relationship can therefore be seen as a product of the risk aversion that accompanied the wave of social liberalism. Cohabitation prior to marriage became an experiment in a form of intimacy that allowed the greater pursuit of personal autonomy (McDonald 1988). In this sense, cohabitation is not an alternative to marriage but is a pathway that

promotes the institution of marriage in a riskier, more uncertain social environment (McDonald 2003). However, as we observe later, cohabitation brings its own risks and uncertainty.

Economic Deregulation

In the 1980s and into the 1990s, much of the world was swept by what has become known as the new capitalism. In keeping with the neo-liberal philosophy that the free operation of the market is the most efficient and effective form of economic organization, regulations and restrictions were reduced so that capital could flow easily in the direction that maximizes business efficiency and profit. Again, these trends have been described, in slightly different terms, by Mills and Blossfeld (Chap. 2, this volume).

In relation to family formation and dissolution, the most important aspect of the new capitalism was its impacts on the labor market. These impacts include: industry restructuring with a rapid increase in the producer services industries and a decline in manufacturing; direct negotiation between workers and employers and the decline of large unions; a shift in labor demand to higher levels of human capital; flexibility of employment permitting easy movement within the system and flexibility of appointment, dismissal, work content, working conditions, and working hours but absolute dedication to the completion of short-term tasks; downsizing as a short-term strategy of cost reduction; the end of "jobs for life"; and contracting out to increasingly specialized smaller firms. The new capitalism offers great rewards to those who are successful in its terms but is unforgiving for those that it rejects. Accordingly, rising income inequality has been a significant feature of the new capitalism. Once more, the outcome for young people is a greatly increased sense of risk.

Strategy to Alleviate Risk

Investment in one's human capital (education and labor market experience) is seen as the essential hedge against these personal and economic risks. It is the optimal path of risk aversion. This investment involves considerable commitment to self and one's employer, especially through long work hours, in opposition to a commitment to more altruistic endeavors such as service to family members and family formation. However, values related to the family have not been simply swept aside by these waves of change. They represent a third dominant dimension of social values. Family values are resilient because humans are inherently social and have a strong need for intimacy. Isolation and loneliness are not desirable characteristics, and, for most people, these are avoided principally through the intimacy of family relationships. For most people, the emotional benefits of children remain strong. The common strategies to deal with new risks but still move upon a pathway to family life have

been to cohabit rather than to marry directly and to delay the birth of the first child. In this chapter, we examine what impact these strategies have had on relationship pathways to the first birth.

The arguments made here about increasing risk, both personal and economic, are essentially the same as the globalization argument made in Chap. 2 by Mills and Blossfeld. However, again as argued by Mills and Blossfeld, outcomes in any one country are filtered by specific historical path dependencies, such as the nature of the welfare regime, the nature of the economy, family systems and history. In this chapter, we examine outcomes in just one country, Australia, and accordingly the outcomes of the global forces well described by Mills and Blossfeld are filtered by the specific institutional arrangements that characterize Australia. While Australia is classified among those countries with a liberal welfare regime by Mills and Blossfeld (following Esping-Andersen), its welfare regime is very unlike that of other liberal countries such as the United States and Canada but similar to the welfare regimes of the United Kingdom and New Zealand. On the other hand, its economy is very similar to that of Canada and quite unlike that of the United Kingdom. Family systems tend to be similar across these English-speaking countries in a way that supports the argument of Thomson et al. in Chap. 7. All of these countries are characterized by a standard ideal family life course that includes marriage and children. All have relatively high levels of fertility and high proportions of people in all these countries marry at some time during their lifetime.

In this chapter, we show that the Australian experience is consistent with the theoretical frameworks of both Mills and Blossfeld (Chap. 2 this volume) and of Thomson et al. (Chap. 3 this volume). Consistent with Thomson et al., we show that attainment of the first birth is highly associated with marriage in both the pre-globalisation era and in the post-globalisation era. The difference between the two eras, however, is that the relationship pathways to achievement of first birth and marriage are very much more complex in the post-globaliation era. Complexity is the outcome of the circumstances that Mills and Blossfeld emphasise, developed essentially as protections against risk both personal and economic. Complex relationship pathways are both the cause of and a product of the phenomenon of delay of marriage and first birth.

Complexity of relationship pathways arises because of cautionary approaches to relationship formation, especially cohabitation. Through cohabitation, young Australians progress in a risk-averse way towards the standard ideal pattern described by Thomson et al. in Chap. 3 They do so as a hedge against the risk that the relationship may not last or that their economic situation may not be sufficiently stable to embark upon the ideal of marriage and family. As a consequence, many cohabiting relationships end before the couple marries and then a process of seeking a new relationship begins. At a more advanced age, this process can take time or be unsuccessful. This increases complexity. Interestingly, however, this cautionary approach to relationship formation, despite its complexity, has led to a substantial fall in divorce rates for cohorts born after the 1950s. It seems that cohabitation has operated successfully as a form of trial marriage and relationship breakdowns increasingly occur before the marriage. Marriages that follow upon a successful cohabitation have then become more stable.

Table 5.1 Summary statistics for birth cohorts

| | Age at last interview | | | |
Birth cohort	N	Mean	Min	Max
1940–1949[a]	345	59.2	47	79
1950–1959	657	50.3	37	57
1960–1969	653	40.1	27	47
1970–1979	495	30.0	18	37
1980–1989	368	22.3	18	27
Total	2,518	40.8	18	79

Source: NLC Waves 1–4
[a]One case born in 1929 is included in the 1940–1949 cohort

Data and Method

The generational change in the timing and types of partnerships experienced by individuals, and the relationship context of the first child's conception and birth, is examined using data from female participants in the Negotiating the Life Course survey. The chapter focuses upon women because its interest is upon relationship pathways leading to a woman's first birth. In total, there were 2,534 women that had participated in the survey for at least one wave; this figure includes 1,248 original sample members that participated in Wave 1 and 1,286 women that were first introduced in Wave 4 as part of the top-up sample (see Appendix 1). After excluding 16 cases with missing information, the final analytical sample consisted of 2,518 women.

To investigate trends over time, the women were split into six birth cohorts, as shown in Table 5.1. The table gives the average age at last interview of the women in each cohort, as well as the range of minimum and maximum ages. The range of ages within each cohort is relatively large, and is greater than the 10-year range of years of birth. This is due to the fact that in each cohort, the women participated for a different number of waves, resulting in different ages at last interview even for respondents born in the same year. For example, a respondent who was born in 1950 would have been around 47 at the time of the last interview if they had participated only in Wave 1 (1997), whereas they would have been 56 if they had participated up to Wave 4 (2006). A full listing of ages at last interview and the corresponding years of births, by last interview, is available in Appendix 1.

Relationship History Variable

For each respondent, a variable was created describing their detailed relationship history at every birthday from age 15 up to and including age 44. If respondents had not yet reached age 44 by the time of the last interview, information was instead recorded up to their age when they were last observed.

This means that while it is possible to describe the relationship histories at ages 15–18 for every woman, since all women in the sample were at least 18 years old at the time they were first interviewed, as age increases, the number of women that are

censored increases. For example at age 44, information is only available on the relationship experiences of 1,128 women out of the total sample of 2,518.

Information regarding the full retrospective relationship history of the respondents was taken from the last wave they participated in. For example, if a respondent was present in Wave 1 and Wave 2 but then dropped out of the survey, their most up-to-date relationship history was taken from Wave 2.

As the aim of this chapter is to document the degree of complexity of relationship pathways, the relationship history variable has 12 main categories, which combine information on current relationship status at each age with information about previous relationship experiences. For example, there are four categories of relationship histories for women who were currently in their first marriage, depending on whether or not they had experienced a premarital cohabitation (pmc) and/or an unrelated cohabitation before they married. The variable was created by comparing the dates of each relationship a woman had experienced, with the date of her birthday at each age, in order to calculate whether or not she was in a relationship at the time of her birthday and also incorporating information about any previous relationships.

The resulting, mutually exclusive relationship history categories are as follows:

1. not in a relationship, no previous relationship
2. not in a relationship, 1+ previous cohabitation
3. not in a relationship, 1+ previous marriage
4. 1st cohabitation, no previous marriage
5. 2+ cohabitation, no previous marriage
6. 1st marriage, no previous cohabitation
7. 1st marriage, no pmc, 1+ previous cohabitation
8. 1st marriage, previous pmc, no previous cohabitation
9. 1st marriage, previous pmc, 1+ previous cohabitation
10. after separation from 1st marriage separation, in cohabitation
11. after separation from 1st marriage separation, in 2+ marriage
12. after separation from 2+ marriage, in cohabitation
98. Unclassifiable as dates not available

Relationship Context at Conception and at Birth

Variables were also created describing the relationship context at the time the first child was conceived and at the time the first child was born. These variables were created in a similar manner to the variables describing the relationship history at each birthday, but the date of conception[1] and the date of birth were substituted as the dates of interest, instead of the woman's birthday. Data quality issues related to the calculation of these variables are described in Appendix 2.

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[1] Date of conception was calculated as 9 months prior to the birth of the child.

Part 1: Changes in Relationship Histories Across Time

This section provides a summary of generational trends in relationship histories. The aim is to compare how the types of relationships experienced up to a certain age changed over time. To provide a snapshot of the trends, relationship histories are examined at six age cut-offs: ages 19, 24, 29, 34, 39.

As mentioned above, not all women from the five birth cohorts will have information on their relationship history for all ages due to censoring at the time of the interview. For example, in the cohort born in 1970–1979, the majority of women would have information on their relationship history up to age 24, however at age 34 the number of valid cases is small as only a minority of this cohort would have been aged over 34 at the time of the last interview.[2]

Relationship History at Age 19

At age 19, the middle three cohorts were much more likely to have ever been in any form of relationship than both the 1940s and 1980s cohorts. Between the 1940s cohort and the 1950s cohort, there was a shift to earlier relationship formation but it was mainly in the form of earlier marriage. Subsequent cohorts gradually abandoned early marriage as cohabitation replaced marriage. With the most recent 1980s cohort, cohabitation by age 19 had also been rolled back. Across the whole period of experience of these cohorts, it became increasingly well known that early marriage was associated with very high rates of divorce. Accordingly those wishing to avoid the personal risks associated with divorce gave up early marriage. For 25–30 years, cohabitation substituted for marriage at these early ages – it was an experiment in maintaining personal autonomy while still enjoying the benefits of a relationship. By the 1980s cohort, however, any early relationships were beginning to be seen as risky and counter to the need to maximize human capital. Young people were staying in education longer and remaining at home with their parents. They still had relationships but not live-in relationships (Fig. 5.1).

Relationship History at Age 24

The substitution of cohabitation for marriage that occurred across cohorts at age 19 is much less evident at age 24. At this age, the strong fall in the percentage that had ever married across cohorts (from 76% for the 1940s cohort to just 19% for the

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[2] As seen from the table in Appendix 1, they would only have been aged over 34 if they were born in 1970 or 1971 and participated in Wave 4 of the survey.

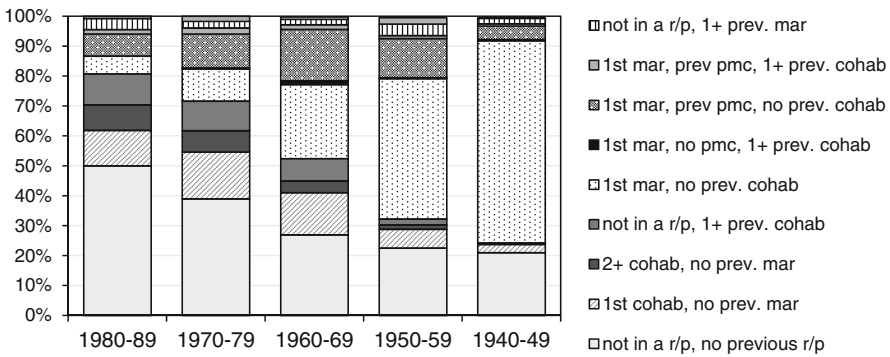**Fig. 5.1** Relationship history at age 19, by cohort

Fig. 5.2 Relationship history at age 24, by cohort

1980s cohort) was matched at least as much as cohabitation by rises in the percentage of women who had never lived in any form of relationship (from 21% to 50% across the five cohorts). Also evident is a dramatic decline in the percentage of women who were in their first marriage, without having had a pre-marital cohabitation or any other cohabitation experience. The percentage in this category fell from nearly 68% in the 1940s cohort to just 6% for the 1980s cohort. Thus early marriage not preceded by cohabitation was virtually abandoned as a strategy but about half the shift away from this category was towards having no early live-in relationship. The other important pattern evident at this age is the very strong rise in the percentage that had never married but had had a failed cohabitation, from 0.5% for the 1940s cohort to 19% for the 1980s cohort. This is strong evidence of caution being progressively exercised. By the 1980s cohort, the strongest preference was not to live in a relationship at all but, if the woman did enter a relationship, cohabitation was the preferred initial form. Then, if the cohabiting relationship was not working, it was ended (Fig. 5.2).
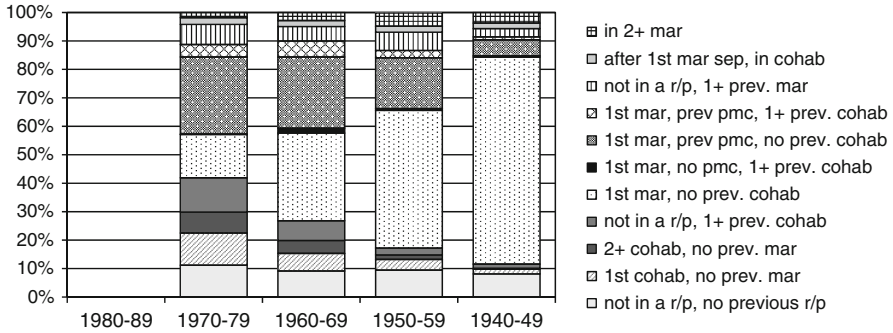
Fig. 5.3 Relationship history at age 29, by cohort

Relationship History at Age 29

Unlike at age 24, at age 29, the proportion of women who had never been in any form of relationship was roughly the same across cohorts at about 10%, although there are no data for the 1980s cohort. However, the percentage that had never married had risen from 12% for the 1940s cohort to 42% for the 1970s cohort. In other words, at this age, cohabitation was progressively substituting for marriage as it did at age 19. Most significantly, this age is characterized by increasing diversity of relationship histories as time progresses with a very wide diversity emerging for the 1970s cohort. For this cohort, the largest category, making up only 27% of all women, was those in their first marriage that had cohabited and then married their partner. Twenty per cent had never married but had had a failed cohabitation and 11% were in their first cohabitation. Eleven per cent had had a marriage breakdown (Fig. 5.3).

Relationship History at Age 34

By age 34, only 3–5% of women in all the cohorts had never had a live-in relationship, but, for the 1970s cohort, 19% were not currently in a relationship but had been in the past. Singlehood at age 34 for the 1970s cohort, therefore, was very much post-relationship singlehood. The proportion that had never married at age 34 rose from 6.5% for the 1940s cohort to 17.6% for the 1970s cohort. Fourteen per cent of all women in the 1970s cohort had never married but had been in a cohabitation that had ended. Only 1.4% were in a continuing first cohabitation but 33% were married to their first cohabiting partner. Thus, by age 34, first cohabitations had been resolved: either the couple had married or the relationship had ended. Cohabitation is a preliminary to marriage; if the cohabitation is not successful, it is ended. Even for the 1970s cohort, by age 34, marriage was the dominant form of living arrangement with almost 70% being currently married. There was not the same level of variation in living arrangements as there had been for the same cohort at age 29 (Fig. 5.4).
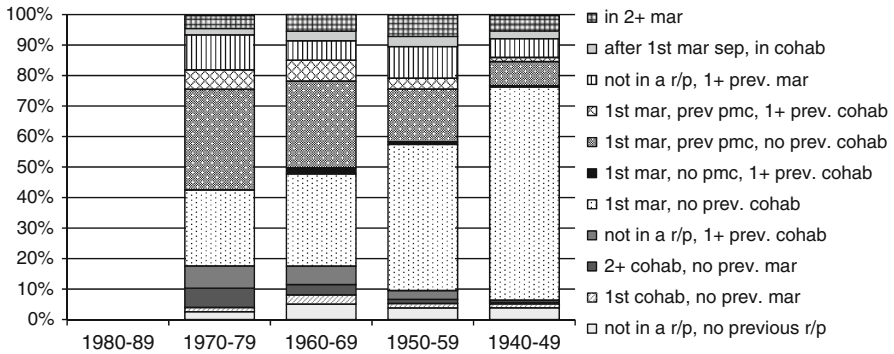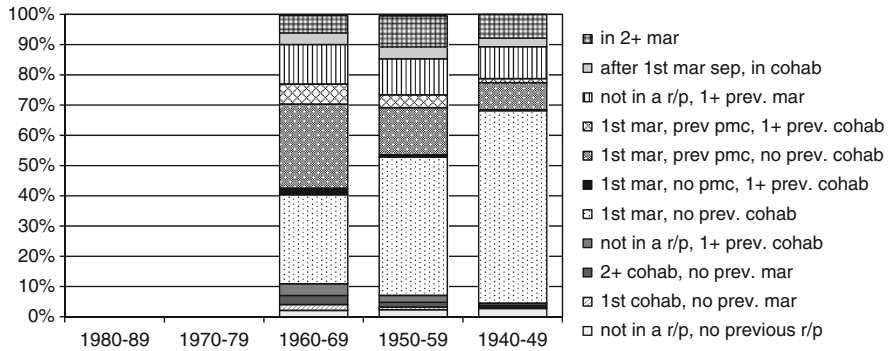
Fig. 5.4 Relationship history at age 34, by cohort

Fig. 5.5 Relationship history at age 39, by cohort

Relationship History at Age 39

By age 39, only a small percentage of women had never married with the percentage rising from 4% for the 1940s cohort to 11% for the 1960s cohort. Stated otherwise, very few women were living in other forms of arrangement before a first marriage. By the 1960s cohort, about 60% of those currently in their first marriage had cohabited before the marriage compared to just 14% for the 1940s cohort (Fig. 5.5).

Relationship History at Age 44

At age 44, the percentages never married had fallen below 10% for all cohorts. By this age, the interesting feature is marriage breakdown. For both the 1950s and 1960s cohorts, 34% of first marriages had ended in divorce. Among the 1960s cohort, for those whose first marriage had ended, 76% were not in a relationship,
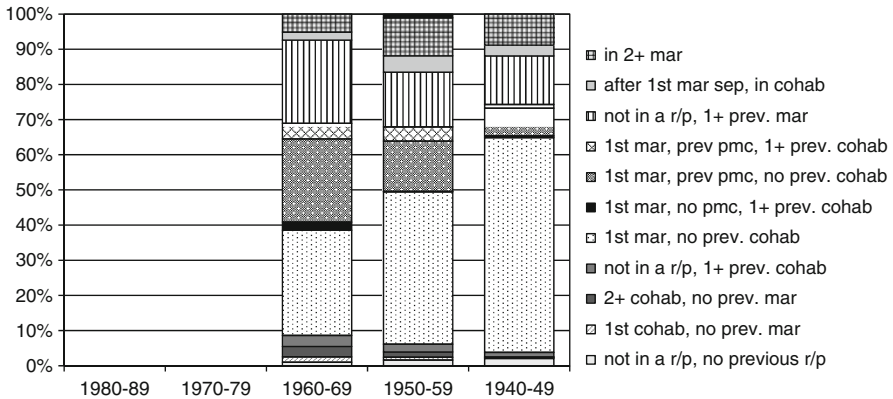
Fig. 5.6 Relationship history at age 44, by cohort

Table 5.2 Parity and mean age at first birth, by birth cohort

Parity		Birth cohort					
		1940–1949	1950–1959	1960–1969	1970–1979	1980–1989	Total
No child	N	43	80	98	213	304	738
	%	12.5	12.2	15.0	43.0	82.6	29.3
1+ children	N	302	577	555	282	64	1,780
	%	87.5	87.8	85.0	57.0	17.4	70.7
Total	N	345	657	653	495	368	2,518
	%	100	100	100	100	100	100
Average age at birth		24.04	25.57	26.2	24.4	20.3	25.1

Source: NLC Waves 1–4

17% were in a second marriage and 7% were cohabiting. Perhaps again reflecting perceived risk, those whose marriage had ended were apparently cautious about entering a new relationship (Fig. 5.6).

Part 2: Relationship Context at the Time of Conception, and Birth, of the First Child

Table 5.2 displays the unweighted numbers and percentages of women in each birth cohort who had given birth to at least one child at the time of their last interview, and the average age at first birth. A total of 1,780 women, or just over 70% of the sample of women, had had at least one child at the time of their last interview.

In the two youngest cohorts, born from 1970s onwards there is a relatively high degree of censoring and a majority of these women had not yet had a child, due to their young age. For example, the 1970s cohort would have been aged between 18 and 37 years old at the time of the last survey, and the 1980s cohort between 18 and 27 years old, depending on which wave they last participated in. Therefore the women

Table 5.3 Relationship history 1 year before conception, at conception and at birth of first birth

Relationship history	One year before conception		At conception		At birth	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Not in a r/p, no previous r/p	516	31.2	237	14.3	104	6.3
1st cohab, no prev. mar	165	10.0	157	9.5	132	8.0
2+ cohab, no prev. mar	67	4.0	53	3.2	52	3.2
Not in a r/p, 1+ prev. cohab	45	2.7	29	1.8	21	1.3
1st mar, no prev. cohab	511	30.9	687	41.5	784	47.4
1st mar, no pmc, 1+ prev. cohab	5	0.3	19	1.1	20	1.2
1st mar, prev pmc, no prev. cohab	251	15.1	338	20.4	390	23.6
1st mar, prev pmc, 1+ prev. cohab	45	2.7	77	4.6	89	5.4
Not in a r/p, 1+ prev. mar	21	1.2	9	0.6	12	0.7
After 1st mar sep, in cohab	12	0.7	19	1.2	14	0.8
2+ mar	16	1.0	28	1.7	34	2.1
After 2+ mar sep, in cohab	1	0.1	1	0.1	1	0.1
Total	1,655	100	1,655	100	1,655	100

in these two cohorts who *had* had a child will be biased towards early childbearing as is evident from their average ages at first birth.

There were 123 cases where the women had had at least one child but where the relationship status at conception and birth could not be calculated, either due to missing or implausible dates of birth of the first child (32 cases) or to missing information on relationship histories (89 cases). This left a total of 1,657 cases with valid information. The exclusion of cases with missing dates could introduce some bias, especially if these cases are more or less likely to have conceived and given birth in certain relationship statuses.

The following sections provide an overview of the relationship context at the time the first birth was conceived and born, and the difference in the relationship contexts between these two times.

Relationship History at 1 Year Before Conception, at the Time of Conception and the Time of Birth of the First Birth

Table 5.3 presents the relationship status, 1 year before the first child was conceived,[3] at the time of conception and at the time of birth[4] for all cohorts combined. The results indicate that there is a significant degree of movement between relationship statuses around the time of conception and birth. For example 1 year before conception, 31%

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[3] The date 1 year before conception is calculated as 21 months prior to the birth of the first child.

[4] Comparable information was only available for 1,655 women rather than 1,657 women because there were two women where the relationship history at the time of conception and birth could be identified, but the relationship history 1 year before conception could not be similarly identified.

Table 5.4 Broad relationship status at conception of first birth, by cohort (percentages)

Relationship status at conception	1940–1949	1950–1959	1960–1969	1970–1979
Single	18.0	16.2	14.1	18.3
Cohabiting	3.9	8.7	17.4	22.8
Married	78.1	75.1	68.4	58.9
Total	100.0	100.0	100.0	100.0
N	285	545	524	254

of women were not in a relationship, and had never had a previous relationship. At the time of conception only 14% of women were in this category, and at the time of birth the percentage had declined even further to 6%.

On the other hand the percentage of women who were in a first marriage without any premarital cohabitation, increased from 31% 1 year before conception to 47% at the time of birth.

Cohort Differences in the Relationship Context at Conception and at Birth

At Conception

Table 5.4 shows the broad relationship status at the time of conception of the first child, by cohort. Data for the 1980s cohort is not shown due to the selectivity bias discussed above. It should be noted however that there is likely to be some degree of selectivity in the 1970s cohort as well, as nearly 50% of the female respondents in that cohort had not yet reached age 30 at the time of the survey.

Despite the issue of the censoring of the youngest cohorts, there appear to be some clearly identifiable trends in the relationship context over the generations. In terms of the percentage of births conceived outside of a live-in relationship, it is difficult to tell if there is a clear trend and the percentage appears to be relatively stable over time at around 14–18%. What is clearly visible, even excluding the data from the 1970s cohort, is the increase in the percentage of births conceived in a cohabiting relationship and a decline in the percentage of births conceived in a marriage.

At Birth

Table 5.5 presents the broad relationship status at the time of birth of the first child, by cohort. The same trend is evident, in that the percentage of births born in a marriage declined while the percentage of births born in a cohabitation increased among the

Table 5.5 Broad relationship status at birth of first birth, by cohort (percentages)

Relationship status at birth	1940–1949	1950–1959	1960–1969	1970–1979
Single	5.3	7.2	7.3	11.6
Cohabiting	3.0	6.4	14.7	21.7
Married	91.6	86.4	78.0	66.7
Total	100.0	100.0	100.0	100.0
N	283	545	523	254

Table 5.6 Relationship status at conception versus relationship status at birth, all women

Relationship status at conception		Relationship status at birth			
		Not in a relationship	Cohabiting	Married	Total
Not in a relationship	N	126	43	106	276
	%	**45.8**	**15.7**	**38.4**	**100.0**
Cohabiting	N	8	157	66	231
	%	**3.3**	**67.9**	**28.7**	**100.0**
Married	N	3	0	1,147	1,151
	%	**0.3**	**0.0**	**99.7**	**100.0**
Total	N	137	200	1,320	1,657
	%	**8.3**	**12.1**	**79.6**	**100.0**

younger generations. Comparing the results of the relationship status at birth with the earlier table of the status at conception, it is also evident that there are considerably more births than conceptions in marriages. Conversely, the number of births in cohabitations is lower than the number of conceptions. This indicates that there are transitions into marriage for those who had conceived as a single person or in a cohabitation. It is also possible that those who were single transitioned into cohabitations. This is investigated in greater detail in the following section.

Relationship Transitions Between the Time of Conception and Birth

Transitions between the relationship status at birth and at conception can be seen by classifying the respondents' broad relationship status (single, cohabiting, or married) at the time of the conception and birth and cross-tabulating them. As shown in Table 5.6 for all women, of the 276 births not conceived in a live-in relationship, around half were not born in a relationship and the other half were either born in a cohabitation or in a marriage. Of the children conceived in cohabitation, the majority was also born in a cohabitation (68%) but over a quarter were born in a marriage. Almost 100% of women who were married at the time of conception were still married at the time of birth. The

Table 5.7 Relationship status at conception and birth and average age at conception, all women

Conception vs. birth	Average age at conception	Frequency	%
Not in r/p → not in r/p	20.7	126	7.6
Not in r/p → cohabiting	22.6	43	2.6
Not in r/p → married	20.0	106	6.4
Cohabiting → not in r/p	21.5	8	0.5
Cohabiting → cohabiting	23.3	157	9.5
Cohabiting → married	23.9	66	4.0
Married → not in r/p	22.7	3	0.2
Married → married	25.5	1,147	69.3
Total	24.4	1657	100.0

shifts towards marriage between conception and birth indicate a strong preference for the ideal pattern described by Thomson et al. (Chap. 7 this volume).

Based on this information, a variable was created that compares the relationship status at conception and birth. With three statuses for conception and three statuses for birth, a total of nine different combinations were possible:

1. Not in r/p → Not in r/p
2. Not in r/p → Cohabiting
3. Not in r/p → Married
4. Cohabiting → Not in r/p
5. Cohabiting → Cohabiting
6. Cohabiting → Married
7. Married → Not in r/p
8. Married → Cohabiting
9. Married → Married

In each category, the first status describes the context of the conception and the second the context at birth. There were no cases where the conception occurred in a marriage and the birth occurred in a cohabitation (category 8) so this category is eliminated

Table 5.7 shows the distribution of respondents in each of the eight categories, along with the average age at conception. The youngest mean age at conception was for those respondents who were not in a relationship and either did not have their birth in a relationship or had their birth in a marriage. The oldest group was those where both the conception and the birth occurred in a marriage.

Cohort Differences

The analysis in this section describes the inter-cohort differences in the distribution of relationship status at conception versus birth. Due to the small number of
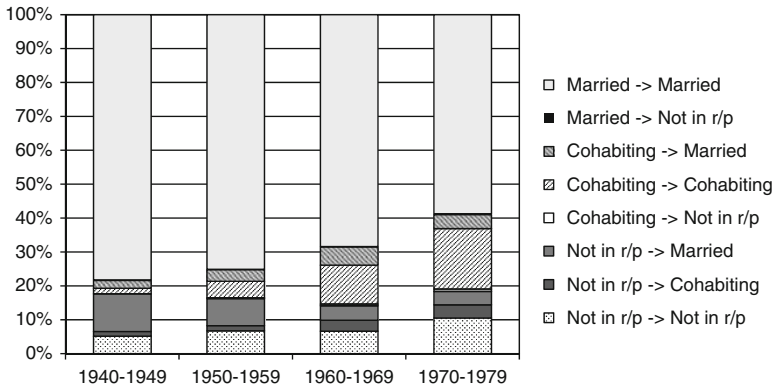
Fig. 5.7 Relationship status at conception versus at birth of first child, by cohort

cases and the selective nature of the women having a first birth in the 1980s cohort, results from this cohort are not discussed. It should be noted however, that there is also likely to be some selection effects in the 1970s cohorts due to age censoring.

The results indicate several important changes in the relationship context of the first conception and birth over time (Fig. 5.7). The percentage of people who were married at the time of conception and birth, decreased from nearly 80% among those born in the 1940s to around 60% among those born in the 1970s. On the other hand, those born in the younger cohorts were considerably more likely to have conceived and given birth in a cohabitation. So-called 'shot-gun' marriages where a pregnant single woman marries before the birth became much less common across the cohorts. On the other hand, across time, it became more common for a child conceived in a cohabitation to be born in a marriage.

Age Differences

The relationship context of the first birth was also related to the age of the mother at the time of the birth (Fig. 5.8). Young mothers aged 24 and under were considerably more likely to have conceived and given birth outside of a relationship. While 12% of women giving birth at age 24 or under conceived and gave birth outside of a relationship this was only true of three per cent of women aged 25 and over at the time of birth. For births at ages 25 and over, being married at both the time of conception and the time of birth was by far the most common occurrence (83%). All the other transitions occurred more commonly at the younger ages than at the older ages. This suggests that the more risk-averse women who delayed their first birth to an older age also sought the
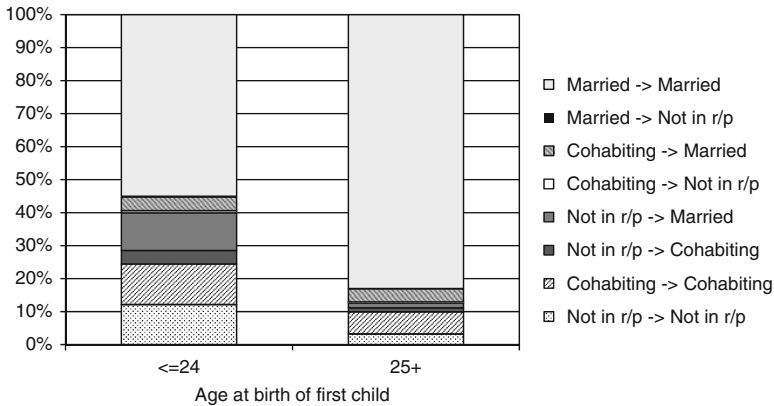
Fig. 5.8 Relationship status at conception versus at birth of first child, by age at time of birth

greater protections of marriage for the birth of the child. Among those where the first birth was conceived outside of marriage, 73% of the births occurred at age 24 or lower.

Relationship Transitions of Women Who Conceived Outside of a Live-in Relationship, or in a Cohabitation

Finally another way to examine the changing nature and meaning of relationships is to see how the relationship transitions of women who conceived outside of a live-in relationship and in a cohabitation have changed over time.

Conception Outside of a Live in Relationship

There are three possible relationship transitions between the time of conception and birth of the first child for women who conceived outside of a live-in relationship: (a) Stay single, (b) enter into a cohabitation, (c) enter into a marriage. The transitions experienced by women of the different birth cohorts are presented in Fig. 5.9. It should be noted that the number of women who conceived outside of a live-in relationship is relatively small, especially for the oldest and youngest cohorts so the results should be interpreted with some caution. The results indicate a clear increase in the percentage of women who stayed single up to the time of birth (although they may have married or cohabited with the father of the child after the birth) or who cohabited, and a decline in the percentage who married.
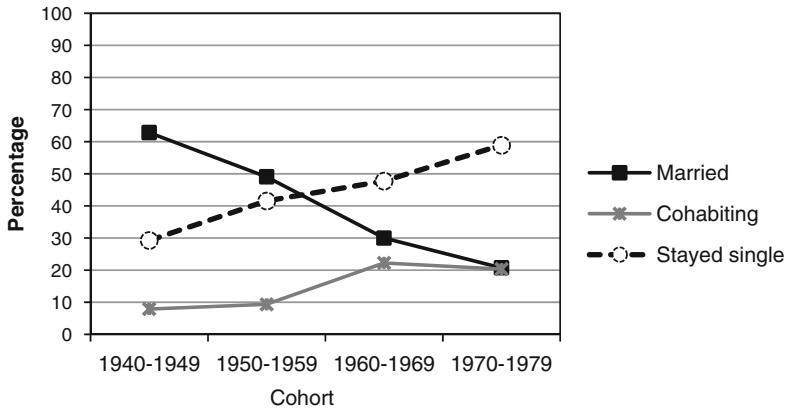
Fig. 5.9 Relationship transition at time of birth, for women not in a relationship at time of conception, by cohort
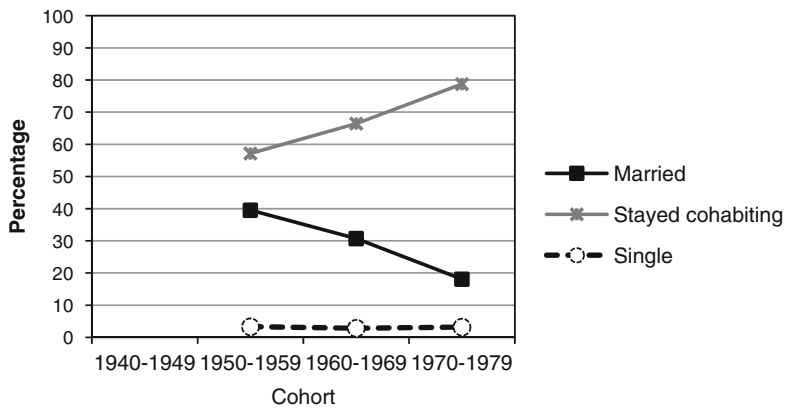

Fig. 5.10 Relationship transition at time of birth, for women cohabiting at time of conception, by cohort

Conception in a Cohabitation

For women who conceived in a cohabitation, the three possible relationship transitions between the time of conception and birth of the first child are: (a) Stay in cohabitation, (b) enter into a marriage, (c) dissolve the cohabitation. The transitions experienced by women of the different birth cohorts are presented in Fig. 5.10. Again the numbers are relatively small, and information from the 1940s cohorts is not displayed because only nine women from this cohort conceived while in a

cohabiting relationship. Very few women in any cohort dissolved the cohabitation by the time the child was born. Across the generations, an increasing proportion stayed in the cohabitation, and a decreasing proportion converted their cohabitation to a marriage. The results indicate the more widespread acceptance of cohabitation as a setting for having children (Kiernan 2001) although we have not examined whether the couple married after the birth.

Part 3: The Relationship Between Partnership History and Childlessness

Previous research has only investigated the relationship between union formation and childlessness at a relatively broad level, for example, by comparing the current marital status of childless women and those who have had at least one child. A recent study by Keizer et al. (2008) using data from the Netherland Kinship Panel Study used a more detailed account of past relationship histories and found that compared to individuals who had had only one relationship, men and women who had never experienced a live-in relationship and those who had had multiple relationships were significantly more likely to remain childless.

To study the relationship between a woman's partnership history and whether or not she was childless, relationship histories of women who had not had a child by age 35 were compared to those women who had had a child by age 35. The age cut-off of 35 leaves the possibility that some women may still experience their first birth after this age however the percentage of first births occurring past this age are relatively small. Across all cohorts, there were 1,670 women that were at least 35 years old at the time of the last interview and the median year of birth of this subsample was 1958. The large majority of the women (84%) had had a first birth by age 35.

Relationship Histories and Having a First Birth

Table 5.8 presents a comparison of the relationship histories experienced up to age 35 by women who had no children at this age, and those who had at least one child, by cohort. It is immediately evident that the patterns of relationship histories are very different for these two groups of women. The percentage of women who were not in a relationship and had never had a relationship was much higher among the childless group than the group with a child, at over 20% and less than 0.5% respectively. The childless group was also much more likely to have experienced the breakdown of at least one cohabitation and less likely to have experienced a marriage. For example, nearly 10% of the childless group born from 1960 onwards were in a second or higher order cohabitation, compared to around 3% of the equivalent cohort that had at least one child. Conversely, those who were married without a prior cohabitation or had only cohabited with their marriage partner constituted

Table 5.8 Relationship history at age 35, for women who were childless and those that had at least one child, by cohort

Relationship history at age 35	Childless				1+ child			
	Born <1960		Born 1960+		Born <1960		Born 1960+	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Not in a r/p, no previous r/p	31	**21.0**	27	**23.7**	2	**0.2**	1	**0.2**
1st cohab, no prev. mar	10	**6.9**	2	**1.6**	2	**0.2**	10	**1.7**
2+ cohab, no prev. mar	7	**4.7**	11	**9.4**	6	**0.7**	18	**3.3**
Not in a r/p, 1+ prev. cohab	13	**8.6**	22	**19.3**	6	**0.8**	12	**2.1**
1st mar, no prev. cohab	27	**17.9**	16	**13.7**	494	**57.9**	168	**30.3**
1st mar, no pmc, 1+ prev. cohab	1	**0.6**	1	**0.7**	5	**0.6**	11	**2.0**
1st mar, prev pmc, no prev. cohab	17	**11.3**	12	**10.7**	118	**13.8**	171	**30.9**
1st mar, prev pmc, 1+ prev. cohab	4	**2.4**	7	**5.8**	23	**2.7**	41	**7.4**
not in a r/p, 1+ prev. mar	21	**14.1**	5	**4.6**	69	**8.1**	54	**9.7**
after 1st mar sep, in cohab	5	**3.4**	2	**1.4**	26	**3.1**	17	**3.1**
2+ marriage	8	**5.4**	5	**4.3**	60	**7.0**	26	**4.6**
After 2+ mar sep, in cohab	1	**0.7**	0	**0.0**	4	**0.5**	0	**0.0**
No dates available	4	**2.9**	6	**4.8**	37	**4.4**	25	**4.5**
Total	**148**	**100**	**115**	**100.0**	**854**	**100.0**	**553**	**100.0**

61% of those with a child but only 24% of those without a child. The percentages of women in the categories who had experienced the breakdown of a marriage were broadly similar for those that had had a baby and those that had not had a baby.

Visual depictions of the differences between the relationship histories of those that had had a baby and those that had not are shown in Fig. 5.11a, b.[5] Each plot is made up of a series of individual lines, each one representing one individual's relationship history. When there is change at some age in an individual's relationship

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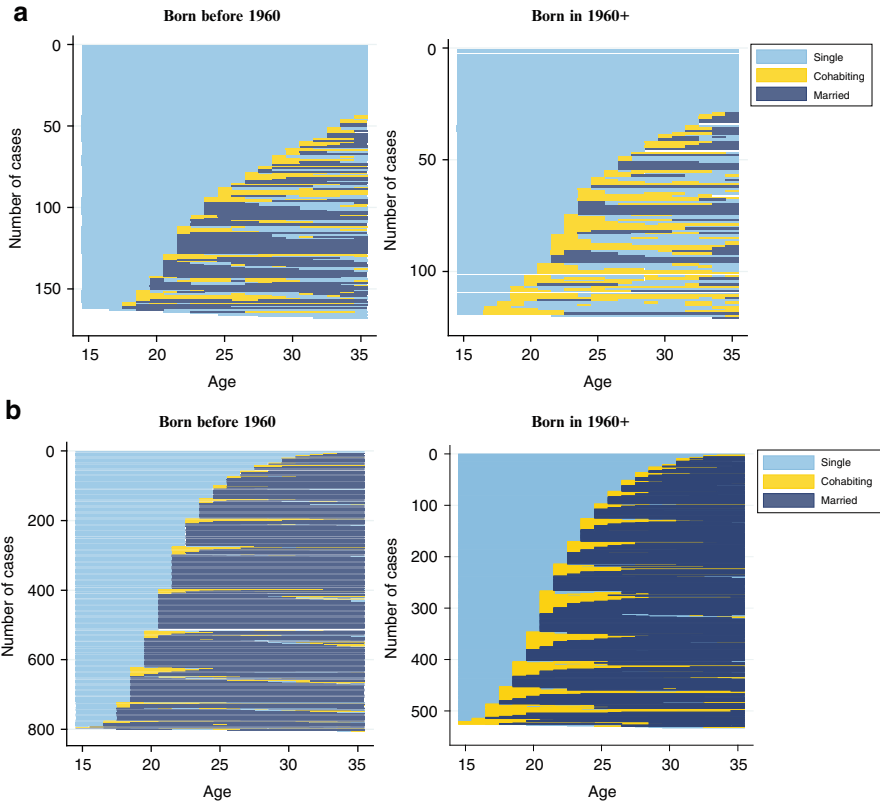[5] Plots are based on unweighted relationship histories variables.

Fig. 5.11 (**a**) Relationship histories of women childless at age 35, by year of birth. (**b**) Relationship histories of women with at least one child by age 35, by year of birth

status from single, cohabiting or married, the horizontal line changes colour. Looking first at the diagrams for those that had had a first birth (Fig. 5.11b), the women that were born before 1960 entered their first relationship earlier and, overall, their relationship histories were dominated by marriage. For those with a birth who were born from 1960 onwards, marriage once more dominates the picture but, for many, the marriage was preceded by a cohabitation.

Looking now at those that did not have a first birth by age 35 (Fig. 5.11a), the diagrams are dominated by instability of relationships and multiple relationship types. This is especially the case for those women born from 1960 onwards for whom marriage is hardly evident at all. For those born before 1960, not having a child by age 35 is also associated with a much later start to the first relationship.

Thus it can be concluded that having a child by age 35 is strongly associated with following the normative pattern of relationship history. For those born before 1960, the normative pattern was an early marriage not preceded by cohabitation. For those born from 1960 onwards, the normative pattern was a somewhat later commencement
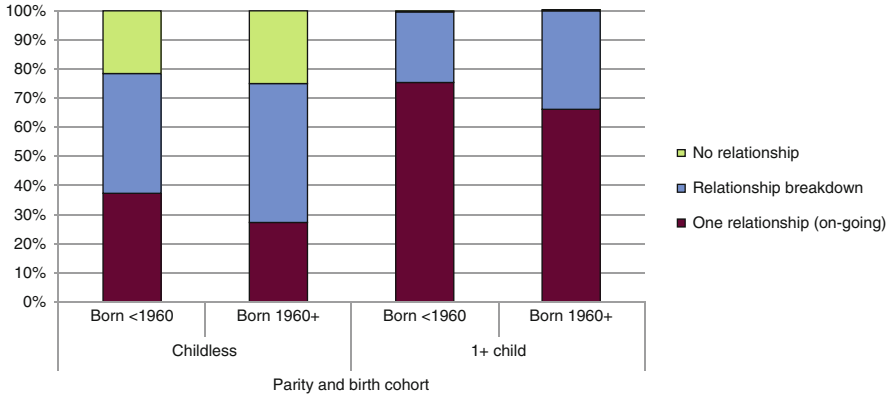
Fig. 5.12 Broad relationship history up to age 35: Comparison of women with no child and 1+ child by birth cohort

Table 5.9 Having a child by age 35, by number of unions and birth cohort

| | Childless | | | | 1+ child | | | |
| | Born <1960 | | Born 1960+ | | Born <1960 | | Born 1960+ | |
Number of relationships	Frequency	%	Frequency	%	Frequency	%	Frequency.	%
Unknown	10	6.5	9	8.0	45	5.3	33	6.0
0	31	21.0	27	23.7	2	0.2	1	0.2
1	73	49.2	50	43.2	670	78.5	395	71.4
2	25	17.1	19	16.2	109	12.8	89	16.2
3	7	4.8	7	6.1	22	2.6	32	5.7
4+	2	1.4	3	2.9	5	0.6	3	0.5
Total	148	100.0	115	100.0	854	100.0	553	100.0

of the first relationship. This first relationship was often a cohabitation that led onto marriage. Those who remained outside a relationship until a relatively late age or those that experienced a failed cohabitation were much less likely to have had a first child by age 35. Figure 5.12 shows this result in summary form.

Total Number of Unions

It is also possible to examine differences in the total number of unions experienced up to age 35 for childless women and women with at least one child (Table 5.9). The percentage of women with an unknown number of relationships is slightly higher than in the previous tables due to the fact that for certain cases the exact number of unions did not need to be known to identify the relationship history.[6] No distinction

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[6] For example a person with an unknown number of cohabitations and two marriages could be coded as being in a second marriage, however it would not be possible to identify the total number of relationships they had up to age 35.

is made between whether or not a union was on-going or not. For example, those who had one relationship that had dissolved and one relationship that was on-going are both listed as having experienced one relationship. A cohabitation that is followed by a marriage to the same partner is counted as one union.

As mentioned above, the number of women with no relationship is considerably higher among those who were childless. Considering only the women with full information that had had at least one relationship, the percentage of women with just one relationship was 66% for childless women and 80% for mothers. Of the women that had experienced at least one relationship, childless women in both birth cohorts were therefore more likely to have experienced multiple relationships compared to their counterparts with children.

Characteristics of First Union: Type, Timing and Duration

Type of First Union

Of the women that had had a first union by age 35, the first union was more commonly a cohabiting than a marital union for the childless women (Table 5.10). For example, among those born before 1960, over half of childless women who had experienced at least one union had started off with a cohabitation compared to a quarter of women with at least 1 child. Also evident is the trend for an increased percentage of those born after 1960 (among childless women and women with one child) to have a cohabitation rather than a marriage as a first union.

Time to First Union

Comparing the nulliparous women and the women that had at least one child, there were also differences in the timing to first union. Those with no children were older at the start of their first union (Fig. 5.13). The mean age at the start of the first union was 24.4 and 23.7 for women with no children born before 1960 and after 1960 respectively. For women who had had at least one child, the average age at the start of union was 21.5 and 21.7 for the earlier and later cohorts respectively.

Duration of First Unions That Ended

Of the women that had experienced the breakdown of the first relationship, there was also a difference in the duration of the first relationship by whether or not the woman was childless. The median duration of the first relationship that had broken down was 2.5 years for childless women and 5 years for women with children. Broken down by birth cohort, the median durations are 4.0 years (<1960) and 2.3 years (born after 1960) for women with no child; and 6.4 years (<1960) and

Table 5.10 Having a child by age 35, by nature of first union and birth cohort

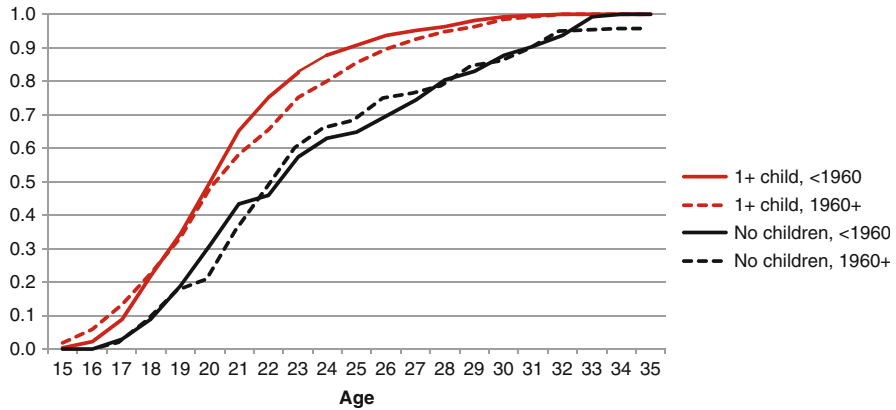| First union | Childless | | | | | | 1+ child | | | | | | Total | |
	Born <1960		Born 1960+				Born <1960		Born 1960+					
	Frequency	%	Frequency	%			Frequency	%	Frequency	%			Total	%
Cohabitation														
Marriage	61	52.6	63	71.6			210	24.9	326	59.1			659	41.3
Unknown	46	40.0	20	22.8			606	71.9	212	38.4			884	55.3
	9	7.4	5	5.6			27	3.2	14	2.5			55	3.4
Total	116	100.0	88	100.0			842	100.0	551	100.00			1,597	100.00

Fig. 5.13 Time to first union for women that had had a union by age 35, by parity and cohort

3.5 years (born after 1960) for women who had had at least one child. It is possible therefore that when there was a first relationship breakdown for the women with children, the relationship had lasted long enough to have one or more children.

Conclusion

With the movements towards social liberalism and economic restructuring, we argue that most young people applied a more cautious approach to relationships and to the timing of first births. Their aim was to protect themselves as individuals against financial difficulties later in life by investing in their own human capital. This meant that relationship formation and first births were delayed. To protect also against the potential risk of divorce, most young people moved to cohabitation as their first form of union. Cohabitation enabled people to have the intimacy of a relationship but not the level of lifetime commitment implied by marriage. The preferred normative sequence shifted from single-married-birth to single-cohabitation-marriage-birth. However, for many and increasingly across time, the first cohabitation ended and the individual concerned sought a new relationship. This led to much greater complexity in relationship pathways during the twenties. As observed in the chapter, for the latest birth cohort, the level of diversity of relationship histories at age 24 was very great indeed compared to the earliest cohort.

The more that people had multiple relationships, the less likely it was that they had had a child before the age of 35. While it may be the case that some people set out to have multiple relationships and not to have a child, it is much more likely that this pathway was unintended. Delay of the first relationship also seems to be strongly associated with not having a child before the age of 35. Even for those born after 1960 that had had a child by age 35, the mean age at the commencement of their first relationship was a quite young, 21.7 years. If, as we suggest, childlessness was an unintended consequence of a diverse or disrupted relationship history or of a late

start to relationships, then the experiment in cohabitation and delay of relationships and births has failed for some people while not for the majority of people.

Evidence from the Australia censuses has indicated that the transition to a relationship between the ages of 20–24 and 25–29 has occurred somewhat earlier for the cohort reaching age 25–29 in 2006 than for the cohort reaching age 25–29 in 2001. Furthermore, age-specific fertility rates rose between 2007 and 2008 for nine out of ten of the single years of age from age 20 to age 29. These new trends may have been facilitated by the favourable state of the economy in these years but it also may reflect a limited reappraisal of the strategy of delaying relationships and births. This is significant in a macro-sense in that, if first births occur somewhat earlier, this will raise the cross-sectional birth rate for several years.

In relation to theory, Second Demographic Transition theory and Mills and Blossfeld's globalization theory are adequate to explain the increase in the level of complexity of relationship histories prior to the first birth but they are not adequate to explain the continued high rates of marriage, increasing fertility and falling divorce rates that have characterized Australian family behavior in recent times. These latter trends require additional theoretical frameworks. Two come to mind. The first is that there is an underlying strong sense or preference for the standard or normative approach to family life as argued by Thomson et al. (Chap. 3 this volume). This has also been described as a strong attachment to the intimacy provided by the normative approach (McDonald 2006). The second, as discussed by Mills and Blossfeld in Chap. 2, is the argument that countries that have been able to establish a better relationship between gender equity in individually oriented institutions and in family oriented institutions will be more likely to be able to follow the normative approach (McDonald 2000, 2006). Cross national comparisons of life course pathways using longitudinal data similar to that collected by the Negotiating the Life Course project is required to fully examine these arguments.

Appendices

Appendix 1: Age at Interview and Year of Birth

| | Age by year | | | |
| | Wave 1 | Wave 2 | Wave 3 | Wave 4 |
Born	1997	2000	2003	2006
1940	57	60	63	66
1941	56	59	62	65
1942	55	58	61	64
1943	54	57	60	63
1944	53	56	59	62
1945	52	55	58	61
1946	51	54	57	60

(continued)

(continued)

| Born | Age by year | | | |
| | Wave 1 | Wave 2 | Wave 3 | Wave 4 |
	1997	2000	2003	2006
1947	50	53	56	59
1948	49	52	55	58
1949	48	51	54	57
1950	47	50	53	56
1951	46	49	52	55
1952	45	48	51	54
1953	44	47	50	53
1954	43	46	49	52
1955	42	45	48	51
1956	41	44	47	50
1957	40	43	46	49
1958	39	42	45	48
1959	38	41	44	47
1960	37	40	43	46
1961	36	39	42	45
1962	35	38	41	44
1963	34	37	40	43
1964	33	36	39	42
1965	32	35	38	41
1966	31	34	37	40
1967	30	33	36	39
1968	29	32	35	38
1969	28	31	34	37
1970	27	30	33	36
1971	26	29	32	35
1972	25	28	31	34
1973	24	27	30	33
1974	23	26	29	32
1975	22	25	28	31
1976	21	24	27	30
1977	20	23	26	29
1978	19	22	25	28
1979	18	21	24	27
1980	17	20	23	26
1981	16	19	22	25
1982	15	18	21	24
1983	14	17	20	23
1984	13	16	19	22
1985	12	15	18	21
1986	11	14	17	20
1987	10	13	16	19
1988	9	12	15	18
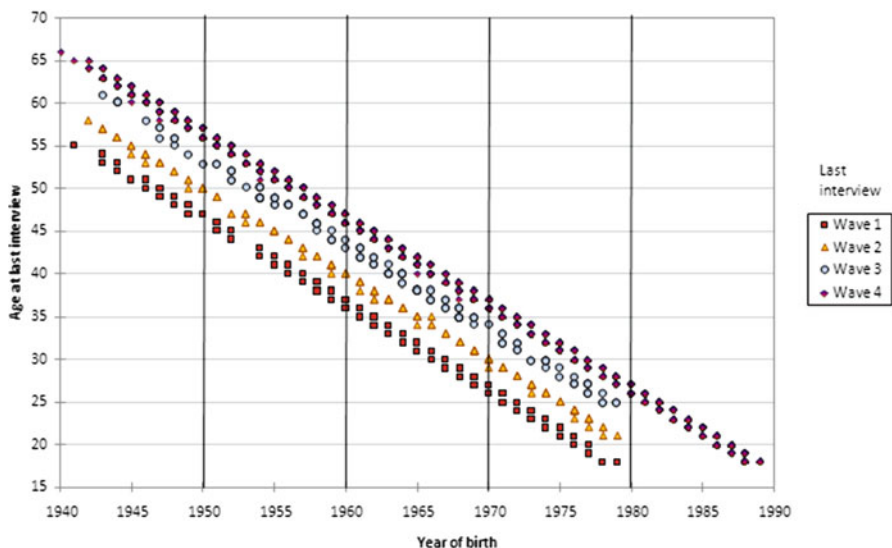
Appendix 2: Data Quality Issues

To create the relationship history variable and to identify the relationship context in which the first child was conceived, several key pieces of information were necessary. These included the date of birth of the respondent, the date of birth of the first child (if any), and the start and end dates of every cohabitation (including pre-marital cohabitation) and marriage.

The quality of the dates of birth of the respondent as well as their first child was generally very high.[7] However, due to the way the retrospective relationship histories were asked in the questionnaire and recall error, there were some issues with the quality of data on the start and end dates of relationships.

The NLC collects both retrospective and prospective data on marriages and cohabitations. The first time they were interviewed, all respondents were asked to give retrospective information regarding their marital history, including how many times they had been married, and the start and end dates (month and year) of the first, second and, most recent marriage. Information was also collected on the duration of any pre-marital cohabitation that occurred before the first, second and most recent marriage. Similarly, for cohabitations, respondents were asked how many times they had been in a cohabitation that had lasted for at least 3 months without this leading to a marriage, and the start and end dates of the first, second and most recent such relationship.[8] In subsequent waves, prospective information was collected on

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[7] There were 28 cases where the year of birth of the first child was missing or refused.

[8] Current cohabitations which were on-going at the time of the interview were included even if they had not yet lasted 3 months.

any new marriage that had taken place since the last interview, and up to three new cohabitations.

Due to recall error and the way that questions on relationships were asked, some respondents had missing information on one or more of their relationships. For example, a respondent who had already experienced four marriages, or four cohabitations, by the time they were first interviewed would have been asked about the start and end dates of the first, second and *most recent* (i.e. fourth) marriage/cohabitation but not about the third marriage/cohabitation. However, as expected, the number of cases that had more than four marriages or cohabitations at the first interview was very small.

Another issue affecting the quality of the relationship history data was that a number of respondents could also not recall the month that a relationship had started and/or ended. Recall error particularly affected information on the start dates of cohabitations, because transitions into cohabiting unions are often gradual processes that are not as well defined or remembered in the same way as marriages (Manning and Smock 2005). Where the month of a relationship was unknown, but the year was known, we have imputed the month to June.

The fact that the month of a relationship was imputed to June may have affected the results regarding the relationship history at each birthday, as well as the relationship context of first birth. An example of how imputation of the month to June may affect the results would be a woman who had her 20th birthday in April 1990. If she also married for the first time in February 1990 then on her 20th birthday she would have been classified as married, but if the month of marriage was missing she would have been classified as not married. For relationship histories at each age, this may be less of an issue but for the relationship context of the first child's conception and birth it may be more important since the two processes of first childbearing and of union formation tend to be closely linked in time (Baizán et al. 2001).

Depending on when the relationship occurred, missing information on the start or end date may only partly affect, or not affect at all, the ability to describe the relationship histories up to certain ages, or the relationship context of the first child's conception or birth. For example if a woman was in her first marriage until age 46, and then had a second marriage at age 50 then if information was missing on the date the second marriage started this would not affect the results since of interest is only the relationship history up to age 44. In certain cases information is missing on the start or end date of a relationship, but while this makes it impossible to identify the relationship history at every age, it may still be possible to identify the relationship history at select ages. For example, a woman may have been born in 1967 and aged 30 at the time of the interview in Wave 1 (1997). At this time, she may have experienced only one relationship, a marriage that had already ended in divorce. If the start date of the marriage is unknown, but the end date is listed as 1995, just after her 28th birthday, then it would be impossible to describe her relationship history from age 15–27 because we do not know if the marriage started at 15 or 26. Then, from ages 28–30, her relationship history could be described as single after the separation from a first marriage.

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Chapter 6
Employment and the Life Course: Birth Cohort Differences of Young Australian Women

Jennifer A. Baxter

Abstract This chapter examines trends in female employment in Australia using the detailed education, relationship, fertility and work history of respondents from the first four waves of the Negotiating the Life Course project. The work history data provide information about respondents' employment status in each year from the age of 15 years to the survey year. Focusing on females, changes in education, fertility and relationship formation for ages 15–40, are explored for women born in the 1940s through to those born in the 1960s and 1970s. This information is then used to examine how these changes relate to employment trends. The analyses show that women are spending longer in study, resulting in higher levels of education, and delays in entry to full-time employment. Significant changes in patterns of relationship formation and fertility are also apparent, especially at the younger ages. Overall, trends in employment participation from earlier to more recent birth cohorts were affected by the extended time in full-time study (reducing employment rates during those years of study), complemented by higher education levels and the reduced amount of time spent with children (increasing employment rates).

One of the challenges women increasingly face in negotiating the life course is managing the timing and responsibilities of childbearing with expectations or needs to maintain a connection to the labour market. Since the post-war years, there has been significant growth in the rate of female and maternal employment in Australia. Nevertheless, research on women's work-family balance and time spent on housework and childcare (e.g. Baxter 2002; Craig et al. 2010; Probert and Murphy 2001) indicate that the conflict between work and family is an important issue for many Australian women. This chapter examines growth in female employment in Australia, looking in particular at the links between employment and different

J.A. Baxter (✉)
Australian Institute of Family Studies, Melbourne, Vic., Australia
e-mail: jennifer.baxter@aifs.gov.au

aspects of education, relationship formation and fertility, and how those links have changed over time and across the life course. The aim is to improve understanding of how patterns of employment have changed given the substantial demographic and social changes that occurred over recent birth cohorts, as outlined in discussions in Chaps. 2 and 5, in relation to the second demographic transition and globalization processes. Moreover, this chapter broadens the analyses presented in Chaps. 4 and 5 by investigating how education and employment are related to patterns of family formation and childbirth in Australia.

The analyses here consider changes in female employment from the perspective of birth cohorts for women born in the 1940s through to those born in the 1960s or 1970s. Within each cohort, employment is compared across the age range of 15 to around 40 years, the main stages of the life course when women are studying, forming relationships and having children. It is the relationship between these factors and employment that is the main subject of this chapter. As discussed in Chaps. 2, 3 and 4 in this volume, for these birth cohorts, there has been significant change in patterns of education, relationship formation and fertility, as well as in the links between each of these factors. The well established relationship between education and employment, and for women, between childbearing and employment leads to the expectation that changes in these demographic characteristics will be associated with changes in female employment (Baxter 2005; Eccles 1982; Young 1990).

Work history data from the first four waves of the Negotiating the Life Course project are analysed in this chapter. These data provide information about respondents' employment status in each year from the age they turn 15 to the survey year, recording for each year whether they were employed full-time, employed part-time or were not employed. Respondents were not given criteria by which to assess whether their job was full-time or part-time, so this distinction between full and part-time work is not as precise a distinction as is made when derived from usual work hours.

This full history was collected in Wave 1 and also at Wave 4 for new respondents at this wave. For respondents continuing from Wave 1, Waves 2, 3 and 4 updated the work history for intervening years. Responses from women born between 1940 and 1979 are used, representing 2,164 women. A key aspect of these analyses is to compare women from different birth cohorts. To do this, women are classified by their year of birth into birth cohorts of 1940s (N = 344), 1950s (N = 661), 1960s (N = 659) and 1970s (N = 500). Younger women are excluded because of the incomplete nature of their data, given they were aged less than 30 at the most recent wave of the survey. Censoring affects some of the women in the analyses, particularly those born in the 1970s, and for this reason, this birth cohort has been excluded from some analyses. The work history data are analysed by taking each respondents' data and creating a separate record for each year for which work history was captured. The resulting dataset is therefore a person-year dataset, incorporating multiple records per person. As well as including employment details for each year, other relevant information from the survey, covering educational attendance and attainment, relationship formation and fertility are linked to these data. This enables demographic character-istics to be matched to the corresponding employment status at each age. A more detailed discussion of these data is provided in Appendix 6.1. This derived work history dataset is the source of data for analyses in this chapter.

Overall Patterns of Female Employment

Like other OECD countries, female participation in employment in Australia has been increasing since the post-war years, including significant growth over recent decades (Campbell and Charlesworth 2004; Gray et al. 2006; OECD 2007). Such changes have been particularly evident for mothers. For example, among partnered mothers with dependent children the percentage in employment increased from 42 to 63% between 1983 and 2002 (de Vaus 2004). Despite this growth, the employment rate for women remains lower than for men, with a marked period of withdrawal from employment during the childbearing years.

Growth in female employment has occurred over times of very significant changes in the Australian labour market. For example, during the 1960s the Australian Public Service marriage bar was lifted (1966) and Equal Pay Cases commenced (1969). Women in the 1940s birth cohort would have been very aware (and possibly instrumental in) these changes. Changes in employment during the childbearing years would have been supported by the availability of maternity leave and child care, and the outlawing of sexual discrimination: women born in the 1940s and 1950s could benefit from maternity leave for the Australian Public Service (from 1973), and the Child Care Act (1972). In the 1980s, the Sex Discrimination Act (1984) increased parental leave for public servants (1985) and Affirmative Action for women (1986) was introduced (for details refer to Baxter 2005; Young 1990). Such changes were intended to improve employment opportunities for women by improving employment conditions and prohibiting discrimination. In addition, part-time work grew considerably over this time, providing opportunities for women to reduce their labour market involvement during the childbearing years without withdrawing completely from paid work.

This chapter considers how female employment has changed from the perspective of changes across birth cohorts. Previous analyses by Baxter (2005) and Young (1990) have demonstrated the usefulness of this perspective, in relating patterns of employment participation for each cohort to the different demographic characteristics of those cohorts. These analyses showed that for women born before the 1940s increased rates of female employment were largely attributable to increases in employment before and after the childbearing years, not during the childbearing years when employment rates remained relatively low. For the 1940s and 1950s birth cohorts, employment growth was also apparent in the post-childbearing years, but significant growth during the childbearing years also commenced. For these and later cohorts, the distinct M-shape of age-specific labour force participation rates was gradually replaced by a much flatter profile, although maintaining a slight dip during the childbearing years.

The trend toward higher employment participation through the childbearing years is evident in Fig. 6.1, which uses the Negotiating the Life Course work history data at ages 15–40 years for the birth cohorts of the 1940s, 1950s, 1960s and 1970s. (For the youngest cohort, information is only available up to age 30, since a high proportion of this cohort was not aged over 30 at the time of the surveys). The first graph in this figure compares the proportion employed at each age across birth cohorts,
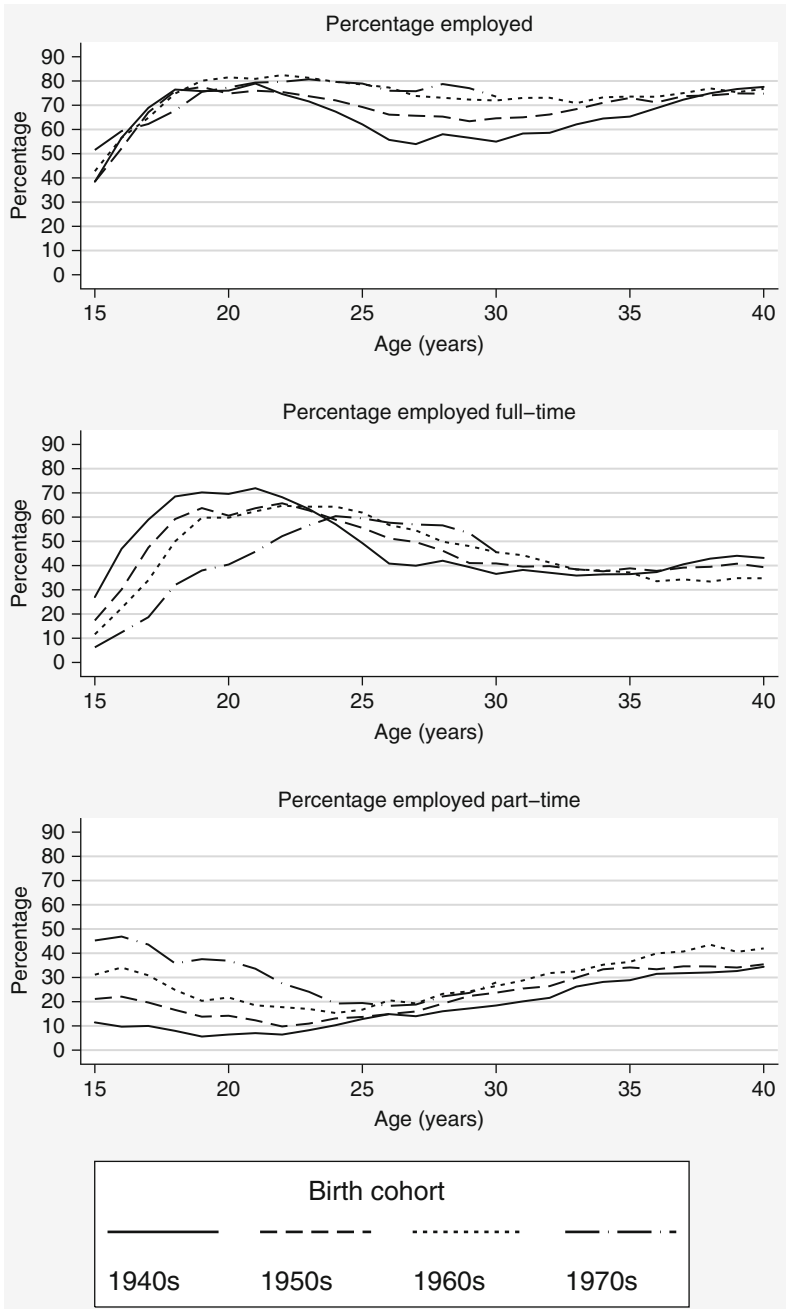
Fig. 6.1 Employment rates at ages 15–40 years, by birth cohort, women born between 1940 and 1979 (Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4)

and shows that the proportion employed is similar at the early part and latter part of this age distribution across these cohorts. However, considerable differences across the birth cohorts are apparent in the employment rates through the middle of this age range, with higher employment rates evident for the more recent birth cohorts.

These aggregate employment rates conceal one of the key changes in the Australian labour market over recent decades – the growth in part-time employment. The increased availability of part-time employment has seen this form of employment become the predominant arrangement for employed mothers. This may have been particularly instrumental in allowing mothers' employment rates to increase, although supply and demand effects are difficult to disentangle.

In the second graph of Fig. 6.1, the data show that for women in each birth cohort, full-time employment peaks during early adulthood. With more recent birth cohorts, higher proportions remain in full-time employment to somewhat older ages, consistent with the changes in age at first birth across these cohorts. Part-time employment, on the other hand, is initially high during the years of young adulthood and again during the main childbearing years. Part-time employment has become more common in the younger birth cohorts at any of these life course stages, which may be related to the increased availability of this type of employment. Early in young adulthood, the likelihood of part-time rather than full-time employment is strongly associated with participation in education, which is examined next.

Education and Employment

Education and employment are associated in two ways. First, full-time students are likely to have lower rates of participation in employment than are those studying part-time or not at all. Second, after completion of education, higher levels of educational attainment are associated with higher rates of participation in employment. As shown by Evans (Chap. 4 this volume), young women of more recent birth cohorts have spent longer periods of time in education. Using the Negotiating the Life Course project, specifically the education history data (which is collected in the same way as the work history data, see Appendix 1) the median age of full-time education completion can be calculated. This is based on the age at which women first reported they were not in full-time education. As education history was collected from age 15 years onwards, women who were not in full-time education at age 15 were assumed to have completed full-time study at age 15 years. Based on these data, the median age of full-time education increased from 17 years for the 1940s and 1950s cohorts, to 18 years for the 1960s cohort and 19 years for the 1970s cohort.

Full-time students are far less likely to be in full-time employment than part-time students or those not studying. That is, spending longer in education means delayed entry to full-time employment. To show this, we consider women who have not yet had children to more clearly observe differences by education rather than other life course factors. In the 1960s birth cohort, of women studying full time, 52% were employed, including 45% employed part-time and 7% employed full time. In
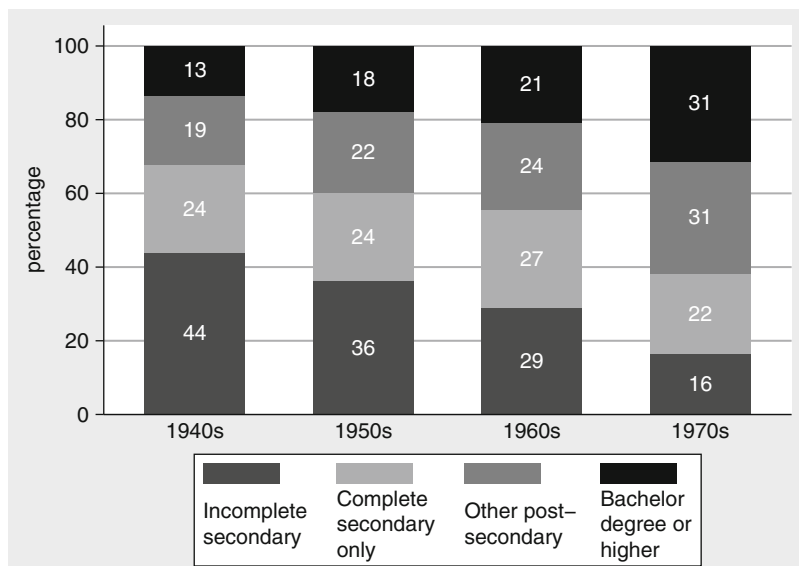
Fig. 6.2 Educational attainment at age 25 years by birth cohort, women born 1940–1979 (Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4)

comparison, for those studying part-time, 96% were employed, including 19% employed part-time and 77% employed full time, and for those not studying 93% were employed, including 10% part-time and 83% full time. Similar associations between education and employment were observed for earlier birth cohorts, although it was less common in earlier birth cohorts to be combining employment and full-time study. In the 1940s birth cohort 30% of full-time students were employed (19% part-time) and in the 1950s cohort, 39% of full-time students were employed (33% part-time). The increased use of part-time employment for full-time students may be part of the explanation for the increased employment rate of these students.

The delays in entry to full-time employment, and increased participation in part-time employment at the younger ages are apparent in Fig. 6.1. Spending longer in education typically leads to a higher level of educational attainment and so over these birth cohorts there have been significant shifts in the distribution of women's level of educational attainment. For example, measured at age 25, Fig. 6.2 shows, across these cohorts, a considerable fall in the proportion of women with incomplete secondary education, and growth in the proportion with bachelor degrees or higher.

The shift to higher levels of education across cohorts results in a stronger connection to the labour market as women have become more qualified to enter higher status occupations and earn higher wages. The Negotiating the Life Course data show that women with higher levels of education are more likely to be employed, and also more likely to be employed full time, than women with lower levels of

education. For example, at age 25 years, in the 1960s birth cohort 71% of women with incomplete secondary education were employed (including 50% full time employed) compared to 89% of women (including 80% full time employed) with bachelor degrees or higher.

However, the relationship between education and employment is more complex than this. Associations between these measures also occur through their associations with other demographic characteristics, notably with relationship formation and childbearing, since women with higher levels of education are more likely to delay these life course events (Edwards 2002; Oppenheimer 1994; Wilkie 1981). That is, on completion of education, women with higher levels of education are likely to have relatively high employment rates until older ages as relationship formation and childbearing are delayed, allowing them to spend longer in full-time employment.

Children and Relationships

Another key factor in explaining variation in women's employment is the presence and ages of children. Children are universally found to have a negative effect on women's employment in industrialised countries (Ellingsaeter and Ronsen 1996; Lehrer and Nerlove 1986; Leibowitz and Klerman 1995; Nakamura and Nakamura 1994; Wenk and Garrett 1992). This is evident in Australia, where women continue to take primary responsibility for childrearing (Baxter 2002; Baxter et al. 2007; Craig et al. 2010), resulting in a lower rate of employment during the prime child-bearing and childrearing years.

As most childbearing occurs within couple relationships, and more often within marriage rather than cohabitation (Birrell et al. 2004; McDonald 2000b; Weston et al. 2004), in exploring changes in employment it is also relevant to consider how changes in the timing or nature of relationships might have evolved over these birth cohorts. In the absence of children, relationship status is not expected to make a difference to employment participation for women of recent birth cohorts. However, for women entering relationships in the 1950s and 1960s, when the male breadwinner model predominated and there was more widespread disapproval of married women in employment, being married may in itself have been associated with lower rates of employment (Evans and Kelley 2002; Glezer 1984; McDonald 2000a; Probert and Murphy 2001; Young 1989). Further, some women may leave employment on becoming pregnant, even if they have no other children, although this is less likely to be the case in recent birth cohorts, except perhaps within specific occupations.

The Negotiating the Life Course project data are used here to explore how relationship formation and childbearing have changed across birth cohorts. Starting with relationship formation, shown in Fig. 6.3, it is apparent that across birth cohorts, women have increasingly delayed marriage and have become more likely to spend time in cohabitation in the years prior to marriage. For example, from the birth
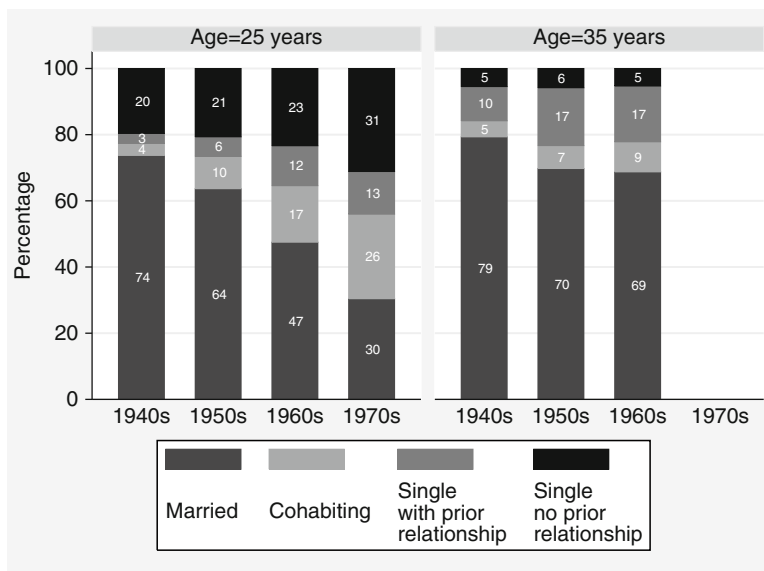
Fig. 6.3 Relationship status at ages 25 and 35, by birth cohort, women born between 1940 and 1979 (Note: Women in the 1970s cohort had not reached the age of 35 years by the time of the survey; Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4)

cohorts of the 1940s through to the 1970s, at age 25, an increased proportion were in a cohabiting (but not married) relationship (from 4 to 26%), still single and no prior live-in relationship (from 20 to 31%), and single with a prior relationship (up from 3 to 13%). These figures simplify what is quite a complex story with regard to how relationship patterns have changed across birth cohorts, as was apparent in the more detailed analyses presented in Chap. 5.

Relationship differences across birth cohorts are smaller by age 35. In particular, the percentage married at this age varied much less by birth cohort than it had at age 25, although a higher proportion of the 1940s birth cohort had married compared to later cohorts. At 35, marriages far outnumbered cohabitations, even in the youngest birth cohort. Very few women remained single with no prior live-in relationship, although 10% of the 1940s birth cohort and 17% of the 1950s and 1960s birth cohorts were single and separated at this time.

Given these delays in relationship formation across birth cohorts, it is not surprising that childbearing was also delayed. According to these data, the median age at first birth increased from 24.8 years for the 1940s birth cohort, to 26.3 years for the 1950s birth cohort and 27.9 years for the 1960s birth cohort. As shown in Fig. 6.4, 52% of women from the 1940s birth cohort had at least one child at age 25, compared to 43% of the 1950s birth cohort and 36% of the 1960s birth cohort. At age 35, 86% of the 1940s cohort, and 81–82% of the 1950s and 1960s cohorts had
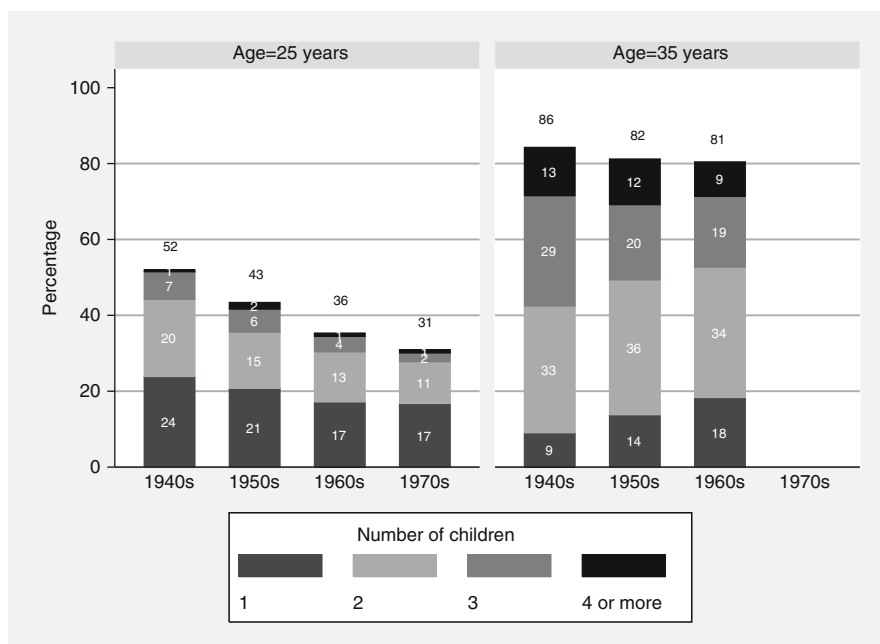
Fig. 6.4 Number of children born at ages 25 and 35 years by birth cohort, women born between 1940 and 1979 (Note: Women in the 1970s cohort had not reached the age of 35 years by the time of the survey; Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4)

at least one child. Family size also declined, with fewer women at 35 years having three or more children, reflecting the smaller family size already apparent at age 25 years.

Analysis of these data reveal that most births were to married women but increasingly births occurred outside marriage. For women born in the 1940s, 94% of births were to married women; for those born in the 1950s, 88% of births were to married women; for 1960s birth cohort the percentage was 80%. In each of these cohorts, the percentage of births to cohabiting women increased (from 2.5%, to 5–14%), as did the percentage born to single women (3.5, 6.5 and 6.2%).

Increased participation in education, as discussed previously, is likely to have some impact on these changes in the timing of relationship formation and childbearing. For example, Fig. 6.5 shows that, at age 25, with the 1940s, 1950s and 1960s birth cohorts combined, women with higher levels of education are much more likely to be single (73% of those with a bachelor degree or higher compared to 19% of those with incomplete secondary education). Also, a higher level of education at this age is associated with a lower probability of having started childbearing (27% of those with a bachelor degree compared with 81% of those with incomplete secondary education have at least one child). By 35 years of age, at least 90% of all women have started childbearing and 10% or fewer women are single without having lived in a previous relationship. Small differences by education are apparent, both in
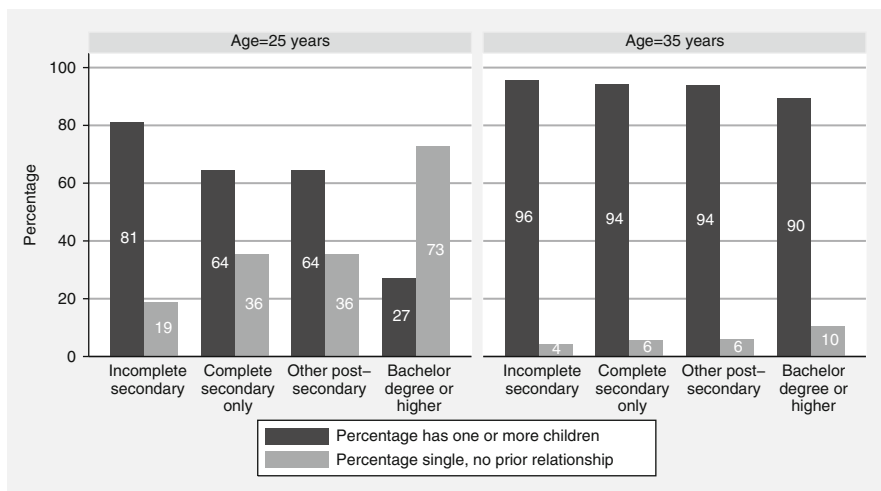
Fig. 6.5 Relationship status, childbearing and education, all birth cohorts, women born between 1940 and 1969 (Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4)

Table 6.1 Employment rates by relationship and presence of children for women aged 15–40 years, excluding full-time students

	1940s	1950s	1960s	1940s	1950s	1960s
	Childless			With children		
Per cent employed						
Single	96	94	94	64	68	59
Couple	85	88	92	54	57	60
Total	**90**	**91**	**93**	**59**	**62**	**60**
Per cent full-time employment						
Single	91	88	84	42	39	28
Couple	79	79	81	28	25	24
Total	**85**	**83**	**82**	**35**	**32**	**26**
Per cent part-time employment						
Single	5	6	10	22	29	32
Couple	7	9	11	26	32	35
Total	**6**	**8**	**10**	**24**	**30**	**34**

Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4.
The work-history data were used to isolate those years women were childless and aged 15-40 years, and not full-time students, and the average percentage of these years spent employed (in full-time or part-time employment) was calculated and shown here. The same was done for women over the ages 15-40 years when they did have children.

terms of relationship status and childbearing. If analysed separately for specific cohorts, similar patterns remain.

How do these changes relate to changes in employment participation of women? Concentrating on differences by relationship status and childbearing, Table 6.1 uses person-year data for women over the ages 15–40 years to show the percentage of

years spent in employment and the percentage spent in full time and part-time employment by birth cohort. Note that full-time students have been excluded. Clearly, proportions of years in employment and in full-time employment are highest when women are childless. The proportion of years in employment, for women without children, increased slightly over these birth cohorts but this was associated with an increase in the proportion in part-time rather than full-time employment. Over the years prior to having children, single women had higher employment rates than couple women for the 1940s birth cohort (a gap of 9 percentage points), but this gap by relationship status narrowed in the 1950s birth cohort (to 6% points), and in the 1960s birth cohort had reduced to 2% points. This is consistent with expectations that, prior to childbearing, employment rates for married women would be lower in earlier cohorts but not more recent ones.

Not surprisingly, across the ages of 15–40 years the employment patterns among women with children are quite different to those without children. Around 60% of women with children were employed across these ages. Surprisingly, there was only slight variation across cohorts, and it may be necessary to look further at ages or numbers of children to understand how associations between fertility and employment have changed. This is examined below. In the 1940s and 1950s cohorts, the employment rate was higher for single mothers compared to couple mothers, although the gap had narrowed for the 1960s cohort. Single mothers were also more likely than couple mothers to be employed full-time, although the full-time rates for both single and couple mothers declined across the birth cohorts. The percentage in part-time work increased, and is slightly higher among couple mothers compared to single mothers.

To look more closely at women with children and their participation in employment, Fig. 6.6 presents the employment rates of mothers according to the age of their youngest child, focusing on ages up to 10 years. Figure 6.6 shows mothers' employment rates are lowest around the birth of a child, but then increase as the youngest child grows older. At older ages of children, the growth in rates of maternal employment appears to slow down somewhat.

The relationship between age of youngest child and maternal employment is apparent within each of the birth cohorts, although mothers in the most recent cohort were more likely to be employed at all child ages compared to mothers in the 1940s birth cohort. The employment rates of mothers in the 1950s birth cohort rates fell in between these two. The rates of part-time employment varied most across these cohorts. In each cohort as the age of the youngest child increased up to around 8 years, there was a very gradual increase in the proportion in part-time employment as well as in full-time employment.

A less conventional way of examining the relationship between childbearing and employment is to explore how employment participation varies according to the age of the mother when she had her first birth. In Fig. 6.7, the 1940s, 1950s and 1960s birth cohorts are combined, but similar patterns are observed if cohorts are examined separately. For those whose first birth was at age 20 years or older, employment rates remain high in the years prior to the first birth, followed by a period during
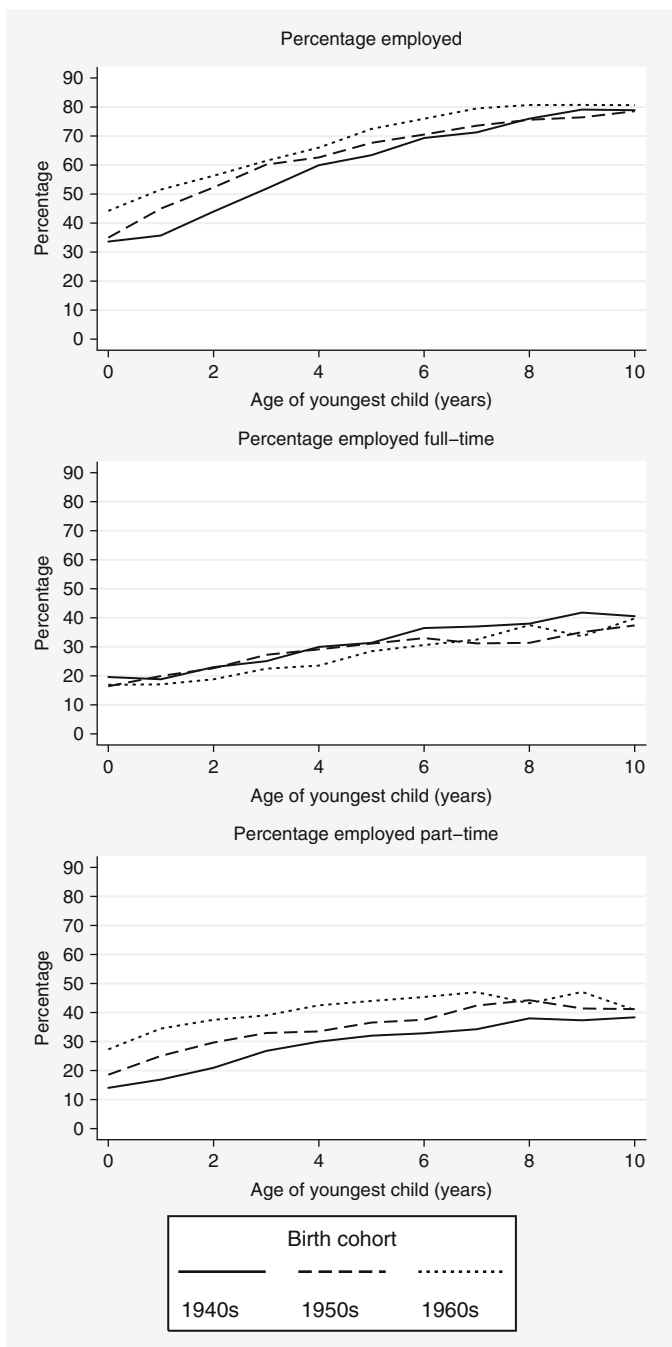
Fig. 6.6 Employment rates by age of youngest child, mothers aged 15–40 with youngest child aged up to 10 years, women born between 1940 and 1969 (Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4)
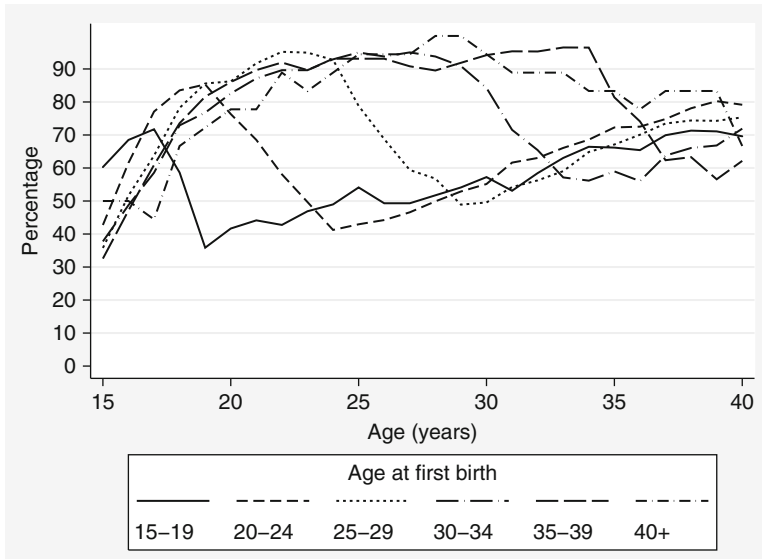
Fig. 6.7 Percentage working at ages 15–40, by mothers' age at first birth, birth cohorts combined, women born between 1940 and 1969 (Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4)

which employment rates decline, followed by some increase in employment rates as women start to return to work.

As women delay relationship formation and childbearing, they have longer time in which to invest in their own human capital, through education or employment, before needing to make decisions about how to combine work and family. The expectation is that women who delay childbearing will potentially face a higher opportunity cost, through lost wages, if they take a longer absence when they do start childbearing (McDonald 2001; Rindfuss and Brewster 1996). They are therefore expected to maintain a stronger connection to work once they have children. According to Fig. 6.7, the rate of return to work (as indicated by the upward slope of the employment rate) appears not to vary a great deal by the age at which the first birth occurred, at least for those having their first child before age 35. This suggests that building up human capital before having a child does not, in itself, lead women to return to employment more quickly. However, as indicated by the lowest points on each of these lines, women are more likely to exit from employment during childbearing when they have their children at a younger age, and hence have a lower employment rate from which they need to recover. It is, however, not possible with these data to ascertain whether decisions about childbearing and subsequent return to work are related to the perceived or actual costs of childbearing – in terms of wages or longer-term impacts on employment – or to other attitudes regarding family formation and employment.

Table 6.2 Birth cohort difference in characteristics between 15 and 40 years, women

	1940s	1950s	1960s
	Percentage of years aged 15–40 years spent with this characteristic		
Employed	66	69	73
Study full-time	11	13	17
Not studying full-time	89	86	79
Incomplete secondary	51	44	38
Secondary only	19	19	22
Post-secondary non-degree	17	20	22
Degree or higher	12	17	18
No children	46	51	57
Youngest aged <3 years	23	21	21
Youngest aged 3 to 5 years	12	11	10
Youngest aged 6 years or older	18	17	12
Pregnant	9	8	8
Single	38	42	45
Married or cohabiting	62	58	54

Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4

How Do Changes in Maternal Characteristics Explain Changes in Employment Participation?

Table 6.2 shows that 66% of women over the ages 15–40 years, were employed in the 1940s cohort compared to 69% in the 1950s cohort and 73% in the 1960s cohort. Multivariate techniques are now used to consider how these changes in employment rates might be explained by the changing characteristics of women over these cohorts. The 1970s birth cohort was excluded because the censored nature of the data meant that there was too much missing data for the age range under examination. Multivariate analysis allows us to consider factors such as educational attendance and level, relationship status and childbearing together to establish which of these factors matter most in explaining maternal employment rates, and also to establish whether the importance of these variables is different in each of the birth cohorts.

Employment participation is examined for women in relation to a range of characteristics: age, ages of children (if any), whether single or partnered, and education (attainment and whether in full-time education). In addition, whether or not the respondent was pregnant was included as an indicator variable. The changing characteristics of women over these cohorts are summarised in Table 6.2. This table shows that in the 1940s cohort, 11% of the years between age 15 and 40 years were spent in full-time education. This increased to 13 and 17% in later cohorts. Not surprisingly, then, women in later cohorts have higher levels of educational attainment.

Across cohorts, around half of the years between ages 15 and 40 were spent without children, but this proportion was lower in the 1940s cohort (46%), and higher in the 1960s cohort (57%). Women in the older cohort were more likely to have time with older children (aged 6 years and older) during the ages of 15 and 40 years. Finally, women in the most recent birth cohort spent more of these years single.

As discussed at the beginning of this chapter, these analyses are based on a person-year dataset, incorporating multiple records per person. Each record represents 1 year between ages 15 and 40 years for which employment history data were collected. The record includes an indicator of whether the respondent was employed in that year and also includes variables capturing respondents' age, whether or not in full-time education, level of educational attainment achieved at that time, relationship status and ages and numbers of children. For these analyses the variable of interest is the binary variable, whether or not employed. The binary nature of the variable means it is appropriate to use logistic regression, but because the dataset comprises multiple records per person, the analyses used random effects models.

A very simple model was first estimated, with all birth cohorts combined, including only dummy variables to capture differences in employment rates between birth cohorts. A second model expands upon this by including the range of demographic characteristics. This allows examination of whether differences between birth cohorts are still apparent, after taking account of the different characteristics of the cohorts. Finally, the expanded model was estimated separately for each birth cohort, to examine how the relationships between characteristics and employment changed across cohorts.

Marginal effects have been calculated to aid in the interpretation of the results. The marginal effect shows, for each variable in the model, the predicted change in being employed associated with having this characteristic. For the categorical variables of educational attainment and age of youngest child, the differences are relative to the reference category shown in the table. The marginal effect for each variable has been calculated by setting other variables at the mean value. The mean across all cohorts was used even when analysing birth cohort specific models so that when comparing marginal effects across birth cohorts, changes in these values reflected changes in the coefficients alone, not changes in the characteristics across the cohorts.

The results, as shown in Column a Table 6.3, show that compared to the 1940s birth cohort, the percentage employed between ages 15–40 in the 1950s cohort is predicted to be 4% higher than for the 1940s cohort, although this difference fails to reach statistical significance. The employment rate of women in the 1960s cohort is predicted to be 8% higher than that of women in the 1940s birth cohort. This confirms that employment rates have increased overall.

The total column in Table 6.3 (column b) shows that, after taking into account the variation due to the range of socio-demographic factors, there was a small increase in employment from the 1940s to the 1960s birth cohort of (a predicted) 6%. That is, this 6% increase in employment is the increase that is not explained by the changing characteristics of 15–40 year olds, as incorporated in these models. As this is a smaller number than the 8% in the simpler model, it appears that inclusion of

Table 6.3 Multivariate analyses of employment: women aged 15–40 years by birth cohort (marginal effects)

	Just birth cohort (a)	Total (b)	1940s	1950s	1960s
Birth cohort (Reference = 1940s)					
1950s	4%	1%			
1960s	8%***	6%**			
Studying full-time (Reference = not studying full-time)		−71%***	−83%***	−74%***	−58%***
Highest educational attainment (Reference = incomplete secondary					
Secondary only		10%***	4%*	8%***	14%***
Post-secondary non-degree		15%***	13%***	14%***	17%***
Degree or higher		16%***	18%***	14%***	17%***
Age of youngest child (Reference = no children)					
Youngest <3		−63%***	−69%***	−64%***	−59%***
3 to 5		−38%***	−43%***	−37%***	−37%***
6 or older		−17%***	−18%***	−17%***	−18%***
Pregnant (Reference = not pregnant)		−20%***	−23%***	−24%***	−14%***
Single (Reference = married or cohabiting)		3%***	9%***	3%***	1%
Age (years)		0%*	0%	0%	0%
Number of person-years	40,335	39,435	8,480	16,354	14,601
Number of persons	1,664	1,664	344	661	659

Source: Work history dataset, Negotiating the Life Course project, Waves 1 to 4
***p < .001; **p < .01; *p < .05

demographic characteristics in the model has absorbed some of the difference between the cohorts, although only a relatively small portion. It appears, then, that the increase in employment is driven by broad changes in supply or demand for female employment as well as some impact of the changing characteristics of women. Of course, these models do not incorporate all maternal or family characteristics, and so some of this change across cohorts may be attributable to other factors that have not been taken into account.

The importance of the socio-demographic variables in explaining the variation in female employment is evident in Table 6.3 and the final three columns of this table show how the importance of these variables changed across cohorts, based on models estimated separately for each birth cohort. A higher level of educational attainment leads to a higher likelihood of being employed and this holds across all cohorts. Being in full-time education had a very strong negative relationship with employment, and had a stronger effect on employment within the 1940s birth cohort (a marginal effect of 83%) compared to the 1960s cohort (a marginal effect of 58%). This may be due to labour market changes, which have enabled more recent birth

cohorts to combine full-time study with part-time employment, which has become more readily available.

Having children has a very strong relationship with employment across all cohorts. Being pregnant was also associated with lower employment rates, of around 20% (but lower at 14% in the 1960s birth cohort). Those with a child aged under 3 years had the lowest employment rates, predicted as 63% lower than childless women (all cohorts combined). For women with older children, the marginal effects declined (38% for a youngest child aged 3–5 and 17% for a youngest child aged 6 or older). Differences across cohorts were apparent, especially for mothers of under-3-year olds. The declining marginal effects suggested a reduction in the gap between the employment rates of mothers with young children and those without children.

Single women had a higher employment rate than partnered women when all birth cohorts were combined. However, the link between employment and relationship status varied by birth cohort, with the largest difference between rates for married and single women being in the 1940s birth cohort, predicted (after controlling for other factors) to be 9%. For the 1950s cohort the marginal effect was 3%, then in the 1960s cohort the marginal effect was non-significant (that is, the employment rates of single and partnered women did not vary, after taking into account the ages of children). This reflects that women in the 1940s birth cohort, and to a lesser extent in the 1950s birth cohort, had a lower employment participation rate when in a relationship, but this was not apparent for the 1960s birth cohort.

Summary and Discussion

This chapter has provided strong evidence of links between changes in employment, education, fertility and relationship formation during the ages 15 through to 40, for women born in the 1940s through to those born in the 1960s and 1970s. Women are spending longer time in education, resulting in delays in entry to full-time employment. Part-time employment has also become increasingly common. Participating in full-time study is negatively associated with being employed at any one point in time, but a higher level of educational attainment has a positive association with employment. Relationships between education and employment were apparent for each of the birth cohorts considered here. However, the higher levels of educational attainment of women in recent birth cohorts contribute significantly to increases in female employment amongst the most recent cohorts.

Patterns of relationship formation and childbearing have changed considerably for successive birth cohorts, especially among women aged in their twenties, and this appears to some extent to be related to the increased time spent in education. Delays in marriage and increased cohabitation are evident for these women, with young women in the most recent birth cohorts more likely to be single or cohabiting in their twenties than is the case for earlier birth cohorts. However, until children are born, relationship status for women of recent birth cohorts has little bearing

on employment. Young childless women's employment status does not vary with relationship status, unlike earlier birth cohorts, when women were less likely to be employed if married. Having children continues to be one of the very strong predictors of employment status. As expected, young children result in the lowest employment rates for mothers, and as children grow up, maternal employment rates increase. This is true in all birth cohorts.

Overall, changes in employment participation from earlier to more recent birth cohorts were affected by the extended time in full-time study (reducing employment rates during those years of study), complemented by higher education levels and the reduced amount of time spent at home in fulltime motherhood due to increasing employment rates. The other significant change evident in these data was the much greater use of part-time employment amongst younger cohorts, which is most commonly used by the more recent cohort while studying and while caring for children. The use or availability of part-time employment may have been one of the reasons for the overall increase in employment rates that was evident across these cohorts. We cannot discount, however, that other changes within the labour market may have provided a more welcoming environment for mothers, given significant change in policy and legislation over this time.

Part-time employment by mothers of young children is perhaps the preferred option for many women, because it enables them to devote more time to children without withdrawing from employment altogether. It is important that we understand the nature of this work, however, to assess whether it provides women with the labour market opportunities they need during the childrearing years, and beyond. Chapter 11 (this volume) addresses these issues in some detail by considering the characteristics of part time employment. It will also be interesting to examine the employment patterns of women as they move out of the prime childbearing years, through the years when they have care of older children, and as they move toward and into retirement years. This valuable work history, education, relationship and fertility history will enable rich analyses of these lifetime employment patterns.

The close associations between educational attainment, employment and relationship formation and childbearing for women are clearly apparent in these data. These patterns indicate that it is likely that there are educational differences in adherence to the "standard family life course" in Australia, as was shown for France, Sweden and the United States by Thomson et al. in Chap. 3. The birth cohort differences observed in these analyses suggest that educational differences are not uniform across the cohorts examined. Increasingly, a standard family life course for women in Australia involves increased time in full time education and longer periods in employment, both of which have implications for the timing of family formation. But compared to other countries, such as the US, France and Sweden, additional complexity is apparent in the Australian context by the concentration of mothers in part time employment. These contextual patterns support the need for country specific analyses to fully understanding the ways in which the second demographic transition and globalisation have impacted women's pathways through the life course.

Appendix 1

This analysis is based on Waves 1–4 of the Negotiating the Life Course project, incorporating women's work history, study history, fertility and relationship history and other details. Only women's responses were used, and the sample was further limited to women born between 1940 and 1979 representing 2,164 women.

Respondents who did not participate in all waves of the survey are included in the analyses since the main collection of work history data occurred in their first interview. Non-response at later waves meant that data could not be updated. This was not a concern for women aged 40 or over at the first interview, since complete data for the age range considered here had been captured at this first interview. Non-response at later waves was most problematic for the younger women, especially those aged in their twenties at the first interview, who had provided incomplete work history data for the age range considered in this chapter.

To undertake these analyses, a person-year dataset was created. This dataset had one record per person for each year since turning 15 to the most recent survey year. Record counts from this derived dataset are shown in Appendix Table 6.1. The data are tabulated by the age of women, such that when the work history data were available for all women for all of the 5 years in each age group, the sample count is equal to five times the number of persons (e.g. in the 1940s birth cohort, there were 344 women, and data were available for all of the years between ages 15 and 19 for all women, giving a total of 1,720 records). This table shows that some cells are affected by censoring, especially in the younger birth cohorts, because these women were still in their twenties at the most recent survey. The extent of this is seen in the decline in person-year records from one age group to the next. Some censoring also occurred due to non-response to waves following the initial collection of work history.

Appendix Table 6.1 Sample counts, work history dataset, Negotiating the Life Course project Waves 1–4

	Birth cohort				
	1940s	1950s	1960s	1970s	Total
Number of person-records	344	661	659	500	2,164
Mean age at most recent survey (years)	59	50	40	30	44
Person-year records					
Total	**15,427**	**23,805**	**17,041**	**7,869**	**64,142**
Age					
15–19	1,720	3,305	3,295	2,493	10,813
20–24	1,720	3,305	3,295	2,355	10,675
25–29	1,720	3,305	3,283	1,902	10,210
30–34	1,720	3,305	3,092	993	9,110
35–39	1,720	3,286	2,568	126	7,700
40–44	1,720	3,121	1,362	–	6,203
45 or older	344	601	102	–	1,047

In the same way as the yearly work history was collected, a study history was also collected. Using these data, respondents could be classified as studying full-time or part-time, or not studying in each year. Changes to the questions in Wave 3 meant the study data were only collected of those not working for the years 1997–2000. This was able to be corrected somewhat by checking the data against the detailed education questions. Detailed questions about educational attainment were also collected at each wave. As information was collected on the year of attainment of different qualifications, these data could be mapped to the person-year data to derive a measure of educational attainment across the years since turning 15.

The month and year of the commencement and end (if applicable) of respondents' current and past marriages and cohabitations were collected and updated across waves. When the history was first collected (in Wave 1, or Wave 4 for new respondents) respondents could report details for up to three marriages. Just six respondents were unable to provide complete relationship details because they had four or more marriages in either Wave 1 or Wave 4. (For these cases, relationship status for the person-years between the second and most recent relationships was set to missing.) Respondents were asked about time spent cohabiting before marriage, and this is incorporated. Details of cohabitations lasting 3 months or more were captured and included in the relationship details. As with marriages, only three cohabitations could be included, and when respondents were unable to provide their full cohabitation history relationship status was set to missing for person-years between the second and most recent cohabitation. As relationship details were updated across waves, details of more than three marriages or cohabitations could be captured.

Comprehensive fertility histories were also collected of every respondent. The birth date (year and month) of each child born (or adopted) was incorporated in this analysis. Other information was available for other children living in the family, but this was not included. This means step-children are not included when considering impacts of children on employment. This was necessary since no information were collected on when these step-children started living with the woman.

The relationship and birth information were restructured into a person-year-month dataset to derive data at this level on relationship status and the ages and numbers of children born to the respondent. To then merge this with the work history data, fertility and relationship status in July of each year was used (or the most recent data prior to this in a year if no details were provided for July). July was chosen as close to the mid-point of the year to reflect the likely fertility or relationship situation throughout the year. Clearly, this does not allow for change throughout the year but a more complex classification of fertility or relationships would need to be used in order to capture such changes.

These data were also used to derive an indicator for whether a woman was pregnant for some of the year. This was derived by assuming mothers with a child aged less than 1 year old (meaning born up to July that year) were pregnant for some time in the year before this. When a child was born August to December, that child was included, aged less than one, the calendar year after he or she was born. The 'pregnancy' indicator therefore will, accurately, indicate whether they were pregnant in the calendar year the child was born.

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Chapter 7
Who Gets Divorced? The Social Determinants of Marital Separation over the Life Course

Belinda Hewitt

Abstract As with most developed Western nations marriage dissolution has become a prominent feature in Australian family life over the last several decades. In this chapter data from the Negotiating the Life Course project is used to examine three key mechanisms through which social and demographic characteristics influence marital separation including factors that operate through normative and cultural mechanisms, those that influence the quality of the match, and factors that provide barriers to marriage dissolution. The chapter shows that all of these mechanisms are important for understanding marital separation and divorce. Men and women are less likely to experience separation if their normative and cultural social characteristics such as religiosity, birth cohort, ethnic background, and cohabitation before marriage reflect more traditional family organization and greater commitment to the institution of marriage. Similarly, social characteristics that imply a poorer mate selection process such as young age at marriage or early birth, or that decrease the ability of both or one spouse to negotiate relationships such as parental divorce, tend to increase the risk of separation. Barriers are also important for both men and women, with children and partners' income reducing the likelihood of separation. Ongoing changes in the timing and formation of relationships and women's economic status over the life course are all likely to have implications for future rates of marriage dissolution.

In Chap. 2 Mills and Blossfeld argue that the second demographic transition, characterised by falling fertility rates and ideological changes in relationship and family formation, has been also impacted by volatility and uncertainty in global

B. Hewitt (✉)
Institute for Social Science Research, The University of Queensland,
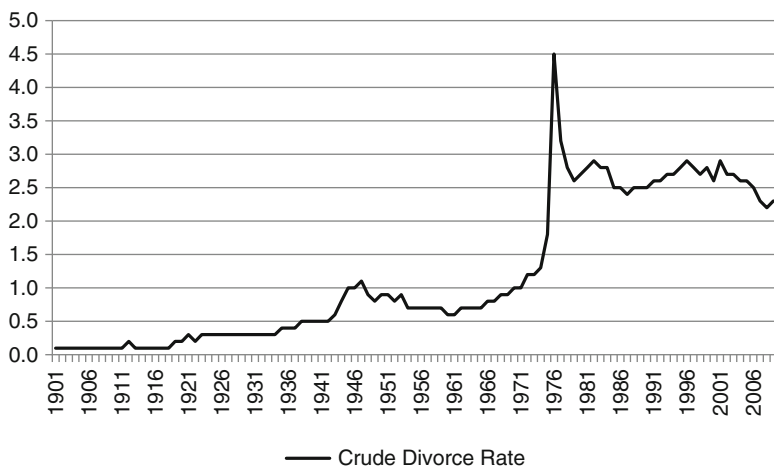St. Lucia, QLD, Australia
e-mail: b.hewitt@uq.edu.au

Fig. 7.1 Crude divorce rate Australia 1901–2009 (Source: ABS 2005, 2010)

economic markets. These two combined forces have led to increased uncertainty and instability in family life, characterised by, amongst other trends, an increase in marital dissolution in most developed countries. In the current chapter, trends and factors that influence marital dissolution in Australia are examined using data from the Negotiating the Life course survey.

Separation and divorce from a marriage is a dramatic life course event that a large number of Australians experience every year. Despite a plateau in the overall rate of divorce in Australian over the last three decades (see Fig. 7.1), divorce continues to be a pervasive social feature of Australian society. Currently around one-third of Australian marriages will end in divorce, and as younger marriage cohorts move through the life course this figure is expected to increase to around 45% (Carmichael et al. 1996). Moreover, the nature and characteristics of divorcing couples continue to change with increases in the median age of divorce, the median number of years to separation and divorce and a decrease in the proportion of divorces involving children under 18 (ABS 2007a, b). These trends suggest that separation and divorce continue to be important social issues in the Australian context.

A large body of research shows that separation and divorce have major social, emotional and financial implications for couples and their children in both the short and long term (see Amato 2000 for a review). Given these consequences a great deal of research has emerged over the last several decades to better understand why marriages end. This chapter provides an overview of this research and uses retrospective and longitudinal data from the Negotiating the Life Course project to examine the social characteristics that contribute to the risk of separation and divorce in Australia.

Who Gets Divorced? The Social Determinants of Marital Separation

The divorce literature is dominated by three main theoretical perspectives, role specialisation characterised by the work of Gary Becker, social exchange and bargaining theory. Even though Becker's neoclassical economic theory of household organisation was developed with reference to a relatively outdated and idealised 1950s view of household organisation, where a male head of household specialises in paid employment and a female head of household specialises in domestic labour and care work, current debates about separation and divorce continue to employ ideas and assumptions drawn from this perspective. Becker argues that the optimal household model is one where the male spouse concentrates on paid employment while the female spouse runs the household and raises children (Becker 1973, 1981; Becker et al. 1977). In other words, a successful marriage relies on complementary inputs from each spouse. This perspective implies that any deviation from 'traditional' divisions of labour within households increases marital instability.

The main sociological theory for explaining separation and divorce is social exchange theory (Blau 1964; Levinger 1965, 1976; Levinger and Moles 1979; Manser and Brown 1980; Edwards and Saunders 1981; McElroy 1990; Molm and Cook 1995). Similar to Becker's work this perspective employs cost-benefit analysis to understand why marriages end. But unlike a neoclassical economics approach which emphasises the structural functioning of a system (i.e. the family or household) a social exchange approach to explaining separation and divorce views marriage as an exchange relationship between actors that takes place in an institutional setting which establishes the costs and benefits of marriage (Blau 1964).

Researchers operating from a social exchange perspective identify a range of different factors which constitute "push" and "pull" forces that determine the balance of the overall costs and benefits of marriage (Levinger 1965, 1976; Levinger and Moles 1979; Edwards and Saunders 1981). For example, Levinger (1965, 1976; Levinger and Moles 1979) argues that the survival of marriage depends on the balance between the *attractiveness* of marriage, *barriers* to ending the marriage, and *alternative* attractions to the marriage. The attractiveness of a marriage is positively associated with perceived financial and non-financial rewards such as love, status, companionship, money, goods, services and security, and is negatively associated with the costs of staying in the relationship such as conflict, time and energy demands (Levinger 1976: 25). Put simply a marriage ends when the perceived costs outweigh the rewards.

Economic exchange bargaining explanations for divorce draw heavily on social exchange theory but emphasise economic aspects of marital relationships. The concept of alternatives is integral to economic exchange bargaining explanations of marriage dissolution. Within this framework each spouse uses their relative power, which is determined by their relative economic contributions to the household, to bargain for their preferences within marriage but this bargaining power is limited or enhanced by alternatives outside the marriage (Blau 1964; Edwards and Saunders

1981; Blau et al. 2006). In turn each spouse's alternatives to the marriage are shaped by broader social structures such as labour and marriage markets. The marriage is at risk when the perceived alternatives become more attractive than remaining married, which is known as the "divorce-threat point" (Manser and Brown 1980; McElroy 1990). Therefore factors such as marriage and divorce policies, labour market policies, state transfers, welfare provisions and other spousal alternatives to the marriage vary the divorce threat point and thereby influence the likelihood of separation and divorce (Lundberg and Pollack 1996).

Each of these theories, specialisation, social exchange and exchange bargaining, suggest that social characteristics and contexts are important predictors of marital separation and divorce. The application of these theoretical perspectives to understanding divorce processes has been limited because most, although not all,[1] empirical research testing these theories tends to focus on a narrow range of socioeconomic factors such as spouses' relative income, absolute income or employment status (see for example, Ono 1998; South 2001; Rogers 2004). Moreover, even though specialisation-trading, social exchange and exchange bargaining theories are the most influential theoretical perspectives in the divorce literature, much empirical research into the social determinants of divorce has taken place outside of these theoretical frameworks (White 1990). An equally large body of research adopts a life course approach to understanding separation and divorce. A life course approach operates from the premise that temporal and life course factors intersect to influence marital outcomes (Thornton and Rodgers 1987; Heaton 1991; Bracher et al. 1993). Researchers adopting this approach have identified a diverse range of social factors that influence whether a marriage ends or remains intact, many of which are often overlooked by the other theoretical approaches (White 1990).

Overall the literature suggests that social characteristics are important factors in understanding why marriages end or remain intact in three main ways; through shaping *normative and cultural* expectations of marriage and perceptions of marriage as a breakable (or unbreakable) bond; by influencing the *quality of the match*; and by providing *barriers* that limit spouse's alternatives outside of marriage and deter separation. In the next section of this chapter I draw on these frameworks to overview the findings of the empirical literature on the nature and extent of the association between socio-structural characteristics and separation and divorce.

Normative and Cultural Processes and Marital Separation

The first mechanism identifies factors that influence marital outcomes through *normative and cultural* processes. Researchers taking an economic exchange bargaining approach argue that normative and cultural factors can influence spousal preferences

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[1] There are a smaller number of studies testing or operating from a social exchange perspective that examine the association between a range of non-economic factors of marriage breakdown, for example Black et al. (1991), Thompson and Spanier (1983), Knoester and Booth (2000) and Previti and Amato (2003).

within marriage and therefore influence bargaining thresholds and divorce threat points (Lundberg and Pollack 1996). Other social exchange researchers have argued that some social factors influence commitment to marriage and thereby increase or decrease the risk of separation and divorce (Edwards and Saunders 1981). Thus, normative and cultural factors influence expectations about the conduct of marriage, commitment to the institution of marriage and attitudes towards divorce. These expectations and attitudes in turn influence spousal preferences within marriage that determine divorce threat points. Some of these factors are detailed below.

Marriage or birth cohort is a temporal influence related to the broader social norms that a person is exposed to during their formative years. It is well established in the divorce literature that recent marriage generations are more likely to divorce than older marriage generations (Heaton 1991; Bracher et al. 1993; De Graaf and Kalmijn 2006). Ideational shifts as a result of the second demographic transition, as well as increased labour market uncertainty, work-family conflict and competing careers of partners due to processes of globalisation, as detailed in Chap. 2, indicate possible reasons for increased marital instability in recent years. Both Giddens (1992) and Beck and Beck-Gernsheim (1995) identify shifts in the social expectations of long-term relationships and marriage over the last century. Presumably, older generations were normatively exposed to a *marriage culture*, where marriage was seen as an unbreakable bond (Hackstaff 1999). On the other hand, younger generations have grown up with *a culture of divorce* with expectations of a less stable but more egalitarian model of marriage (Hackstaff 1999). Some social changes that have occurred in Australia over the last century that are also likely to contribute to differences between older and younger generations in their willingness to divorce include an increasing acceptance of divorce (de Vaus 2004); legislative changes that have made divorce a less costly and time consuming process (Finlay 2005); and a substantial increase in married women's participation in the work force (Baxter 2003).

In Australia ethnic family origin is important for understanding marital outcomes (Roden 1989; Bracher et al. 1993; Jones 1994; de Vaus 1997). Previous research finds that compared to the Australian born population migrants from English-speaking backgrounds have higher rates of marriage breakdown and non-English speaking migrants have a lower risk of marriage breakdown. It is likely that the practices of marriage and family life in migrant populations differ from the mainstream population because they retain the cultural and religious beliefs and practices of their country of origin (Ware 1975). The increased risk of divorce amongst English speaking migrant populations in Australia may be because they come from countries such as the United States, the United Kingdom and New Zealand that have a culture of divorce (Yodanis 2005) and rates of divorce similar to or higher than those in Australia (United Nations 2005). Australian migrants from non-English speaking countries come from a more diverse range of countries but in many of these countries marriage and family practices are such that often divorce is not an option, particularly for women (and Rao and Sekhar 2002; see for example Bose and South 2003). Further, while specific ethnic groups are likely to experience different rates of divorce compared to Australians (and other ethnic groups) marriages that cross ethnic boundaries are particularly vulnerable (Jones 1994; de Vaus 2004).

This is consistent with Levinger's (1965) theory of attractions where homogeneity across ethnic groupings is seen to stabilise marriage because it facilitates adherence to social norms governing marriage.

Cohabitation may also be a factor that influences marital separation and divorce primarily through normative mechanisms, despite a popular belief that cohabitation improves the process of mate selection by giving couples the opportunity to get to know each other better, to negotiate roles and to develop communication skills prior to marriage (Becker 1981; Sarantakos 1994; Beck-Gernsheim 2002). In Australia (Bracher et al. 1993; de Vaus et al. 2003) and other comparable western countries such as the U.S. (Bumpass et al. 1991; DeMaris and Rao 1992) Canada (Hall and Zhao 1995; Hall 1996) and Europe (Liefbroer and Dourleijn 2006) researchers consistently find that people who cohabit prior to marriage have an increased likelihood of marriage breakdown compared to those who do not cohabit. The predominant explanation for this paradox[2] is that those who cohabit are less conventional in their attitudes towards relationships and marriage and have lower levels of commitment to marriage than those who do not. People who cohabit before marriage are therefore more likely to divorce than those who do not (Lillard et al. 1995; Hall 1996). Cohabitation prior to marriage thus reflects values and beliefs that are likely to increase the risk of separation and divorce. Although, it should be noted that some research indicates that cohabitation does not increase the risk of separation for more recent marriages suggesting that as cohabitation prior to marriage becomes commonplace in younger cohorts there has been a reversal of the association, where those who do not cohabit have an increased propensity to separate (Klijzing 1992; Hewitt and de Vaus 2009).

Attitudes and beliefs directly affect the risk of separation by influencing respondents' expectations of the conduct of marriage and family life, commitment to marriage and the acceptability of divorce. The two most common attitudinal measures used in the divorce research literature are religion and gender role attitudes. The belief systems of many religions encourage and support marriage as a sacrosanct bond formed with the consent of God which reduces the likelihood of divorce for those who adhere to these beliefs (Waite and Lehrer 2003). Previous research finds that it is not necessarily religious affiliation with a particular faith, but religiosity, or the level of engagement with religion, that is important in determining marriage

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[2] Two other less supported explanations for the increased risk of divorce with cohabitation have also been proposed. One is that the experience of cohabitation increases the propensity to divorce. For example, Axinn and Thornton (1992) found respondent's attitudes towards acceptance of divorce were more positive after a period of non-marital cohabitation than they were prior to a period of non-marital cohabitation. More recently a study by Dush et al. (2003) found that both selection arguments and the experience of cohabitation argument need to be integrated to better understand the association between cohabitation and marriage breakdown. The second is a measurement explanation (de Vaus et al. 2003; DeMaris and Rao 1992) that emphasises that couples who cohabit before marriage have been in the relationship longer than those who do not cohabit. They have therefore had longer exposure to the risk of relationship dissolution, which explains in part the higher rates of dissolution observed for marriages preceded by cohabitation.

outcomes (Call and Heaton 1997). Religiosity has a strong negative association with separation and divorce because people who have higher levels of religiosity tend to have stronger commitment to and more traditional views of marriage (Amato and Booth 1995; Greenstein 1995; Heaton and Blake 1999; Rogers and Amato 2000).

More traditional gender role attitudes are also associated with more stable marriages. Traditional gender role attitudes uphold a gender based division of labour and support the consequent interdependence and power differentials between spouses whereby husbands are the primary breadwinners and wives are the primary home makers and carers. In contrast non-traditional gender role attitudes emphasise shared and negotiated divisions of labour where both spouses participate in economic activities and home based activities with an emphasis on shared power. Holding non-traditional gender role attitudes increases the potential for conflict within marriage because they challenge the gender based divisions of labour that underpin marriage and family life as well as labour market and employment policy and legislation (Broomhill and Sharp 2005; Pocock 2005).

Quality of the Match and Separation

The second mechanism relates to social characteristics that affect the *quality of the match* of the marriage and either increase or decrease the likelihood of marital separation and divorce. The quality of the match is a particularly important feature of Becker's theory. For example Becker (Becker 1973, 1981; Becker et al. 1977) argues that the process of mate selection is important for marital stability because the better the quality of the match the greater the chances of a successful marriage. Social factors that are seen to indicate better or poorer mate selection processes are age at marriage, premarital birth, premarital pregnancy and cohabitation prior to marriage. Social exchange theory also implies that relationship characteristics that influence the quality of the match are important for understanding marriage breakdown. For example, Levinger (Levinger 1965, 1976; Levinger and Moles 1979) argues that whether or not separation and divorce occurs partly depends on the attractiveness of the marital relationship.

Some social characteristics disrupt marriage by undermining one or both spouses' ability to successfully negotiate a marital relationship which detracts from the attractiveness of marriage and affects the quality of the match. For example, a consistent finding in the divorce literature is that respondents whose parents have divorced are more divorce prone (McLanahan and Bumpass 1988; Amato 1996; Beck-Gernsheim 2002). The most common explanation is that children of divorced parents receive poor socialisation and role modelling for marriage (Mueller and Pope 1977; Kiernan and Cherlin 1999; Teachman 2002, 2004). Although, children of divorced parents compared to children with still married parents, are more likely to have relationship and fertility histories that increase the risk of divorce (Teachman 2002).

Other social characteristics affect the quality of the match by placing stress and strains on the relationship increasing the propensity for disagreement in the

relationship and the risk of separation and divorce. Children born before marriage increase the risk of the marriage ending (see White 1990 for a review). One possible explanation is that premarital children may encourage marriage with an unsuitable partner (Waite and Lillard 1991). Alternatively, if the premarital child is not the biological child of one partner (with the exception of foster or adopted children) they may be a destabilising force in the marriage in similar ways to step children in remarriages (Morgan and Rindfuss 1985; Coleman et al. 2000).

Children born early in marriage can also increase the risk of separation, as they may add stress and strain in the developmental stages of the marriage (Waite and Lillard 1991). A birth early in marriage may also indicate a "shot-gun" wedding where a couple decides to marry because of pregnancy (Teti and Lamb 1989). This destabilises marriage because it speeds up the mate selection process and a couple may decide to marry when they otherwise would not. The evidence for the relationship between premarital births and pregnancies and marital separation is mixed. Becker et al. (1977) found premarital conception increased the risk of divorce. In contrast, Morgan and Rindfuss (1985) found that premarital conception moderately reduced the risk of marital separation, while Waite and Lillard (1991) found no significant association between premarital conception and separation and divorce.

Another factor that indicates the quality of the mate selection processes is age at marriage. In Australia, people who marry under the age of 25 have a greater risk of divorce than those who marry after age 25 irrespective of the year they married (ABS 2000). Some argue that young age at marriage reflects a poor mate selection process because it implies that a shorter time was spent searching for a marriage partner (Becker 1981; England and Farkas 1986; Kalmijn and Poortman 2006). Others argue that these marriages face greater risk because the couple are less likely to have developed the maturity and social skills required to negotiate a long-term marital relationship and often do not have access to adequate socioeconomic and financial resources (Moore and Waite 1981; Teti and Lamb 1989; South 1995; Wolcott and Hughes 1999).

Barriers to Separation

The third mechanism identifies factors that operate as *barriers* to marriage termination. Barriers are factors that deter marital separation when one or both spouses are considering ending the marriage (Levinger 1976). Some social factors represent investments in the relationship that are unavailable or less valuable outside of the relationship and other factors limit the attractiveness of alternatives to the marriage and therefore deter marital separation and divorce.

The role of children in marriage and marriage breakdown is an important one. According to Levinger's (1976) psychosocial perspective on marriage breakdown children represent a restraining force when one or both partners are considering terminating the relationship. Researchers have identified that one of the most important deterrents to marital separation is concern over loss of contact with children and children's well being if divorce occurs (Knoester and Booth 2000; Poortman and

Seltzer 2005). But children deter divorce in other ways. From Becker's (1973, 1981; Becker et al. 1976) perspective children are the most important form of marital-specific capital whose value diminishes with divorce. And an exchange bargaining theoretical perspective emphasises women's restricted access to resources outside of marriage when children are born, which reduces their bargaining power within marriage and their alternatives outside of marriage and therefore reduces the risk of marital separation and divorce (Brinig and Allen 2000).

Arguably the main structural explanation for the increase in separation and divorce in Western countries is the overall improvement in women's socioeconomic position relative to men's particularly over the second half of the twentieth century. Access to economic resources is considered important for all theoretical perspectives overviewed earlier but the mechanisms whereby the increase in women's access to economic resources contributes to marital instability differ across each theoretical approach. From a social exchange perspective a wife's access to economic resources implies that she could survive economically should the marriage end and increases her alternatives outside of marriage (Blau 1964; Cherlin 1992; Beck and Beck-Gernsheim 1995). The other mechanism suggested by a neoclassical economic model is that a wife's participation in the paid work force, results in lower returns to marriage for both partners and therefore destabilises the marriage (Oppenheimer 1997). Both approaches view a husband's lack of economic resources and a wife's access to economic resources or economic independence as destabilising for marriage because economic resources increase women's alternatives outside of the marriage (Ono 1998; Sayer and Bianchi 2000).

Negotiating the Life Course: Data on Divorce in Australia

In the remainder of this chapter, data from the Negotiating the Life Course project is used to examine the associations between factors that influence these three mechanisms and the probability of marital separation or divorce. The Negotiating the Life Course project collects information on a large range of factors that are likely to be associated with whether a marriage ends or remains intact. The next section explores some of these associations. To fully exploit the strengths of the Negotiating the Life Course project for investigating whose marriages end and whose remain intact, two analytic approaches are used. One is a retrospective approach and the other is a longitudinal approach. In both sets of analysis the dependent variable is separation from marriage; separation is used as the indicator of marital breakdown, because in Australia it can take several years for people to legally divorce even though they have officially separated.

In Fig. 7.2 below the survival rates for first marriages using retrospective marriage history data from respondents in Wave 1 of NLC are presented. This graph shows us the proportion of respondents surviving separation at each time interval (marriage duration). This indicates that just over 50% of first marriages of respondents in Wave 1 of NLC had ended in separation. Approximately half of these marriages ended within 12 years of marriage, although the survival rate is relatively stable over
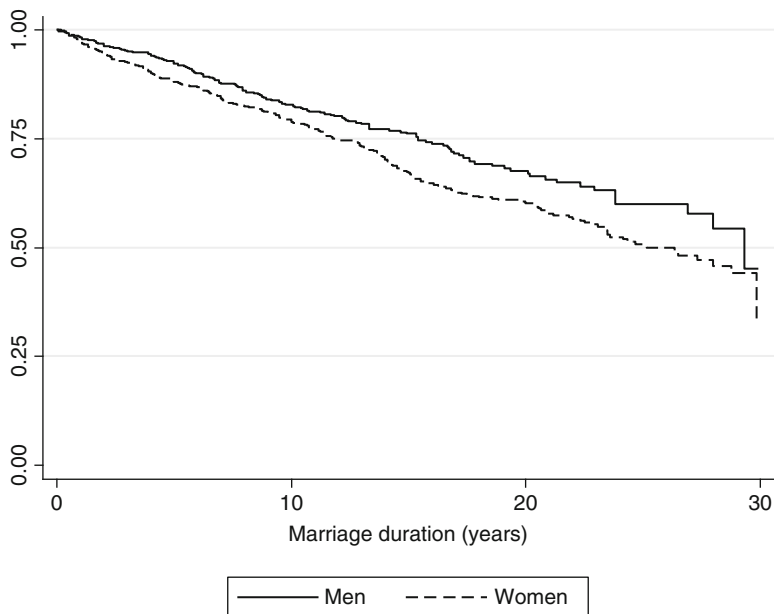
Fig. 7.2 Kaplan Meier Survival estimates of first marriages, by gender (Source: NLC Wave 1)

Table 7.1 Number and % of men and women who separated between 1996 and 2006

	Men		Women	
	N	%	N	%
Married	564	93	751	91
Separated	41	7	71	9
Total	605	100	822	100

Source: NLC Wave 1 to Wave 4

the 30 year period shown here. This patterning of marriage survival is somewhat different from previous research using other data sources (for example Hewitt et al. 2005). This may be due in part to the fact that the NLC survey was age limited to people aged 18–54 in Wave 1 and therefore there were fewer people who had been married for longer durations.

In Table 7.1 the numbers of respondents who separated between 1996 and 2006 are shown. Over the 4 waves we find that a relatively small proportion of marriages ended over the 10 years, 7% (n=41) for men and 9% (n=71) for women.

Due to the relatively small numbers of separated respondents several models are estimated[3] each including a range of covariates that are used as indicators for the three mechanisms identified earlier in the review.

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[3] Other modeling approaches were tried such as pooling the data for men and women and interacting gender with all model covariates, but this approach over stratified the models so the initial approach of running models with smaller numbers of covariates was retained.

Table 7.2 Descriptive statistics (proportions, means and standard deviations) for model covariates for retrospective and longitudinal data sets

	Retrospective data set	
	Men	Women
	%/Mean (SD)[a]	%/Mean (SD)
Year of marriage	77.81 (8.1)	76.51 (8.6)
Ethnic Background:		
Australian born	75%	80%
Migrant: English speaking	15%	13%
Migrant: non-English Speaking	10%	7%
Cohabited before marriage (1 = yes)	36%	31%
Parents Divorced	11%	13%
Age at Marriage	24.26 (4.2)	22.00 (3.5)
Children:		
No Child	5%	4%
Premarital pregnancy	13%	12%
Premarital birth	7%	7%
First child born in marriage [tv]	61%	65%
Missing Data	<1%	0%
Number of respondents	622	909
Number of separations	143	279
Marriage-years	7,921	12,036
	Longitudinal data set	
	Men	Women
Gender role attitudes		
Traditional	70%	29%
Non-traditional	30%	71%
Religiosity		
Very important	12%	18%
Not very important	88%	82%
Respondents Income	$56,382 ($77,230)	$29,586 ($34,610)
Partners Income	$14,989 ($21,801)	$30,734 ($34,081)
First marriage	94%	90%
Second > marriage	6%	10%
Marriage duration (months)	211.84 (113.5)	229.55 (122.9)
Number of respondents	567	756
Number of separations	41	71
Number of wave observations	2.7	2.7

[a]Proportions are reported for categorical measures and means and standard deviations are presented for continuous measures

Measures of Cultural and Normative Factors

Details of each of the independent variables in these analyses are shown in Table 7.2. Year of marriage is an indicator of temporal conditions influencing respondents and is included in the models as a continuous measure. The measure for ethnic background includes three categories 1 = Australian born, 2 = Migrant: English speaking

background, and 3 = Migrant: non-English speaking background. A measure for whether or not the respondent cohabited with their marriage partner prior to marriage was also included (1 = yes).

At each wave of the Negotiating the Life Course project a range of questions were asked in relation to attitudes and values. Attitudes towards gender roles were measured with the question "It is better for the family if the husband is the principal breadwinner and the wife has primary responsibility for the home and the children". Response categories were strongly agree, agree, mixed feelings, disagree and strongly disagree. Responses were concentrated in the "agree" and "disagree" categories so the measure was collapsed to a dichotomy where disagreement with the statement was coded 1 to indicate a more "non-traditional" gender role orientation and agreement was coded 0 to indicate a more "traditional" gender role orientation. (Those with mixed feelings were coded as 1). Religiosity was measured with a question asking "How important is religion in your life?" Response categories were very important, important, somewhat important, or not at all important. This measure was collapsed into a dichotomy indicating whether a respondent thought religion was very important (1 = yes), relative to the rest.

Measures of Quality of the Match

A range of measures that may influence the quality of the marriage match were also included. We include a measure of parental divorce in response to the question: "Did your parents ever divorce or separate from each other?". If the respondent replied "yes" they were coded 1 with a referent of 0 = "no". Age at marriage was included as a continuous measure. Finally, using the date of birth information for children combined with the date of marriage two different measures for premarital children were generated. The first was an indicator for whether or not the respondent was pregnant, but did not have the baby prior to marriage. This measure was coded 1 if the baby was born less than and up to 8 months after marriage. There may have been some measurement error due to premature births, but this is unlikely to be a large amount. The second is a measure of whether or not the respondent had a baby prior to marriage. This measure was coded 1 if the date of birth of the first child was earlier than the date of first marriage.

Measures of Barriers

In contrast to children born before marriage which may be destabilising for a marriage, children born within marriage are viewed as a barrier to separation. Using the same date of first birth and date of first marriage information used to develop the measures for premarital pregnancy and birth, if the first child was born 9 months or longer after the first marriage they were coded 1. This measure is also time varying,

Table 7.3 Discrete time event history (retrospective) analysis of cultural and normative factors associated with separation

	Men	Women
	Hazard	Hazard
Year of marriage	1.10***	1.10***
Ethnic Background:		
Australian born	1.00	1.00
Migrant: English speaking	1.05	1.07
Migrant: Non-English speaking[a]	1.54†	0.75
Cohabit prior to marriage	1.90**	2.21***
Number of separations	143	279
Person-years	7,921	12,036

Source: NLC Wave 1

Note: Results from a discrete time event history analysis of on 1,531 first marriages (men = 622 and women = 909), with a total of 422 separations (men = 143 and women = 279). Models also include controls for duration dependence

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

[a]The gender differences between men and women are statistically significant at $P < .05$

so for each year of marriage where there are no children the measure is coded 0, whereas from the year the first child is born the measure is coded 1.

At each wave of the Negotiating the Life Course, respondents were asked information about their own income and their partners' income. The measure for respondents income is an estimate of their total income, including wages, business income and government benefits. This broad measure was used since according to a bargaining framework earnings from non-salaried or waged work are equally important in determining whether or not separation occurs. The measure for partners' income is by proxy report only (as only one main respondent is interviewed in each household) and the measure provides an estimate of their total income. Respondents and partners income was divided by $1,000 for inclusion in the models (i.e. $25,000 = 25).

The Social Determinants of Marital Separation: Insights from the Negotiating the Life Course Project

Normative and Cultural Factors and the Probability of Separation

The information available in the Negotiating the Life Course project enable us to investigate the association between a range of social characteristics that influence the normative and cultural mechanisms that either shape, or reflect a person's attitudes and beliefs about marriage and divorce and thereby influence spousal preferences within marriage and divorce threat points. In Table 7.3 the results of a discrete time

event history model examining the associations between a range of normative and cultural social factors and separation are presented. The results are presented as hazard rates. A hazard ratio over 1 implies a positive association and a hazard rate below 1 implies a negative association.

Overall, the results are fairly consistent with previous research. The positive, significant hazard rate for year of marriage indicates that those who married more recently are more likely to separate. The magnitude of this effect is quite large as it increases by 10% each year. Therefore, if we compare a person who married in 1966 with someone who married in 1980, the hazard of separation is 1.4 times greater for the person who married in 1980 (1980–1966 = 14*.10 = 1.4). The results indicate that in general ethnic background is not significantly associated with separation, with the only exception that men from non-English speaking countries have a higher risk of separation than Australian born men. The gender differences for men and women from non-English speaking countries are statistically significant, where women from non-English speaking countries have a lower hazard of separation than men. Although, it should be noted, this result may be a product of the relatively small numbers in these groups. Finally the results suggest that cohabitation prior to marriage increases the risk of separation.

Attitudinal factors, such as gender role attitudes and religion are better captured using prospective longitudinal data. This is because of the temporal ordering of the measures. In the retrospective data, many of the respondents separated several years prior to the first wave of data collection; it is likely that over time attitudes have changed, or that the event of separation or divorce from a first marriage has influenced attitudes. Therefore using the prospective data a simple analysis is undertaken to examine whether gender role attitudes and the importance of religion in the previous wave is associated with separation in the following wave.

Figure 7.3 presents the results from a longitudinal model investigating the association between gender role attitudes and separation. Results are presented as odds ratios. Both men and women who have less traditional gender role attitudes have a higher probability of separation between waves. For women, the magnitude of this association is much larger and is marginally significant at $p = 0.07$, although the gender differences are not statistically significant. This overall pattern of results is consistent with previous research finding that women's gender role attitudes are more likely to be non-traditional than men's, and that women who have more non-traditional gender role attitudes are more likely to separate (Heaton and Blake 1999).

Figure 7.4 presents the results of a longitudinal model examining the association between the importance of religion and the probability of separation. The association between the importance of religion and separation was not statistically significant for either men or women. Nevertheless, the association is in the expected direction where respondents who place a higher importance on religion have a reduced probability of separation than those who place a lower importance on religion.
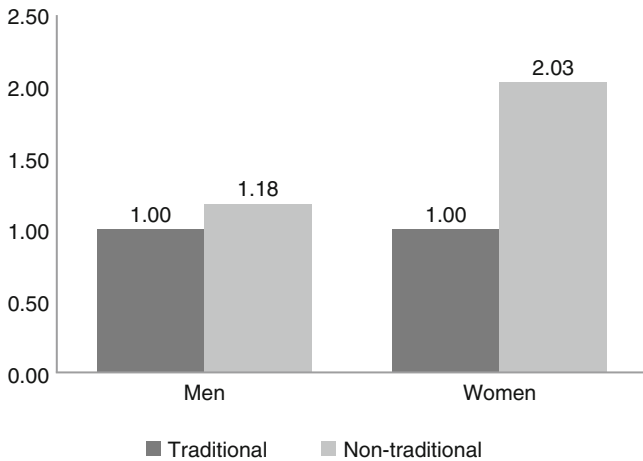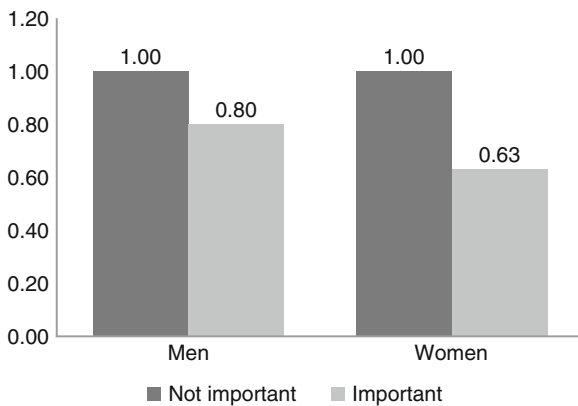
Fig. 7.3 Gender role attitudes and the probability of separation, by gender. Notes: Graphs based on estimates from random effects models on 1,318 (men = 567 and women = 756), with an average of 2.7 wave observations per person (overall person years = 3,558). Over waves 2, 3 and 4 of the Negotiating the Life Course project we have complete data on 112 marital separations (men = 41 and women = 71). Models also include controls for marriage duration at wave 1, whether it is their first marriage or not and a lagged measure for gender roles (Source: Waves 1 – 4 of NLC)

Fig. 7.4 The importance of religion and the probability of separation, by gender. Notes: Graphs based on estimates from random effects models on 1,318 (men = 567 and women = 756), with an average of 2.7 wave observations per person (overall person years = 3,558). Over waves 2, 3 and 4 of the Negotiating the Life Course project we have complete data on 112 marital separations (men = 41 and women = 71). Models also include controls for marriage duration at wave 1, whether it is their first marriage or not and a lagged measure for religiosity (Source: Waves 1 – 4 of NLC)

Table 7.4 Discrete time event history retrospective analysis of factors affecting the quality of the match and the likelihood of separation

	Men	Women
	Hazard	Hazard
Parents divorced (1=yes)	1.13	1.17
Age at marriage	0.95*	0.94**
Premarital Pregnancy	1.16	1.43*
Premarital Birth	2.07**	1.49†
Number of separations	143	279
Person-years	7,921	12,036

Source: NLC Wave 1

Note: Results from a discrete time event history analysis of on 1,531 first marriages (men=622 and women=909), with a total of 422 separationsv (men=143 and women=279). Models also include controls for duration dependence, missing children information, and having no children

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

Factors Affecting the Quality of the Match and the Probability of Separation

Some social characteristics disrupt marriage by undermining spouses' ability to successfully negotiate a marital relationship, which in turn detracts from the attractiveness of marriage and affects the quality of the match. The results below from a discrete time event history model shown in Table 7.4, indicate that while parental divorce was not significantly associated with separation, the direction of the hazard rate was consistent with previous research which finds that parental divorce increases the risk of separation for both men and women.

Age at marriage was significantly associated with separation, where older age at marriage is associated with a lower risk of marital breakdown. Further, this association is relatively large. An additional 1 year delay in age at marriage reduced the hazard of separation by 5% per year for men and 6% per year for women. Therefore, if we compare a man who married at age 18 with a man who married at age 28, the older man's hazard of separation was 40% lower than the younger man ($0.95^{10}=0.60$; $1-0.60=40$). Even more pronounced, the hazard of separation for a woman who married at 28 was 49% lower than for an 18 year old ($0.94^{10}=0.51$; $1-0.51=49$).

Overall, having a premarital child or pregnancy implies an increased risk of separation for men and women.[4] For men, a premarital pregnancy is not significantly associated with separation, but the hazard is in the expected direction. Having a child before marriage is associated with a 107% increase in the hazard of separation compared to men who do not have a premarital child. Similarly for women a premarital pregnancy significantly increased the hazard of separation by 43%, compared

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[4] Note that we do not know if the premarital child is the child of the current partner, or if the child lived with the respondent in their first marriage.

Table 7.5 Discrete time event history retrospective analysis of factors representing barriers to separation and divorce from a first marriage

	Men	Women
	Hazard	Hazard
First child born in marriage[tv]	0.61*	0.60***
Number of separations	143	279
Person-years	7,921	12,036

Source: NLC Wave 1

Note: Results from a discrete time event history analysis of on 1,531 first marriages (men=622 and women=909), with a total of 422 separations (men=143 and women=279). Models also include controls for duration dependence, missing information on children, premarital birth or pregnancy and no children

[tv] Measure is time-varying

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

to those who conceived their first child after marriage. The hazard of separation for women who had a child before marriage was 49% greater than women who did not have a premarital child, but this is only marginally significant.

Barriers to Separation and Divorce

The final analyses examine the association between factors representing barriers to divorce. In Table 7.5 the results of a model examining the association between marital children and separation are presented. If the first child is born within marriage, the hazard of separation is around 40% lower for both men and women than if they had a premarital birth or pregnancy or no children.

Arguably one of the most common barriers identified in the divorce literature is the economic advantages to staying married. One of the most proximate measures of economic advantage is the income that each partner brings to the relationship. The results of a model predicting the probability of separation on the basis of both respondents and partners income is presented in Fig. 7.5. For men, their own income was not significantly associated with the probability of separation, however higher partner's income significantly decreased the likelihood of separation for men.

The results were similar for women, however the associations were stronger. For women, the probability of separation significantly increased with their income, which is significantly different to the results for men. In addition for women, partner's income was a much stronger determinant of whether or not they separated, where the more their husband earned the lower the risk of separation. This is also significantly different to the results for men.

Interestingly own income was less important in predicting separation for both men and women, although this is to be expected, because to operate as a barrier it would be the income you are losing that would deter separation rather than the income you retain after separation (i.e. your own). These results are also consistent

Men
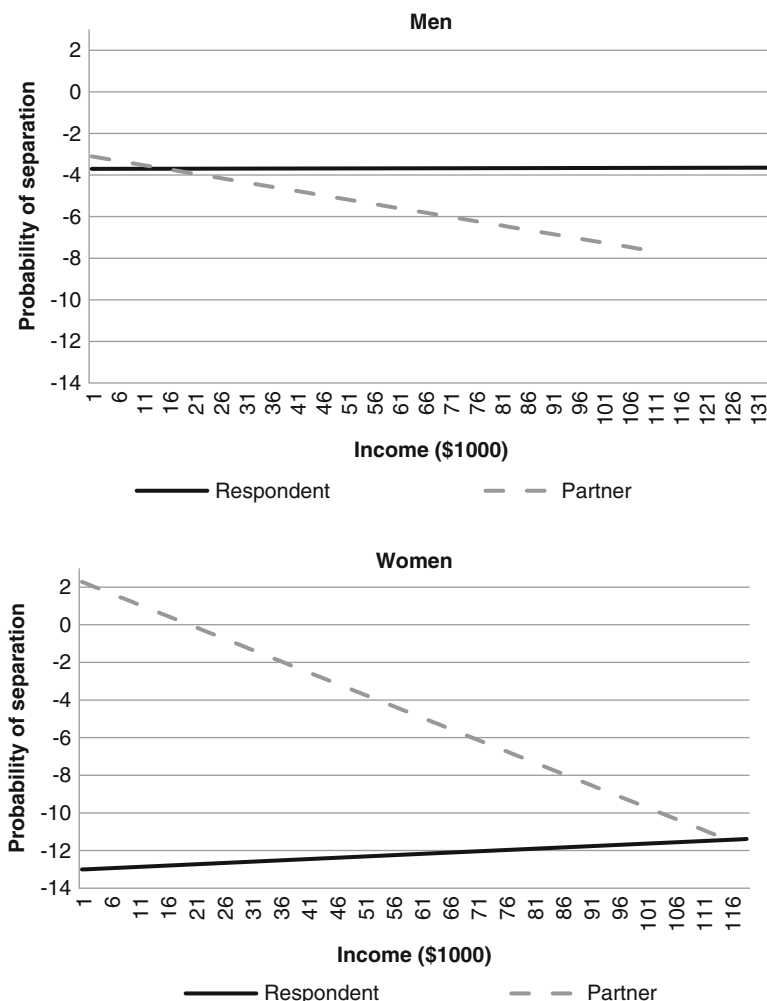
Women

Fig. 7.5 *Respondents and partners annual income and the probability of separation, by gender.* Notes: Graphs based on estimates from random effects models on 1,318 (men=567 and women=756), with an average of 2.7 wave observations per person (overall person years=3,558). Over waves 2, 3 and 4 of the Negotiating the Life Course project we have complete data on 112 marital separations (men=41 and women=71). Models also include controls for marriage duration at wave 1 and whether it is their first marriage or not. Models exclude both men and women who were earning in the top 99 percentile of income to resolve any problems to do with outliers unduly influencing the results. The maximum income earned by a male's partner was $111,000 (Source: Waves 1 – 4 of NLC)

with recent divorce literature which suggests that the economic contributions of wives may provide important resources, offer financial stability in uncertain labour markets and thereby reduce the risk of marriage breakdown. Further, as the participation of married women and mothers in paid employment increases and becomes 'normal', it is likely that the impact of women's workforce participation on marital

separation will be attenuated (Jalovaara 2003). There are a number of studies that offer strong empirical support for this view (Ono 1998; Sayer and Bianchi 2000; Rogers and DeBoer 2001; Poortman and Kalmijn 2002). Under these scenarios, wives' economic resources relative to their husbands are seen as essential to understanding why marriages end or remain intact.

Discussion and Conclusion

The aims of this chapter were twofold. The first was to identify the key theoretical perspectives and empirical life course literature on the social correlates of marital separation and divorce, and to develop a consistent theoretical framework for combining them. The second was to investigate the expected associations using data from the Negotiating the Life Course project. Together these literatures suggest that even though marriage is a union between two people, marriage and marriage breakdown are integrated into wider social contexts and there is a definite structural base to marriage and family life that can be informed by understanding the global social processes outlined by Mills and Blossfeld in Chap. 2 (this volume). As Levinger (1979: 38) points out "The private lives of marriage partners are intertwined with events in their surrounding social and economic environment".

Combining the theoretical and empirical literatures identified three key mechanisms through which social factors influence marital separation including factors that operate through normative and cultural mechanisms, those that influence the quality of the match, and factors that provide barriers to the termination of marriage. The retrospective and longitudinal life course data from the Negotiating the Life Course project suggests that all of these mechanisms are important for understanding marital separation and divorce. Men and women are less likely to experience separation if their normative and cultural social characteristics such as religiosity, birth cohort, ethnic background, and cohabitation before marriage reflect more traditional family organisation and greater commitment to the institution of marriage. Similarly, social characteristics that imply a poorer mate selection process such as young age at marriage or early birth, or that decrease the ability of both or one spouse to negotiate relationships such as parental divorce, tend to increase the risk of separation. Finally, barriers to separation were also important. Marital children reduced the hazard of separation. For both men and women partners' income operated as a barrier to separation, although their own income was less important.

There are two key aspects of relationship dissolution that this chapter has not considered. First, the focus on legal marriage means that de facto unions are not included in these analyses and hence the rate of relationship breakdown is underestimated. Of course, as Thomson notes in Chap. 3 (this volume), whether or not someone forms a partnership may be more important than the type of partnering for understanding pathways through a "standard" family life course. However, while long term de facto partnerships are growing in popularity and increasing numbers of children are born in de facto relationships (de Vaus 2004), cohabitation remains a step into marriage, rather than an alternative to marriage for the majority of people.

Marriage remains the dominant form of long term partnering in Australia (Baxter 2003; de Vaus 2004). Moreover as discussed above, whether a partnership is de facto or de jure may influence whether an individual steps off the standard family life course. Second, this chapter focuses on life course influences on separation, with an emphasis on socio-structural factors, which have been found to be important predictors of marriage breakdown. These factors do not provide insight into the micro relational processes of marriage breakdown within couples, such as people's reported reasons for divorcing or the quality of their interpersonal relationships.

Despite these limitations it is clear from the analyses here that marriage, separation and divorce have a social and structural basis. Relationships do not occur in a social vacuum, but are influenced by the context in which they occur. Therefore understanding people's life course trajectories using longitudinal information on people over time is essential for developing our knowledge about the nature and stability of relationships in changing social contexts. Family life has undergone dramatic changes over the last several decades, but current social and demographic trends suggest that change and diversity will continue into the future, as argued by Mills and Blossfeld in Chap. 2 (this volume). The argument put forward by Thompson et al. in Chap. 3 (this volume) that the majority of people in their cohorts from France, Sweden and the USA experienced a "standard family life course", may be a reflection of the cohorts they examined. It is quite possible that the standard family life course, as defined in Chap. 3, will become less common for more recent cohorts. The findings of this chapter indicate that changes to age at marriage, rates of cohabitation, and fertility timing are all likely to lead to further increases in rates of divorce.

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Chapter 8
Pathways Through the Life Course: The Effect of Relationship and Parenthood Transitions on Domestic Labour

Janeen Baxter, Belinda Hewitt, Michele Haynes, and Mark Western

Abstract This chapter examines variations in time spent on domestic labour and perceptions of the fairness of the domestic division of labour as men and women transition through two key life course events, marriage and childbirth. We use longitudinal data from the Negotiating the Life Course project enabling examination of housework patterns and fairness perceptions before and after transitions to marriage and parenthood. Our results show that women spend considerably more hours on average doing housework than men and that women are more likely than men to perceive the division of housework as unfair. The transition to motherhood results in an increase in women's routine housework hours, but for men there is considerable stability in housework hours across marriage and parenthood transitions. Perceptions of housework fairness do not change following the transition to marriage, but there is some evidence that having a first child increases both men's and women's perceptions that housework arrangements are unfair. We conclude that future work on domestic labour needs to move beyond cross-sectional approaches to explanations of variations in behaviour and perceptions within individuals over the life course.

J. Baxter (✉)
School of Social Science and Institute for Social Science Research,
University of Queensland, St. Lucia, QLD, Australia
e-mail: j.baxter@uq.edu.au

B. Hewitt • M. Haynes • M. Western
Institute for Social Science Research, University of Queensland, St. Lucia, QLD, Australia

Feminist researchers have long been concerned with the gendering of labour within households. This concern stems from the view that women's responsibility for unpaid childcare and housework lies at the heart of gender inequality in modern societies. Many researchers, policy-makers and activists have argued that women's responsibility for unpaid labour and caring work underlies broader patterns of gender inequality. The widespread entry of married women into paid market work from the 1970s onwards was expected to herald an associated change in men's levels of involvement in unpaid domestic and caring work. But there are mixed views about just how much change has taken place in the home and whether we are witnessing new areas of gender inequality, particularly in access to leisure (Sayer 2005).

Some research suggests that domestic labour patterns are beginning to change with evidence of greater involvement by men in domestic work, particularly childcare, a decline in women's time on domestic work and overall evidence of broad gender equality in total workloads of men and women (Sullivan 2006; Baxter 2002; Bianchi et al. 2006; Sayer et al. 2009). Relative to gains in women's involvement in paid labour and access to higher education, however, change in domestic labor patterns has been slow and the domestic division of labour has remained remarkably stable. For example, recent research indicates that women are still responsible for about 70% of domestic labour and while men have increased their levels of involvement in some areas, such as childcare, so have women (Sayer 2005; Craig 2007; Fuwa 2004). At the same time, there is increasing evidence that women have much less free time than men, particularly when they have young children, and that mothers in paid employment experience longer work weeks than men (Sayer et al. 2009; Craig and Mullan 2009). Furthermore, new forms of gender inequality have emerged over recent decades, with many women now responsible for a "second shift" and mothers increasingly expected to be both good earners and good mothers (Hochschild 1989; Craig and Mullan 2009).

Much of the empirical analyses underlying these claims have relied on comparisons of cross-sectional samples over time that compare individuals and households with differing characteristics (see for example Sayer 2005). These studies provide insight into patterns of change across cohorts or groups with differing characteristics, but implicitly assume that levels of involvement in domestic labour are constant within individuals over time. Good quality longitudinal data that contains detailed information on the domestic division of labour are increasingly available enabling examination of how the domestic division of labour varies within individuals across the life course in response to changes in key life events such as marriage and the birth of children (see for example, Sanchez and Thomson 1997; Gupta 1999; Baxter et al. 2008; Kan and Gershuny 2010).

A life course perspective is important given the dramatic changes over recent years in the patterning, timing and duration of marriage and childbirth including the increase in new forms of partnering such as cohabitation, greater labour market uncertainty and instability and increased work-family conflict. As Mills and Blossfeld point out in Chap. 2 of this volume, demographic, economic and cultural changes associated with the second demographic transition and globalization have led to important changes in the life course pathways and experiences of individuals.

While the pathways from family of origin to marriage and parenthood may have once been relatively stable and consistent across groups, the demography of families and households has changed radically in recent years due to a combination of demographic, economic and cultural changes. Australia is no exception as shown by McDonald and Reimondos, Evans, Hewitt and others in this volume. The rise in cohabitation rates, decline in marriage and fertility rates, delay in age at first marriage and first birth, and rise in divorce and remarriage rates means that pathways through the life course have become progressively more varied and complex. Individuals are spending larger amounts of time living outside the traditional family unit (South and Spitze 1994; De Vaus 2004) and it is increasingly important therefore that we understand how the domestic division of labour varies as individuals move through the life course. At the same time, previous research suggests a high degree of stability in domestic labour patterns and divisions of care work within families which may indicate that regardless of whether individuals follow a standard or non-standard family life course, the allocation of labour within couples does not vary a great deal (Fuwa 2004).

This chapter reports analyses investigating variations in time spent on domestic labour and perceptions of the fairness of the domestic division of labour as men and women transition through the life course. The focus is specifically on change as a result of two key life course events, marriage and childbirth. The aim is to develop our understanding of changes in housework patterns and perceptions of housework fairness by focusing on within-individual change rather than differences between cohorts. Longitudinal data is uniquely placed to provide insights into within individual change as it allows individuals to be examined before and after the occurrence of life course events. This enables a much more precise estimate of the causal processes underlying changes in outcomes than is possible with cross sectional analyses or cohort comparisons.

Further we shift the focus from earlier chapters to examining not only behavioural changes, but also changes in attitudes and values. Relationship and parental transitions are important life course events. With longitudinal data we can assess not only how these events transform patterns of behaviour, but also how they shape subjective views. The next sections briefly review why we expect changes in the domestic division of labour and changes in perceptions of fairness of the domestic division of labour over the life course.

Marital Status, Parenthood and Time Spent on Domestic Labour

Research on variations in men's and women's time on the domestic division of labour has tended to focus on either the amount of resources men and women contribute to the household, usually defined in terms of earnings, or gender display, the performance of tasks as a means of affirming gender identity. Earnings are interpreted as a form of economic power or resources that enable the spouse with the greater

resources to bargain their way out of housework. The assumption underlying this approach is that housework is undesirable work and the spouse with the fewer resources has less power to bargain with compared to their spouse.

West and Zimmerman (1987) developed the idea of the performance or display of gender wherein men and women establish and affirm their gender identity by the display of gender appropriate behaviour. Berk (1985) extended this idea to housework arguing that the performance or non-performance of housework is fundamental to the production of gender. She argued that the marital household is a "gender factory" where, in addition to accomplishing tasks, housework produces gender as men and women carry out routine household tasks. Gender display is argued to be a form of maintaining appropriate gender identity, whereby women perform housework as a means of affirming normative and culturally appropriate female behavior. Men, on the other hand, display masculinity by not doing housework, or by only doing tasks that are culturally defined as male tasks, such as outdoor work.

Results across many studies have found support for both approaches (Presser 1994; Shelton and John 1993; Baxter 1997), but in recent years we have also seen some critiques and modifications to these theories. First research has shown that relative earnings only explain the division of labour in households where women earn between zero and 50% of the relative household earnings. Once women cross this threshold and earn more than their partners "gender trumps money" and women's time on housework increases with earnings (Brines 1994; Greenstein 2000; Bittman et al. 2003). This suggests that once women's earnings reach parity with men's or exceed men's earnings, men and women adopt more traditional behaviour in order to negate their gender abnormal behaviour. This research combines both a resource and gender display approach.

A further critique of the relative resource and doing gender approaches has been proposed by Gupta (2006, 2007). He argues that it is women's absolute level of earnings rather than their relative earnings that drives how much time they spend on housework with higher earning women spending less time on housework (Gupta 2006, 2007). Gupta finds women's own earnings are strongly associated with their housework hours, but their partners' earnings are not (2006, 2007). Gupta's work also indicates that there is little association between men's earning and men's housework hours. One possibility is that women use their earnings to purchase household help, thereby lowering their time on housework. Another possibility is that higher earning women live in less tidy houses, possibly as a result of less interest in household duties or less of their identity associated with having a tidy house.

Resource theory, the absolute earnings approach advocated by Gupta, and gender display theory all imply variations across the life course in levels of involvement in domestic work. At different stages of the life course it is likely that men and women will contribute varying levels of economic resources to the household, and if resource theory, or Gupta's absolute earnings theory are correct, we would expect to find that men and women also spend varying amounts of time on domestic labour. For example in relation to resource theory, in the early stages of a relationship, if both partners are working fulltime, they have not yet transitioned from a cohabiting relationship to marriage, women have not taken time out of the labour force for childbirth

and childcare, and men are yet to attain their peak earnings, it is likely that the gap between men's and women's earnings will be smaller compared to couples at a later stage in their relationship. In these households, we might expect to find a relatively equal contribution to domestic labour by both partners. In contrast, couples who have been together for some years, have experienced the transition from cohabitation to marriage, have had children, and who have divided childcare along traditional lines with women withdrawing from paid work, or moving to part-time employment while men have maintained the same labour force attachment over time, will likely have a larger gender gap in household earnings and consequently a less equal division of domestic labour. Similarly, if women's absolute earnings are the main driver of how much time women spend on housework, we would expect to see their time on housework vary across the life course as they move in and out of employment. This is particularly the case for women who typically reduce their labour force involvement, and hence their earnings, during the child rearing years.

The gender display model also predicts variations in domestic labour patterns across the life course. The production of gender is likely to be most apparent in married households since it is in these relationships that displays of dominance and subordination are likely to be most evident (South and Spitze 1994). On the other hand, in cohabiting households there may be less commitment to traditional gender norms and hence less need or desire to display gender through housework. To the extent that cohabiting couples have rejected traditional pathways to family formation by opting to cohabit rather than marry, they may also reject traditional divisions of housework and childcare.

In relation to parenthood, the gender display model implies less involvement in housework for men and increased involvement for women. Parenthood is likely to be associated with an increased production or display of gender if women take on a greater share of childcare and housework while men assume a stronger breadwinner role. Studies have shown that the birth of a child is associated with longer hours spent in paid work for men, perhaps in an effort to make up for the loss of the mother's income, and reduced time in paid work for women (Sanchez and Thomson 1997; Chap. 9 by Gray, this volume). In households with children then, we would expect to find increased displays of gender through women's greater involvement in domestic work and men's decreased involvement.

To investigate these issues we examine data from two waves of the Negotiating the Life Course survey. Our sample includes all people who were married or in a cohabiting relationship in wave 1 (n=1,115). Respondents not in a relationship at wave 1 were not asked questions about time on domestic labor and hence were ineligible for inclusion in the current analyses. Some respondents were excluded from the final sample (n=24, 2.2%) because they had missing data on one or more of the predictor and control variables included in the models. The final analytic sample comprises 1,091 men and women.

Figures 8.1 and 8.2 report predicted means from a random effects regression model for time on housework using data from wave 1 and wave 2 of the Negotiating the Life Course project (model coefficients not shown). The dependent variable is the respondent's weekly hours spent undertaking household tasks, including meal
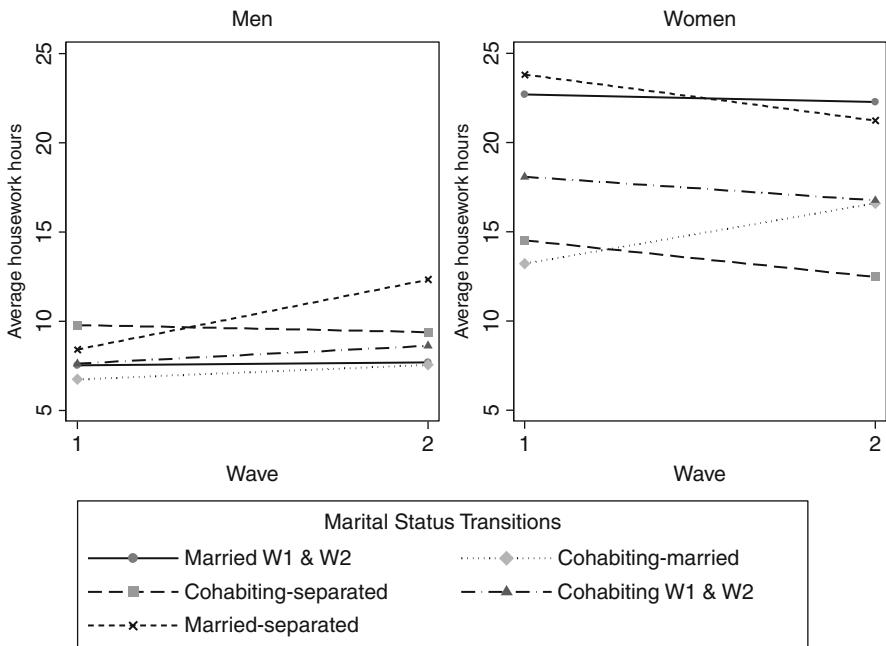
Fig. 8.1 Marital status transitions and change in housework hours between Wave 1 and Wave 2 for men and women (predicted means from regression model)
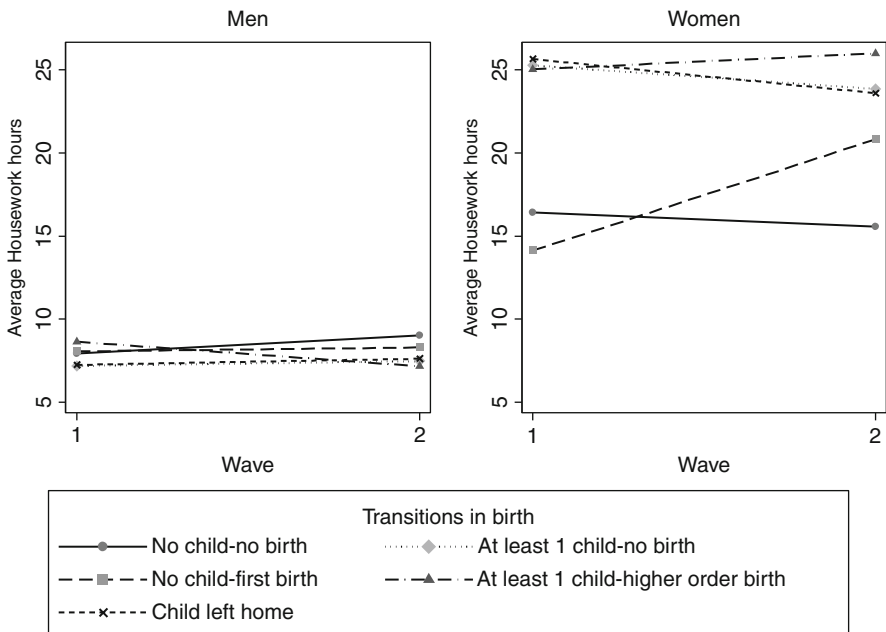

Fig. 8.2 Birth transitions and change in housework hours between Wave 1 and Wave 2 for men and women (predicted means from regression model)

preparation, doing dishes, shopping, laundry, vacuuming and cleaning reported at both wave 1 and wave 2. The independent variables in the model are a measure of the relative proportion of gross financial year income that the respondent contributes to the household, a continuous measure of household income, hours per week in paid employment, whether the respondent has a tertiary education qualification, gender attitudes measured by level of agreement with the statement: "It is better for the family if the husband is the principal breadwinner and the wife has responsibility for home and children," and age.

Figure 8.1 plots changes in the predicted mean hours spent per week on housework for men and women according to marital status transitions while controlling for all other variables in the model. As expected there is no change in housework hours if there is no marital status transition. The data show a slight increase in housework hours for women who transition from cohabiting to married, but the change in hours is not statistically significant. Note though, that married women who remain married between waves do considerably more housework than cohabiting women who remain cohabiting between waves (24 h per week compared to 17 h per week respectively). There is no significant difference between hours of housework for married and cohabiting men.

The only change in marital status that significantly changes men's housework hours is the transition from married to separated, where housework hours increase from an average of 7 h per week to 13 h per week. A change from cohabitation to separation reduces men's housework hours, but not enough to be statistically significant. In contrast, women who separate from their marital partner between wave 1 and 2 experience a decline in housework hours, but again not enough to be statistically significant.

The results for transitions in parenthood status are shown in Fig. 8.2. What is immediately striking here is the enormous variation in women's housework hours with transitions in birth compared to the flat and static average housework hours for men. As expected there is no change in housework hours over time for either men or women when no births occur between waves. On the other hand, women who experienced a first birth, or higher order birth between waves have a significant increase in housework hours. On average, women experiencing a first birth increase their housework time by about 6 h per week. For men a first birth has no effect on hours spent on housework, but the birth of an additional child leads to a significant reduction in men's time on housework, perhaps due to increased time spent in paid work.

Marital Status, Parenthood and Perceptions of Fairness of Domestic Labour

How might we expect perceptions of fairness of domestic labour to change over the life course? As we have seen, women who are married and have children spend considerably more time on domestic labour than men. We might expect that this will lead to a greater sense of unfairness and stronger negative perceptions about gender

equity at home. But the distributive justice framework outlined by Thompson (1991) suggests that perceptions of fairness of housework divisions are not solely determined by who does what and how much time they spent doing it.

Thompson argues that three main factors should be considered when examining women's sense of fairness in relation to housework tasks – outcome values, comparison referents and justifications. Outcome values refer to what people want from a relationship. Rather than assuming that all women want an equal share of tasks, Thompson's work points to the importance of considering other valued outcomes, such as a clean and tidy home, rewarding relationships with children and partners, or a sense of fulfilment and enjoyment that comes from taking care of one's family. In other words, women may receive relationship outcomes from performing domestic work that are more highly valued and rewarding than the stress and conflict that might stem from trying to get husbands to take on an equal share of domestic work.

Comparison referents are the people who are used as a point of comparison when evaluating whether a situation is fair. Most research on housework has tended to assume that women will judge the fairness of their workloads by comparing their own loads to those of their partners. But women may judge their load in comparison to some other reference point, such as other women, perhaps their mother or sisters, or friends. They may also judge their partner's contribution in relation to the partner's of other women. These comparisons might mean that women judge their own loads as not too unfair.

Justifications refer to the perceived appropriateness of current arrangements. For example, women and men with traditional views about who should do household labour will be less likely to perceive an arrangement in which women do most of the work as unfair than men and women with more liberal and egalitarian views about responsibility for domestic labour. Other forms of justification may rely on perceived competence to perform particular tasks or different standards or procedures for carrying out tasks.

Moving from cohabitation to marriage may mean that women compare themselves to other married women rather than single or cohabiting women and compare their husbands to other married men rather than single or cohabiting men. Or women may compare their current arrangements to those in a previous relationship status. Women who marry may therefore be less likely to perceive housework arrangements as unfair if the comparison referent is the more traditional arrangements that often characterise married couples rather than the more egalitarian arrangements adopted by cohabiting couples. Justifications for household arrangements may also change if the transition to marriage is associated with other life changes such as buying a house or men's greater pursuit of financial or career success. This may result in men spending more time in paid employment and thus both men and women may justify men's lower involvement in housework because of their greater involvement in the labour market. Alternatively women and men may compare their current situation to the arrangements they had prior to the transition to marriage, for example when they were single, or in a cohabiting relation. Valued outcomes may also change. For example one of the most valued outcomes may be to make

the marriage a success and to demonstrate their care and commitment to the relationship. Under these circumstances both men and women may be less likely to perceive arrangements as unfair as this is tantamount to admitting that they have committed to an unequal marriage.

The transition to parenthood may also result in changes in men's and women's perceptions of fairness of childcare and housework arrangements. Dominant ideologies about appropriate patterns of mothering and fathering that privilege women's time with children over men's time with children may mean that men and women will be less likely to perceive traditional arrangements as unfair. Valued outcomes might change if women value time spent with children and a clean, tidy and well-organised home over time spent in other activities such as paid employment. The value of having housework under control, such as keeping up with washing, cleaning and food shopping, may be more important for mothers than for childless women, since mothers are likely to have less time to do these chores and because mothering may be perceived as including the provision of a clean, tidy and well-stocked home. Fathering on the other hand is traditionally perceived as providing economically for the family. Thus for men valued outcomes may be associated more with earning a good wage rather than contributing to housework. Justifications for women's increased time on housework after the birth of children may be associated with women's greater skill at caring activities and the need for women to spend more time with children in the home. And finally comparison referents are also likely to change with both men and women more likely to compare themselves to other mothers and fathers rather than childless people.

To investigate these issues we examine data from four waves of the Negotiating the Life Course survey. Our sample includes all people who were married or in a cohabiting relationship with the same partner for at least two waves out of the four. As noted above, respondents not in a relationship at wave 1 were not asked questions about time on domestic labor and hence were ineligible for inclusion. The final analytic sample comprises 1,189 men and women. Because some people will have moved into a cohabiting or marital relationship at waves 2 and 3 and some people will have left the survey or moved out of the relationship by wave 3 or 4, the number of individuals in the analysis at any one wave is less than 1,189. Due to sample attrition at each wave the final dataset is unbalanced which means that some people are present in the data for only two waves while others may be present for three or four waves. However, to assess the effect of a transition on the outcome variable the minimum requirement is that data is available for the two waves that encompass the transition to ensure that any change in outcome is captured.

In some analyses respondents were excluded from the final sample because they had missing data on one or more of the predictor and control variables included in the model. While the total number of individuals in the sample who responded to the perception of fairness with share of housework question across all four waves is 1,189, the number of individuals in the sample at wave 1 who responded to this question is 1,084, the number of individuals who responded at wave 2 is 1,064, the number of individuals at wave 3 is 771 and the number of individuals at wave 4 is 792.
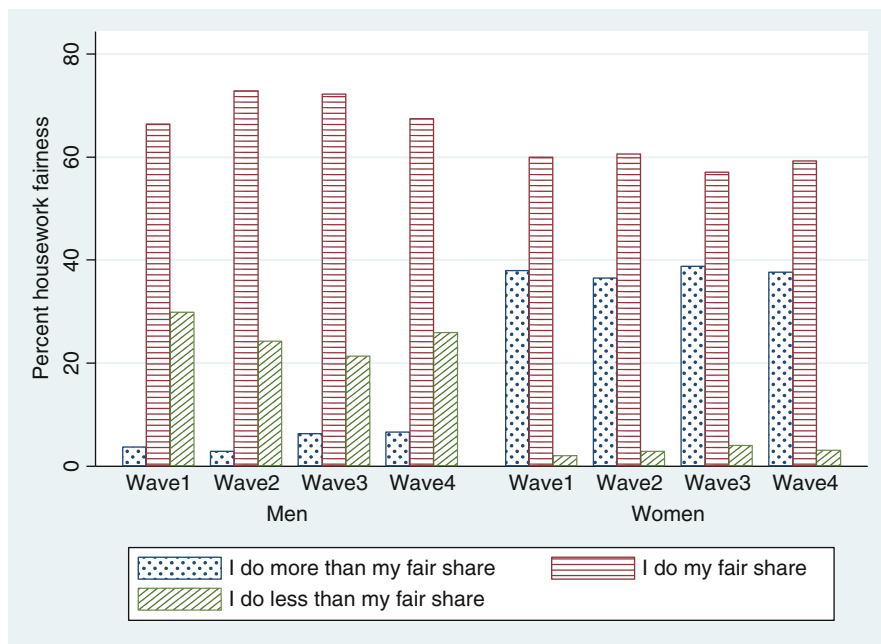
Fig. 8.3 Perceptions of fairness of housework by gender and wave, NLC, Waves 1–4

Figure 8.3 shows the percentage of men and women over four waves of the Negotiating the Life Course project who think the division of domestic labour is fair to them. The dependent variable is the participant's response to a question asking "Overall do you think you do your fair share around the house?" The response to the question is measured on an ordinal scale with five categories: 1=*I do much more than my fair share*, 2=*I do more than my fair share*, 3=*I do my fair share*, 4=*I do less than my fair share*, 5=*I do much less than my fair share*. For these graphs the responses are grouped into three categories by combining responses 1 and 2, and responses 4 and 5. Approximately 70% of men in each wave report that they do their fair share of housework, with about 20–30% reporting doing less than their fair share. On the other hand, about 60% of women report that housework is organized fairly and almost 40% report doing more, or much more, than their fair share. Thus while clear majorities of men and women think that the division is fair to themselves, there are also marked gender differences in perceptions of fairness. Men are more likely to report doing less than their fair share, while women are more likely to report doing more than their fair share. The same broad patterns were evident in relation to perceptions of fairness of childcare (data not shown).

A random effects logistic regression model was used to examine changes in perceptions of housework fairness in relation to marital and birth transitions (data not shown). As the main focus is the change in perception of fairness of housework as

men and women transition from cohabitation to marriage and experience the birth of a child the models include all people who were married or in a cohabiting relationship with the same partner for at least two waves out of the four. The final analytic sample comprises 1,189 men and women. The dependent variable for the regression analyses is dichotomised with 1 = *I do more than my fair share* and 0 = *I do my fair share or less*. Conceptually this variable measures whether the division of labour is perceived to be fair or unfair to the respondent. Control variables in the model are: respondent's and partner's housework hours per week, respondent's share of indoor tasks, such as cooking cleaning and laundry, respondent's share of outdoor tasks such as home maintenance, mowing the lawn and gardening, respondent's share of other tasks such as paying bills and keeping in touch with relatives, a continuous measure of gross financial year income received by the respondent and a similar income measure for the respondent's partner, hours per week in paid employment for both the respondent and the respondent's partner, a variable that measures whether the respondent has a tertiary education qualification, gender attitudes measured by level of agreement with the statement: "It is better for the family if the husband is the principal breadwinner and the wife has responsibility for home and children," age, relationship duration, and whether the respondent has a pre-school child.

The results show no significant changes in perceptions of fairness when individuals transition from cohabiting to married. However, those who experience a first birth have significantly higher odds of thinking the division of housework is unfair to them than those who remain childless. The perception of unfairness is also much higher for women than for men. The model also shows that changes in men's time on housework are particularly strongly associated with changes in perceptions of the fairness of domestic labour and that both men and women are less likely to perceive that they do more than their fair share if their partner does more housework.

Figure 8.4 shows predicted probabilities of "I do more than my fair share of housework" plotted over waves for five different groups of individuals who follow selected birth transition pathways, separately for both men and women. It is clear that the predicted probabilities are much lower for men than women across all waves and pathways. In other words, women are much more likely than men to perceive that they do more than their fair share of housework. And this perception of unfairness is consistently higher for women who have children compared to women with no children.

Discussion and Conclusion

Overall, the findings show that women spend considerably more hours on average doing housework than men, regardless of marital or parenthood status, and that women are more likely than men to perceive the division of housework and childcare to be unfair. The transition to motherhood results in an increase in women's routine housework hours, a trend that is further increased when additional children
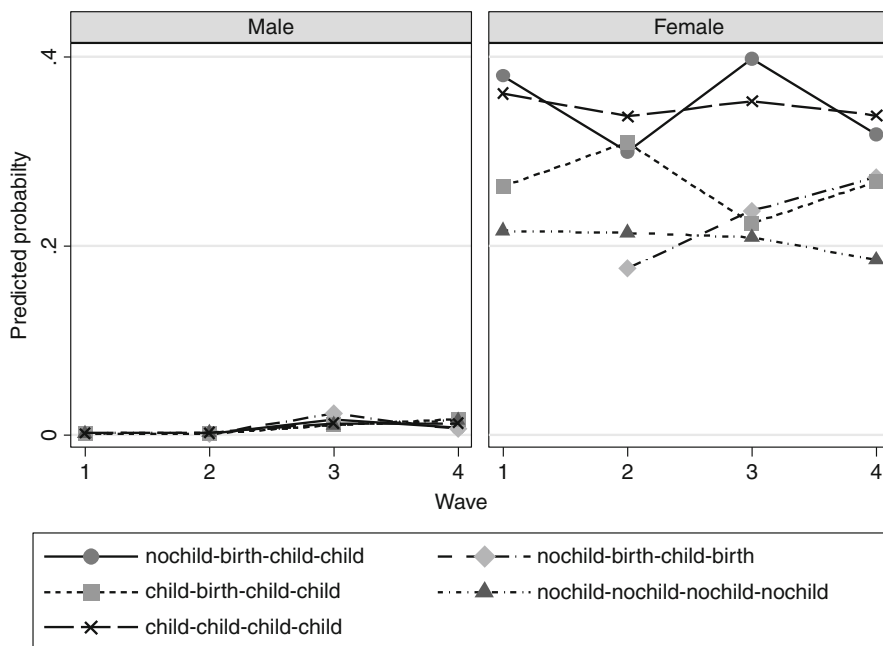
Fig. 8.4 Predicted probabilities of "I do more than my fair share of housework" over waves by birth transition pathways, for men and women

are born. For men on the other hand, there is considerable stability in housework hours across most life course transitions. Men's time on housework is unrelated to changing household composition and structure. Perhaps even more importantly, men's time on routine housework declines as more children are born suggesting that the gender gap in housework time widens as the demand for time on domestic work increases.

In terms of marital status transitions, only the move from married to separated significantly changes men's time on housework. Separation from a marital union almost doubles men's time on routine housework from approximately 7 h per week to 13 h per week on average. This implies that the absence of a female partner results in men taking on household chores that they otherwise would not do. In contrast, the transition from married to separated leads to less time on housework for women, although the result is not statistically significant.

Our results support Gupta's work on the effects of marital transitions on house-work hours (Gupta 1999). Like Gupta we find no significant difference in the amount of time cohabiting and married men devote to housework, and no significant change in either men's or women's housework hours when they move from cohabiting to married, although the trend is in the upward direction for women. In some respects this broad stability in housework hours across the transition from cohabitation to marriage is not surprising. Cohabitation rates have increased dramatically in recent years, and over 75% of married couples cohabit for a period prior to marriage in

Australia (De Vaus 2004). It is likely then that for most married couples the significant transition is from being single to living in a partnership, and as Gupta argues the form of the union is probably less consequential than the fact of the union. On the other hand, similar to previous cross-sectional work (Shelton and John. 1993; South and Spitze 1994; Baxter 2005), we also find that married women who remained married between waves perform, on average, considerably more housework than cohabiting women who remain cohabiting between waves. Together, these results suggest that the gender gap in housework hours does not occur immediately upon marriage, but imply that men and women gradually experience changes over the duration of their marriage. This dynamic will be better understood with longitudinal data on couple's housework hours over longer periods of time.

A significant increase in women's housework hours occurs with transitions in parenthood. Consistent with the study by Sanchez and Thomson (1997), we find the birth of a first child results in a dramatic increase in women's housework time, leading to approximately 6 additional hours of housework per week on average. But there is no corresponding effect for men. Men's housework hours are largely unresponsive to parenthood transitions. Moreover in contrast to Sanchez and Thomson (1997), our results indicate that having additional children continues to increase women's time on housework, but men tend to spend less time doing housework when higher order births occur. Our results indicate that additional children lead to a widening of the gap in men's and women's time on household labor, perhaps consolidated in part by the further withdrawal of women from paid employment with the birth of additional children.

Interestingly, both men's and women's perception that they do more than their fair share of the housework increases when children are born. This is the case for men, despite the fact that we find no changes in men's housework time after a birth. This suggests that men's perceptions of fairness may be related to broader conceptions of the amount of total time they are spending in paid and unpaid work, or that men increase their time on childcare after childbirth leading to the perception that the division of labour on housework is unfair, even though they are not necessarily spending more time on housework tasks. Alternatively, if their partner has reduced their time in paid work after children are born, men may expect to significantly reduce their time on housework. Therefore, this finding may reflect changes in men's expectations of the amount of housework they should do.

These patterns underscore the importance of examining variations in men's and women's time on housework over the life course. Good quality longitudinal data is essential for this purpose. We also need to develop more dynamic theories to explain these variations. Resource theory, absolute earnings and gender display all predict changes in men and women's time on domestic labour as they transition through the life course. But these theories were primarily developed to explain patterns in married couple households and have been primarily examined using cross-sectional data. The task now is to expand these theories, or develop new approaches, that explain why women's time on housework varies more than men's over the life course and why some life course transitions disrupt housework patterns and perceptions of fairness more than others.

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Chapter 9
Fatherhood and Men's Involvement in Paid Work in Australia

Edith Gray

Abstract Becoming a parent is an important transition in the life course, yet most research does not consider how becoming a father changes men's lives. This chapter focuses on whether life events affect involvement in paid work for Australian men. Of central interest is whether becoming a father changes the hours men spend in employment, but other events that are considered include having additional children, getting married, completing education, changing supervisor or manager status, and buying a home. Most research that considers differences between fathers and non-fathers is cross-sectional and typically finds that fathers spend longer hours in employment than men who are not fathers. However, previous research is limited due to the potential effects of unobservable characteristics that are associated with both employment hours and the likelihood of becoming a father. Using four waves of data from the Negotiating the Life Course project, changes in men's employment hours prior to and after the transition to fatherhood are examined using methods which account for unobservable characteristics. The findings demonstrate that there is an effect of becoming a father that increases employment hours for men. This increase in hours could be explained by 'time-allocation' theories, or by the process of men 'doing gender'. There are also potential effects on father's level of involvement in parenting as a result of increased employment hours.

Over the last 20 or so years there has been a growing scholarship on the topic of fatherhood. More than a decade ago, Marsiglio wrote that 'Fatherhood remains a hot topic in the 1990s with research driven by debates about the changing profiles of families and increases in women's participation in the labour force (Marsiglio 1995a:1). This scholarship covers many areas of fatherhood and importantly much focuses on the consequences for the well-being of children

E. Gray (✉)
Australian National University, Canberra, Australia
e-mail: edith.gray@anu.edu.au

(Eggebeen and Knoester 2001). There is general agreement that both cultural images of fatherhood and behaviours of fathers have changed over time (Furstenberg 1988; Marsiglio 1995a).

Despite the growing number of studies available which examine men as fathers few studies consider the effect of having children on individual men's lives. Most research on fathers compares contemporary fathers to fathers past, fathers to non-fathers, or residential fathers to non-residential fathers. Findings from these research areas provide important information about changes over time and differences between groups of men. However, that body of research cannot explain how becoming a father changes aspects of men's lives. Taking a life course perspective that examines behaviours as men transition to fatherhood provides information about how aspects of life change as a result of becoming a parent.

Changes in cultural expectations of fathers mean that fatherhood is no longer inextricably linked to being only an economic 'provider.' Rather fathers are expected to be involved in other ways that benefit children or the family (Marsiglio 1995b; Coltrane 1996; Kaufman and Uhlenberg 2000). Yet there have been few studies which have examined whether men reduce their time or responsibilities in the workplace upon becoming a parent. In comparison there is a vast and growing number of studies examining how becoming a mother affects labour force participation patterns (Hynes and Clarkberg 2005; Vlasblom and Schippers 2006; Aassve et al. 2007) and earnings (Davies et al. 2000; Budig and England 2001; Breusch and Gray 2004; Van Bavel 2010). In Australia, there is a 'marked period of withdrawal from employment during the childbearing years' for women (Chap. 6 by Baxter, this volume).

There are important gaps in our knowledge about how the event of becoming a father affects their lives, particularly in terms of how fatherhood affects their working lives. Percheski and Wildeman state that 'few studies have considered how fatherhood affects men's employment, even though we may expect substantial changes given the increased time and income demands associated with parenting' (2008:483). This suggests that we could expect men's paid working hours to either decrease due to time demands at home, or alternatively, increase due to income demands through the loss of additional income from the partner. Dermott (2006) also posits that there is evidence for two arguments related to men as financial providers: first, that the role of men as financial providers continues to be important, and second, that the meaning of fathers as financial providers is deteriorating as mothers involvement in the paid labour market continues to increase.

In addition to life course changes such as getting married or becoming a father, there are numerous other aspects of men's lives that may be associated with the number of hours that men spend in paid work. Some of these will be underlying organizational characteristics and structural constraints of workplaces as conditions of work are associated with work time structures (Huberman and Minns 2007). In terms of characteristics of the job, it has been found that those workers with managerial occupations work longer hours, while in terms of individual characteristics workers with higher levels of education work longer hours (Golden 2009).

The previous chapter by Baxter et al examined the effect of fatherhood on men's time in domestic labour and their perception of housework fairness. This chapter addresses the effects of having a child on men's involvement in paid employment.

After examining men's patterns of employment and work hours in 2006, the analysis examines changes in employment before and after having a child using longitudinal methods, analysing the period 1996/1997–2006. In doing so, this research controls for selection effects that are apparent and problematic in cross-sectional research comparing fathers and nonfathers. Specifically the analysis controls for the possibility that fathers and nonfathers are different from each other in a number of unmeasured ways and that these factors might also be associated with employment.

This prospective approach means that the analysis is on the effects of fatherhood on employment for contemporary fathers. A retrospective approach, looking at generational change in work patterns, is not appropriate given the measures that are collected in the retrospective work histories. In Chap. 6 (this volume) Baxter uses the yearly work history data to examine the effect of childbearing on female employment. Unfortunately, this approach is not suitable for looking at generational change for men because men do not tend to take large periods of time out of the labour force when children are born. In fact, as previously mentioned, men may take on additional work responsibilities to compensate for the loss of their partner's income.

Fatherhood and Employment

In developed countries there is a vast amount of research that indicates that women adapt their employment responsibilities to their care responsibilities, particularly having and raising children. In Australia, mothers are more likely to be employed part time than in many other countries. In 2004, Australia had the second highest percentage of part-time employment for women, with 40% of employed women working part time (OECD 2006). The rate is even higher for mothers of young children. However, there is little research into how men adapt their employment responsibilities when they have children (Haas et al. 2006).

It is often observed that men who are fathers are more likely to be employed, and when employed, spend longer hours in employment than men who are not fathers. This is a common finding in developed countries (Boje 2006). Dermott (2006) has recently examined this pattern in the UK, and found that after controlling for other characteristics of men, this pattern disappeared. Dermott concluded that fatherhood is a period in the life course that coincides with other aspects of men's lives, including a demanding stage of work life. Research on employment hours from Norway has also found that after controlling for other aspects of men's lives men's actual employment hours are less if they have a preschool-aged child in the household as compared to the employment hours of men who are not fathers and men who have school-aged children (Dommermuth and Kitterød 2009).

However, there are problems associated with the type of cross-sectional research that compares fathers to men who are not fathers at a given point in time. One difficulty is that cross-sectional research cannot account for unobserved heterogeneity. An example of the effect that this might have on measuring employment involvement is that some individuals may attach a high value to having children (which is

an unobserved characteristic) and these people may also be more likely to pursue employment than those who place less value on having children. Not controlling for this unobserved heterogeneity would bias the results for the relationship between having children and employment involvement.

The other advantage of taking a longitudinal perspective is that it is possible to measure individual change, or stability, as events occur. As noted, it is generally found in cross-sectional research that men who are fathers are more likely to be employed and spend longer hours in employment than men who are not fathers. But what dynamic lies behind this effect? It is hard to disentangle this in cross-sectional research. On one hand, it could be argued that when children, particularly young children, are present women generally have lower involvement in the paid labour force than at other times in the life course, and men who are fathers are required to spend longer hours in paid employment to make up for a shortfall in family income. Similarly it could be argued that men who are fathers increase their employment hours to demonstrate that they can 'provide for their family'. Alternatively, the positive relationship between fatherhood and hours in paid work may be due to the selection of more economically active men into fatherhood: that is, men who are desirable as an employee may also be desirable as a father. The benefit of using a longitudinal perspective is that individual men are followed over time. This allows the dynamic measurement of employment hours before and after having a child, rather than simply comparing two potentially different groups of men at one point in time.

There is a handful of studies that use a longitudinal perspective to examine how fatherhood effects men's work involvement, and most of these studies come from the U.S. (Lundberg and Rose 2000; Loughran and Zissimopoulos 2009 examine the effect of childbearing on wages). However, Percheski and Wildeman (2008) note that there appears to be variability between groups, with fatherhood having a different effect on employment for men depending on their different characteristics, supporting the need for research to be conducted more widely.

Data and Method

To demonstrate the difference in results from cross-sectional and longitudinal analysis, both investigation strategies are presented. Using the most recent wave of Negotiating the Life Course data (2006), the first method takes a cross-sectional approach to compare patterns of employment for different groups of men. This examination uses separately identified models of employment and hours of employment. A longitudinal approach is then applied to examine change in men's work hours over time. Here the focus is specifically on employment hours. A fixed effects model using four waves of data is used and provides an opportunity to examine how work hours change as other aspects of men's lives change.

The Negotiating the Life Course has a prospective longitudinal study design, however in Wave 1 (1996/1997) retrospective information about respondents was also collected (McDonald et al. 2000). This retrospective information included family, work, education, relationship and fertility histories. There were 2,231 respondents in the first wave of data collection. The sample was followed and re-interviewed in 2,000 (n = 1,768), 2003 (n = 1,192) and 2006 (n = 1,138, plus n = 2,000 new respondents).

Attrition, that is, losing respondents at later waves, is a consideration when following individuals over time. In the Negotiating the Life Course project the sample size has reduced over time and estimates of the characteristics of those who are lost from the sample are provided in the technical appendix. To minimize the possible effects of attrition, an unbalanced panel has been used for the fixed effects model. While this does not eliminate the problem of attrition completely it does reduce the impact of attrition in comparison to using a balanced panel, as information on participants is able to be analysed for the period in which they remain in the sample (Johnson 1995). Men who were only present in Wave 1 could not be compared over time and were excluded from the analyses. The final dataset for the fixed-effects model consists of 2,478 observations on 754 men. For the cross-sectional models of men in 2006 the sample is based on men aged 18–59 with a sample of n = 1,064.

There are two dependent variables for the cross-sectional analysis. The first measures whether men are employed. This is based on a question asking were they currently employed: 'Last week, did you have a job of any kind?' Just over 80% of the male sample are employed. The second dependent variable measures the hours spent in employment per week for those observed to be employed (an average of 43 h per week).

For the longitudinal analysis, men's hours of employment is constructed as the observed employment hours regardless of employment status. Hence men who are not employed are observed to be spending zero hours in employment. In this respect a change in employment hours can be measured for all men as they move in or out of employment, or change their hours up or down. The construction of the hours of employment variable is based on questions about employment hours for men who are employed, while men who are not employed are allocated 'zero' hours. The wording of the questions pertaining to employed hours changed slightly over the four waves of data collection, mainly to separately identify hours spent in main job and hours spent in secondary jobs.[1] Based on the pooled sample, respondents are employed an average of 38 h per week.

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[1] The wording of the questions over the various waves are:

W1 Including all paid employment, how many hours did you work last week?

W2 And how many hours did you actually work last week?

W3&W4: Q1 Again referring only to your main job, how many hours did you actually work last week? + Q2 All together, how many hours did you actually work last week in these other jobs?

What Factors Are Associated with Employment and Hours of Employment for Men?

In 2006 most men aged 18–59 were employed. Employment is considered to be an important aspect of individual agency and self-definition (Gecas 2004), and is generally seen as an important aspect of men's lives. Around 83% of men were employed in 2006.[2] Men also spend long hours in paid work in Australia with an average of almost 44 h per week. The following section examines the propensity to be employed and the number of hours employed for men depending on their individual situations in 2006.

There are many factors that are associated with men's employment. It is likely that years of experience has a positive curvilinear relationship to being employed: this would suggest that years of employment experience increases the probability of being in employment up to a point after which the effect dissipates. The measure of workplace 'experience' is based on the number of years of employment collected in retrospective work histories: a year 'part time' contributes 0.5 of a year and a year 'full-time' contributes 1 year to this measure of employment experience. Men in this sample have an average of 13.5 years of employment experience.

Another three 'employment' factors are potentially associated with the number of hours that men spend in paid work. Two variables measure responsibility in the workplace. The first is whether men report that they have a 'managerial position', and the second is whether they have a 'supervisory position'. These factors are considered because they are major considerations associated with working long hours (Golden 2009). About 18% of men are in a managerial position, and a further 13% are in a supervisory position. The other factor associated with employment hours is whether men have more than one job, of which around 7% had two or more jobs.

Of central interest is comparing men who are fathers and men who are not on measures of employment and work hours. For this purpose, I examine whether men have a biological child (regardless of the child's age or whether the child lives with their father), and also whether men have children of particular ages living in the house with them. Around 63% of men in 2006 had fathered a child. As indicated, this specifies which men are fathers and which men have not had children, but it does not measure the influence of having resident children. To examine the effect of resident children, I create three measures. The first is having a 'child <3' which indicates whether the respondent has a child aged less than three in the home. Around 9 % have at least one child under 3 years of age in the household. The variable 'one child 3–14' indicates that there is one child of this age in the home (13%), while the variable 'two + aged 3–14' indicates that there is more than one child of this age living with the respondent (17%). Additionally some may have a child less than 3 years of age at home, in addition to an older child or children living in the home as these categories are not mutually exclusive (Table 9.1).

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[2] Employed men includes men who are self-employed.

Table 9.1 Sample summaries, cross-sectional sample

	Cross-sectional sample 2006[a]	
Variable	Mean	SD
Employed (yes=1)	0.83	0.372
Hours worked (if employed)	43.76	14.230
Employment experience (years)	13.55	12.446
Manager (yes=1)	0.18	0.386
Supervisor (yes=1)	0.13	0.337
Has more than one job (yes=1)	0.07	0.248
Age (years)	40.30	11.731
Married (yes=1)	0.59	0.492
Degree (yes=1)	0.28	0.449
Vocation (yes=1)	0.41	0.493
Yr12 (yes=1)	0.18	0.381
Currently studying (yes=1)	0.20	0.397
Have ever had a child (yes=1)	0.63	0.484
Child <3 (yes=1)	0.09	0.281
One child 3–14 (yes=1)	0.13	0.340
Two+aged 3–14 (yes=1)	0.17	0.373
NESB (yes=1)	0.10	0.296
Buying home (yes=1)	0.69	0.463

[a]NLC (2006). Data weighted. N=1,064

Age is also associated with employment and hours worked, and like experience is likely to be curvilinearly related to both. The average age of men is about 40 years. Previous research has found that married men are more likely to be employed than unmarried men so this is considered an important factor to control for. The definition of 'married' is those men who are legally married and this category comprises 59% of the sample. The education variables are mutually exclusive representing the respondent's highest level of education: 'Degree' indicates that the person has a bachelor's degree or higher (28%); 'Vocation' indicates that the person has a vocational qualification or associate diploma (41%); 'Yr12' means that the person's highest level of education is completion of secondary school (18%). The remaining men have less than year 12 education (about 12%). There are 21% of men currently enrolled in a course of study or training.

There is one variable which is included in the model of whether the respondent is employed or not, but is not included in the model of hours worked, as it has been found to separately identify selection into employment. The variable is coded as being born in a non-English-speaking background (NESB). This measure is not perfect, as the respondent is classified on the basis of country of birth: this means that some people who are of a non-English-speaking background, but born in an English-speaking country will be excluded.[3] However, this characteristic has been

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[3] English-speaking countries include Australia, United Kingdom, New Zealand, Canada, United States of America, Ireland and South Africa.

Table 9.2 Per cent employed and employment hours, men (2006)

Variable	Nonfathers	Fathers
Per cent employed*	76	88
Mean working hours (for those employed)*	39.83	45.74

Source: NLC (2006)
Data weighted. N = 1,064 (Sample weights for persons are described in Reimondos (2009))
*P < 0.0001

shown to have a significant influence on being in employment (Breusch and Gray 2004), and hence is included even though it is not a perfect measure. Around 10% of respondents come from a non-English-speaking country. Home ownership is also considered to be associated with employment, and around 69% of respondents are purchasing or own their own home.

To examine the factors which are associated with employment and employment hours, a logit model was fitted for whether in employment and an ordinary least squares regression was used to estimate number of paid hours worked per week.[4] It is often observed that men who are fathers are more likely to be employed and when employed, work longer hours than men who are not fathers. To provide an example, Table 9.2 shows the percentage of men who were employed in 2006, and the average number of hours of employment for men aged 18–59 in 2006 (n = 1,064 weighted).

Table 9.3 provides the estimation results for the multivariate models. The results show that after controlling for other factors associated with employment and hours worked, being a father or having children present in the household has no effect on men's patterns of employment. This is consistent with Dermott's (2006) work suggesting that after accounting for other factors in men's lives the pattern of fathers spending longer hours in paid employment disappears.

The factors that are associated with being employed include years of experience in the labour force, which has a positive curvilinear relationship. Age shows a similar relationship, independent of experience on employment, and also is associated with the number of hours men are employed. This age pattern represents a withdrawal from both the propensity to be employed and the time spent in employment following the prime working years. Being a manager has a positive effect on

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[4] Before fitting these models a Heckman selection model was tested. A Heckman model is often used in wage models as it has been found that if wages are only modeled for the employed then there is potential selection bias: people who are not employed are potentially systematically different from those who are employed (and hence have wages). The Heckman model approach is a two stage equation where the first equation runs the selection model (e.g. employment), and the second equation estimates the principal equation (e.g. wages) given a correction for the selection. Here, we check that there is no selection bias in the measurement of hours employed and found the Heckman model to be significant. This indicates that the models of employment and hours should be run separately: i.e. understanding employment was not necessary to understand hours worked. Note that the coefficients estimated under the Heckman model were similar to those under the separate logit and regression models.

Table 9.3 Estimation results of being employed (logit) and employment hours (regression)

Variable	Logit model of being employed[a]		Ordinary least squares regression of hours worked (for employed)[b]	
	Coeff	t-ratio	Coeff	t-ratio
Experience	0.113**	2.71	0.121	0.59
Experience^2/100	−0.250*	−2.38	−0.172	−0.31
Manager (yes=1)			4.478***	4.01
Supervisor (yes=1)			−0.335	−0.27
Has more than one job (yes=1)			6.452**	2.74
Age	0.258***	3.72	1.559***	3.95
Age^2	−0.004***	−4.46	−0.019***	−3.75
Married (yes=1)	0.614*	2.46	1.380	1.15
Degree (yes=1)	0.502[+]	1.67	−3.185[+]	−1.83
Vocation (yes=1)	0.492[+]	1.83	−0.990	−0.59
Yr12 (yes=1)	0.252	0.84	−4.050*	−2.07
Currently studying (yes=1)	−0.379	−1.52	−3.440*	−2.40
Have ever had a child (yes=1)	0.381	1.45	−1.162	−0.69
Child <3 (yes=1)	−0.656	−1.48	2.649	1.14
One child 3–14 (yes=1)	−0.064	−0.16	−0.755	−0.49
Two+aged 3–14 (yes=1)	0.069	0.17	1.170	0.77
NESB (yes=1)	−0.764**	−2.64		
Buying home	0.735**	3.23		
Constant	−3.337**	−2.91	13.255*	1.94

Source: NLC (2006)
[+]p<0.10*p<0.05; **p<0.01; ***p<0.0001
[a]N=1,064 observations
[b]N=826 observations. Sample based on employed men

paid working hours, and the results indicate that managers spend about four and a half hours more in paid work per week than those who do not have managerial responsibilities. Men who have more than one paid job work approximately six and a half hours more per week than men who only have one paid job.

Men who are married are more likely to be employed as are men who are buying their own home, while men who come from a non-English-speaking background are less likely to be employed. There is a small effect of education on employment, with those who have a degree or a vocational qualification more likely to be employed. However, the effect on hours worked is different. The results show that men who have a degree or year 12 education work slightly fewer hours as compared to men with no qualification and less than year 12 education.

These results demonstrate the existing patterns of workplace participation for men, but they are not predictive. For example, while the result for being married is positive for employment, it can not be interpreted to mean that upon getting married men are more likely to become employed. To look at the dynamic changes in men's lives and how they influence the work lives of men a model which examines change over time is necessary.

What Life Changes Affect Men's Employment Hours?

To investigate how changes in men's individual lives are related to changes in number of paid work hours I use a fixed effects approach to measure changes in the number of hours of employment over the life course. Of particular interest in this model is whether hours of employment change when men become a father, but other transitions that are considered include having additional children, getting married, completing education, changing supervisor or manager status, and buying a home. Partner's paid work hours are also considered as a control factor, as men's employment hours should be considered in the context of the situation of the household. The model allows the analysis of changes in men's lives over a 10-year period. This is a significant advance to research which simply compares men based on different characteristics.

The independent variables for the pooled longitudinal sample are reduced in number due to the exclusion of variables that are 'fixed' over time. Otherwise the construction of variables is the same as for the previous analysis. The sample summaries (Table 9.4) look a little different to the cross-sectional summaries (Table 9.1). This is mainly due to the composition of the samples. The cross-sectional sample is based on all men in wave 4 for the purpose of comparing fathers and non-fathers. The longitudinal pooled sample is essentially an ageing sample where respondents are represented each time they were interviewed. This means that it is not a representative-population sample, but has different characteristics for the purpose of following the sample over time. As such, slightly higher proportions identify as managers or supervisors, higher proportions are married, have had a child, and own or are purchasing their own home.

The presence of children in this analysis is not based on the age of children, but whether or not the respondent has experienced becoming a father to a first, second, or third (or higher) child. The measurement of the child variables allows analysis of

Table 9.4 Sample summaries, pooled sample and transitions

Variable	Pooled sample 1996/1997–2006		Number experiencing a transition to state	
	Mean	SD	N	%
Hours worked	38.324	23.442	–	–
Has a first child (yes = 1)	0.122	0.327	69	2.8
Has a second child (yes = 1)	0.329	0.470	62	2.5
Has a third + child (yes = 1)	0.235	0.424	47	1.9
Married (yes = 1)	0.623	0.485	91	3.7
Manager (yes = 1)	0.176	0.381	120	4.8
Supervisor (yes = 1)	0.148	0.355	146	5.9
Degree (yes = 1)	0.253	0.435	60	2.4
Partner works hours	13.970	18.944	–	–
Buying home (yes = 1)	0.712	0.453	152	6.1

N = 2,478 observations

Table 9.5 Fixed effects models of men's employment hours

	Hours worked	
Variable	Coeff	t-ratio
Has a first child (yes = 1)	4.536[+]	1.77
Has a second child (yes = 1)	0.415	0.15
Has a third + child (yes = 1)	1.568	0.46
Married (yes = 1)	0.025	0.01
Manager (yes = 1)	11.543***	6.87
Supervisor (yes = 1)	8.291***	5.52
Degree (yes = 1)	11.195***	4.41
Partner works hours	0.261***	8.16
Buying home (yes = 1)	−0.993	−0.62
Constant	28.295***	13.42

Source: NLC (1996/7–2006)
[+]$p<0.10$; ***$p<0.0001$
N = 2,478 observations, on 754 men

how men change their paid work hours when they become a father for the first time, or a second, or third time.

An additional variable is included in the fixed effects analysis of paid hours worked which is not included in the cross-sectional model. This variable measures the number of hours of paid work of their partner. Partner's work hours are considered to investigate how the lives of 'significant others' might be associated with the working hours of men.

Transition results are provided to demonstrate the number of men experiencing a change in their situation over the period that they were measured. Some of these transitions can only ever happen once in your lifetime, such as having no children to having a first child, while others may occur a number of times, such as moving in and out of being a manager. The greatest number of observed transitions occurred for not buying a home to buying a home (152), followed by becoming a supervisor (146). Around 60 men obtained a degree, 69 had a first child, and 62 had a second child. In some cases the number of transitions are low which will have some effect on the likelihood of observing a statistically significant result for that variable on the number of paid hours.

Table 9.5 presents the results from the fixed effects model of working hours. It shows that the birth of a first child—a significant life course event—does affect men's working hours. The statistical significance of this result is marginal ($p<0.10$), although this may be a function of small numbers of observations. It is estimated that after having a first child, men's paid work hours increase by an average of four and a half hours per week. In comparison, having more children does not affect men's paid work hours. There is no significant change in employment hours worked when men have more children. Similarly, getting married does not influence employment hours.

Changes in work responsibilities as well as life course changes are associated with men's paid work hours. There are two major changes in work responsibilities

that increase the paid work hours of men. The first is becoming a manager. Men who become a manager increase their paid work hours by an average of almost 11.5 h per week. Becoming a supervisor has a similar effect, increasing employment hours by eight hours per week on average.

Graduating from university is also associated with an increase in men's paid work hours. This result is expected as many of the men will be transitioning from study to work, although a large proportion will have had some form of employment while studying, whether that be on a part- or full time basis. On average, men increase their paid hours by about 10.5 h per week after graduating from higher education.

In terms of life course changes other than having children and getting married, we include partner's work hours as well as buying a home. Partner's hours are positively associated with men's work hours. This reflects a pattern of significant others moving along a similar path. In terms of buying a house, there is no evidence that this has an effect on men's paid work hours.

These results demonstrate that there does appear to be an effect of having a first child on working hours for Australian men. The result is significant at $p < 0.10$, which is a function of relatively low numbers experiencing the transition, but the magnitude of the estimated result is large: over four extra paid hours per week. The results show that transitioning from having no children to having a child increases paid work hours for men.

Discussion

There has been a lot of emphasis on the changing nature of fatherhood in developed societies. According to Percheski and Wildeman, 'becoming a father is a life changing experience that affects their identity, outlook, and behavior' (2008:483). The results in this chapter show that becoming a father does appear to at least have some effect on the intensity of employment as measured by paid work hours. A substantial amount of previous research on the transition to parenthood finds that the division of domestic labour becomes more gendered at this time, often as a result of women decreasing their involvement with paid work (Sanchez and Thomson 1997; Singley and Hynes 2005, Chap. 8 by Baxter et al. this volume). This chapter contributes to this work by demonstrating that in the Australian context fathers widen the gender gap by extending their paid work time upon becoming a father.

How should these results about increased work hours for men be interpreted? One explanation is that of time-allocation theory (Becker 1965): as women provide care for children particularly for newborns, men provide more economic resources. However, it may be better to consider this from a gender-based explanation. Taking the line of West and Zimmerman (1987) perhaps new fathers are 'doing gender' by showing that they are 'good providers', something that is institutionally recognized, supported and probably expected for men. In the workplace, it is not

men who are expected to take parental leave or reduce their hours when a new child is born, but rather women (Singley and Hynes 2005). It could also be argued that this institutional support for gender-based roles also reflects a 'standard' family life course (Chap. 3 by Thomson et al. this volume).

Despite cultural changes that encourage greater father involvement with children, these results challenge the view that fatherhood leads to greater participation in childcare. In Sweden, Haas and Hwang (2008) found that taking parental leave has positive effects on fathers' participation. In the United Kingdom, Tanaka and Waldfogel (2007) have also found that parental leave and working shorter hours is associated with greater father involvement with children. But previous Australian research finds virtually no association between fathers' leave taking behavior at the time of birth of a child and fathers' level of participation in child care (Hosking et al. 2010). An increase in working hours must dampen the time available to spend with children, although it is of course possible that men are reducing time on other activities to free up time to spend with children. Further research in this area would be valuable.

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Chapter 10
Couple Strategies: Negotiating Working Time over the Life Course

Brigid van Wanrooy

Abstract The majority of Australian families with children have two parents in paid employment. This presents the couple with choices to be made about how to allocate and share responsibilities for both earning and caring. Decisions about participation in paid employment are not made in isolation and are constrained by social, financial, employment and personal factors. Couples develop strategies to manage both work and household responsibilities which are continually negotiated throughout the life course. This chapter examines Australians' choices and preferences about how many hours to spend in paid employment and how these choices are influenced by their partners' employment and their joint caring responsibilities. The Negotiating Life Course project provides insight into the number of hours spent in paid work and preferences for alternative arrangements. The overwhelming practice and preference for Australian couples with childcare responsibilities is the 'neo-traditional' approach to sharing paid work. The default to this strategy can be attributed to various aspects of Australia's working time regime, including the unavailability of quality part time jobs, full time jobs with long hours, and the lack of affordable childcare.

Time spent in paid employment is an issue for many Australian families. For most couples, both members are in some kind of paid employment. This often results in a pressured environment in which the couple deals with the daily and unrelenting demands of two paid jobs and the household, including in some cases, the care of children. Decisions about work and care continually change through the life course and are constrained by social, financial, employment and personal factors. This chapter will examine Australians' decisions and preferences about how many hours to spend in paid employment focusing on how these choices are influenced and constrained by personal, family and institutional characteristics.

B. van Wanrooy (✉)
Advisory, Conciliation and Arbitration Service, UK
e-mail: bvanwanrooy@acas.org.uk

Table 10.1 Labour force participation rate by gender and marital status, August 1978 & 2008, per cent

Sex	Married		Not married		Total	
	Men	Women	Men	Women	Men	Women
1978	92.3	45.3	75.8	60.4	86.1	50.3
2008	89.2	69.8	71.9	68.7	82.1	69.4

Source: ABS, 6291.0.55.001 – Labour Force, Australia, Detailed–Electronic Delivery, Feb 2009, LM1

Population: Civilian population aged 15–64 years

Decisions about work hours are usually not made by the individual in isolation. As Bielenski et al. (2002:2) note, 'the household is an important mediating stage in the planning and selection of men's and women's individual working times'. These decisions become increasingly difficult when the demands of many full time jobs extend beyond the prescribed standard 38 h work week. In Australia, the average usual hours for a full time employee are 44 h per week. This has been the case since 2001 when the Australian Bureau of Statistics (ABS) first started to collect data on usual hours spent in paid employment. Further data collected by the ABS on hours worked 'last week' indicates that paid working hours steadily rose from the late 1970s, stabilising at these higher levels in the mid-1990s (van Wanrooy et al. 2008). While the prevalence of long-hour jobs has been observed in several OECD countries, Australia has some of the longest full time hours, comparable to New Zealand, the United Kingdom and the United States (OECD cited in van Wanrooy et al. 2008). In this environment it is very difficult for a couple with young children to maintain two full time jobs. This forces couples to make choices about how they share the responsibilities of paid work and care within the household.

Unfortunately the ABS does not collect information on total hours spent in paid employment for the household. So it is difficult to determine the trend in household working hours. However, it is probably safe to assume that since the proportion of women in paid employment has been increasing over the last few decades, so too has total household working hours. Table 10.1 reports labour market participation rates of men and women by marital status in 1978 and three decades later in 2008. Overall, women's participation has increased by more than one-third in 30 years to 69%, while men's participation rate has dropped slightly from 86 to 82%. Therefore, it is not unreasonable to expect a rise in household hours in paid employment over this time. This is particularly so, when examining the participation rate of married persons. While married men's participation rate has marginally declined from 92% in 1978 to 89% in 2008, the proportion of married women in the workforce has climbed to 70% from 45% in 1978, an increase of more than 50%. This has led to employed couples being the most common household type in Australia.

These patterns raise the question of how couples, both of whom are in paid jobs, share their paid employment and household responsibilities? And in particular, how is this work time negotiated when the typical full time job is well above the prescribed 'standard' working week? Data from the ABS only goes part way to answering these questions. Table 10.2 shows the ABS data available on individuals' hours spent in paid employment by household composition. The first thing to note is the

Table 10.2 Employed persons in full time employment and average hours by relationship in household[a], August 2008

Relationship in household	Employed full time (%)		<35 hours per week (mean)		> – 35 hours per week (mean)	
	Men	Women	Men	Women	Men	Women
Live with partner and children <15	93.4	39.0	17.5	17.5	43.7	38.3
Live with partner and no children <15	88.0	64.6	21.8	17.9	43.1	38.9
Lone parent with children <15	80.6	47.2	17.6	18.6	39.6	37.6
Single[b]	84.9	69.6	17.5	17.5	42.1	40.2

Source: ABS, 6291.0.55.001 – Labour Force, Australia, Detailed – Electronic Delivery, Feb 2009, FM3

Note: Hours data are hours worked last week

Population: Employed persons where relationship in household has been determined

[a] Excludes lone parents with no children under 15; dependent students; non-dependent child

[b] Includes living alone and non-family members not living alone

gendered distribution of full and part time work, and to a lesser extent, working hours. The presence of children and a partner affects men and women's attachment to the labour force in different ways. Almost all men (93%) who have a partner and children are employed full time, while their female counterparts are the group most likely to be employed part time. Among women, it is those not living with a partner or children who have the highest rate of full time employment (70%). Single fathers are the group of men least likely to be employed full time (81%).

Average part time hours are relatively consistent among men and women across the different household compositions, at around 18 h per week. Men who are employed part time and have a partner and no children work slightly longer part time hours (22 per week). There is more variation across average full time hours for men and women. Single dads are the least likely to be employed full time and also have the lowest average full time hours among men, at 40 h per week. Men who live with partners have the longest full time hours at 43 for those without children and 44 for those with children. Women's average full time hours do not vary a great deal. Women with children work an average of 38 h per week, those with a partner and no children work 39 per week, and single women work the longest full time hours at an average of 40 h. However, it is important not to focus on the quantum in this table, but rather the relativities as the hours figure is for 'last week' and not 'usual' weekly working hours. And the most important relativity here is the share of paid employment *within* the household. The missing link in Table 10.2 is the employment status of the partner. From this information we would have a better idea of how many hours a couple and the individual within the couple is contributing to paid employment and how these factors are linked. This insightful information is provided by the Negotiating the Life Course project.

Using the Negotiating the Life Course project, this chapter examines paid work within the household and the experience of working hours as measured by working time preferences. The Negotiating the Life Course project provides information about the relative share of paid employment within the household, and whether individuals prefer a different arrangement. There are numerous factors in Australia, such as minimally regulated working hours, limited provision of public childcare

and minimal rights to paid parental leave, which constrain the options available to working couples. A useful concept for exploring these constrained choices is that of 'couple strategies', which acknowledges that the 'working time regime' of a country limits the employment options available to labour market participants.

The chapter also examines workers' subjective experience of their working hours by determining whether they have a preference to change their hours. Working hours for both the respondent and their partner is examined to identify the relative share of working hours within the household. Further, the analyses examine the share of paid work in relation to workers' preferences for work hours to understand whether their desire for different hours is influenced by the share of work within the household.

The Negotiating the Life Course project is a rich source of data on the dynamic interaction of paid employment and the household over the life course. However, this chapter solely concentrates on time spent in labour market employment and does not examine share of unpaid work in the household (see Chap. 8 in this volume). In the current chapter unpaid work is broadly indicated by the presence of children in the household. The main data items explored in this chapter are respondent's usual working hours – this includes all time spent on their paid job – both at home and at the workplace, hours that are paid for and the extra hours of overtime (whether paid or unpaid). Working time preferences are a useful indicator of an individual making a constrained choice, that is, they are working a certain number of hours they would prefer not to be. The Negotiating the Life Course project provides information on work hour preferences with a question: 'Would you like to change the number of hours you work each week?' While this question leaves the individual to weigh up any trade-offs there may be in changing their work hours such as changes in earnings or, possibly, occupational position, it nevertheless provides a broad indicator of preferences. Other key data items used in this analysis include the respondent's relationship status and, if applicable, their partner's usual working hours and the presence of children under 18 in the household. These data items will illustrate the strategies men and women use to share paid work and the care of children.[1]

Couple Strategies in the Australian Working-Time Regime

Both the Second Demographic Transition and Globalisation frameworks, discussed in Chap. 2, have something to offer when exploring the division of paid work in the household. Both frameworks place an emphasis on increased individual agency and the impact this has on shaping life course decisions. However, the focus on growing insecurity as well as the institutional context makes globalisation the more useful framework. By exploring how a couple divides paid work and household responsibilities

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[1] Due to inconsistencies in the data this chapter will only focus on the wave 2 data collected in 2000. Life course stage is inferred by the presence of children and marital status.

between them we examine issues of increasing labour market insecurity, competing careers and work-life conflict.

The globalisation framework uses the notion of welfare regimes to acknowledge the role of state, market and family systems in couples' decisions about how to jointly structure their work and family. Similarly, 'working-time regimes' is a useful concept for examining the constrained choices couples make about the time they devote to paid work as it acknowledges the structural context in which these choices are made, including 'the set of legal, voluntary and customary regulations which influence working-time practice' (Rubery et al. 1998:72). In Australia, the scarce regulation of working hours, the incidence of casual employment, the absence of universal paid parental leave (until 2011), and the often prohibitive cost and limited provision of childcare all constrain couples' choices about how to manage both paid work and care. Australia's working time regime has resulted in a unique set of circumstances. Not only does Australia have some of the longest full time hours in the OECD, but it also has some of the highest rates of part time employment. The degree of fragmentation in working hours is quite unique to Australia. The rates of part time employment in Australia are comparable to those in the Netherlands, however, the Dutch have some of the lowest full time working hours among OECD countries.[2] Thus, the relatively high rates of long hour full time jobs and part time jobs means that Australia has a notably diversified distribution of paid working hours. The variation in working hours and, among other things, the limited provision of public childcare, means that Australians have a different set of options open to them when making choices about working hours, compared to people in other working time regimes.

Moen and Wethington (1992) conceptualised *couple strategies* to explain how couples make working hour decisions together within working-time regimes. Couple strategies are the decisions made about hours of paid work in response to the social and institutional environment, as well as the integration of individual value systems and life course stage. Men's and women's working hour choices and preferences are embedded within the lives of their families, the choices their partner makes, and the choices they make together as a couple (Moen 2003:10). The focus on the couple, rather than the individual, highlights the gendered roles adopted by men and women through their working hour practices and preferences; roles that are reinforced by social policy and institutions. An International Labour Organisation cross-country comparison found that the impact of family is very small (but positive) on men's supply of labour. For women, on the other hand, the impact of family 'differs considerably among the various welfare states and employment regimes' (Anxo 2004:96). In some countries' working time regimes, part time work is uncommon, so women in these countries have a choice between staying at home or working full time. Working hour options available have a significant impact on the participation of women in the labour market (Bielenski et al. 2002:38). As previously mentioned, working hours are relatively diverse in Australia, with roughly one-third of all workers

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[2] Source: OECD.stat extracted 4th April 2010.

working part time hours, another third working 'standard' hours (between 35 and 40 h per week), and the remaining third in extended full time hours (more than 40 h per week). The availability of part time work enables women to participate in paid employment and take on the primary care load. But this is perhaps a 'constrained' choice when many full time workers, particularly men, work extended hours of work.

Couple strategies can be a reflection of the couple's attitudes and values towards family life and work but confined within more pragmatic considerations such as financial security and occupational constraints. Moen and Yu (2000:296–7) observe that it is empirically difficult to separate deliberate choices and culturally prescribed ways of behaving. For example, the choice for the woman to stay home to look after the children may be because the man earns more and there is a comparative advantage. However, this choice can be constrained due to the woman's earnings and future career opportunities that are limited by structural conditions. Moen and Yu (2000:96–7) believe that examining work hours is key to understanding couple strategies.

> Do they represent simply a desired couple strategy, or do they reflect the absence of viable options? We hold that work hours represent, perhaps, the most fundamental aspect of structural lag. They reflect a lock-step world in which most workers are expected to work at least full-time, with few realistic options for working less without jeopardizing benefits (such as pensions and health insurance), and prospects for future advancement.

Together, couples have to negotiate their work hours, leisure time, housework, childcare and occupational pathways. The life course framework, and in particular the notion of 'linked lives', is useful for examining negotiations between couples. The concept of 'linked lives' recognises the importance of couples, families or households as the unit of analysis (Han and Moen 1999:109). It acknowledges that decisions are not made in isolation and often involve negotiation and compromise, especially when a person or couple is responsible for the care of children. Taking a life course perspective (and the household as the unit of analysis) links the home and work spheres, no longer considering them bounded and separate. It is a useful approach to analyse the dimensions of the work-family interface (Han and Moen 1999:10). For this reason it is particularly useful in examining working hours, as there is 'increasing recognition in working time policy of the interrelationship between the workplace and family life' (McCann 2004:15).

The other key aspect of a life course approach is that it acknowledges the changing circumstances of people's lives over time. Couples have to regularly re-negotiate the share of paid and unpaid work over the life course. Over the years researchers have increasingly recognised the important role that a person's position in the life course plays in their changing preferences for work (Watson et al. 2003:134; Reynolds 2003:1172). Family life and the presence of children are only one part of the life course. As Glezer and Wolcott (1997:4) explain, 'the salience and balance between the personal, family and social components of our lives are always changing and differ for men and women at different stages of the life cycle'.

The framework for examining couple strategies centres on the paid work hours of dual-earner couples. This chapter will include all workers, including single people,

to examine how the presence of a partner and children (under the age of 18) impacts on men's and women's working hours and preferences. Households may be grouped into three main types:

1. Breadwinner – one person in a couple is in paid employment.
2. Dual-earners – including 'egalitarian' couples who both work full time and 'neo-traditionalist' couples where one partner works part time and the other works full time.
3. Single workers – including those not living with a partner and single parents.

The traditional model is the breadwinner family where only one person in the couple, usually the male, is employed while the other partner takes the majority of responsibility for the household and caring work. Hence, the paid worker in this family is financially responsible for the family and often works long hours in paid employment. While this family situation was dominant in Australia for many years, its decline has been steep as more women have entered the labour force and stayed there after they married. An increasingly common household type, particularly in Australia, is an altered breadwinner model or what is sometimes termed the neo-traditional family (Drago et al. 2004). This model is likely to have promulgated due to Australia's working time regime, that is, the trend in long-hour jobs, as well as the prevalence of part time employment. Households where both partners are in full time employment is the least common 'strategy' adopted by couples. Couples in these households tend to rely heavily on public childcare—whether it be daycare or school or a combination of both—as well as often taking joint responsibility for household obligations.

Type of job has some impact on the distribution of hours and preferences within a couple. Among couples with an uneven share of paid work, men are more likely to have a professional job, and women with a desire for a more equal share of paid work are more likely to hold professional jobs (Drago et al. 2004:12). Previous research has found that an egalitarian share of paid work is not a desired strategy among couples in Australia. If all Australian dual-earner couples with children were able to realise their preferred working hours the percentage of couples holding two full time jobs would rise from 17 to 25% and the majority would remain with the neo-traditional approach (Drago et al. 2004:14). This is not to say it is not a desired outcome, however it would not be the preferred 'choice' within the constraints of the current working-time regime.

It is important to also examine the employment hours of single persons. Moen and Yu (2000:315–6) examined single people in the US and found that they reported the highest levels of work overload and the lowest levels of coping compared to dual-earner and breadwinner couples.

The most common household type in the 2000 Negotiating the Life Course data collection was dual-earners with children (29%). It is not possible to distinguish between full time dual-earners and neo-traditional dual earners due to small cell sizes in the data. As mentioned above, full time dual-earners are relatively rare in Australia particularly among couples with children. There were fairly equal representations of single workers and dual-earners without children, and breadwinners with children (all representing around one fifth of households). Among households with children
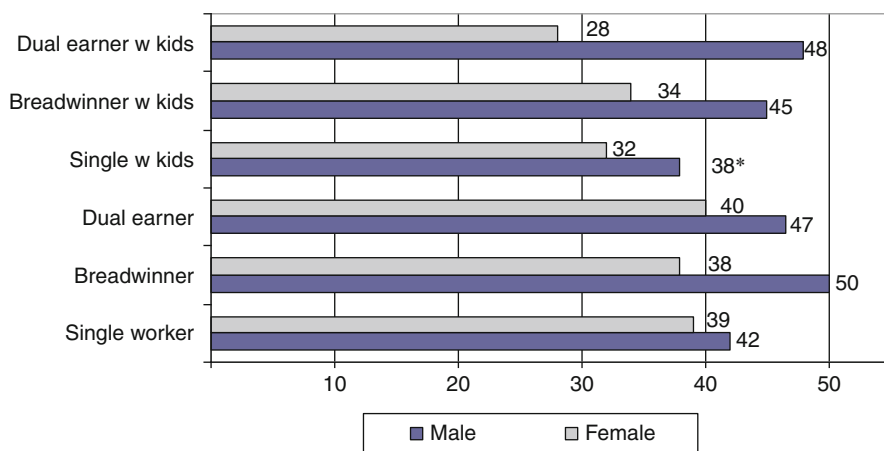
Fig. 10.1 Median usual hours in paid work by gender and household type, 2000. *Estimate not reliable $n < 20$ (Source: NLC W2)

and at least one employed parent, more than half have opted for the dual-earner strategy.

Figure 10.1 reports usual hours of work by gender and household type. In this chapter the focus is on the respondent's report of their working hours. The Negotiating the Life Course project only interviews one person in the household, therefore, the analysis relies on the respondent's reports of their partner's employment status and working hours. This also means that we only have information on the respondent's preferred working hours. The presence of children is also included in Fig. 10.1 to give a broad indication of life course stage. This figure adds to the ABS data shown previously by indicating partner's working hours by household type. Overall, there is a gendered difference among median working hours with men's at 45 h per week and women's at 35 h per week. However, single workers without children in the household are the group where men's and women's hours are the most closely aligned at 42 and 39 h per week, respectively. Women who do not have children regardless of their household role (i.e. single, breadwinner or dual-earner) tend to work similar full time hours, around 39 h per week. When children are present women's hours are lower, reaching the lowest levels where there is also an employed partner in the household. Women with children with single earner status (i.e. single parents and breadwinners) work similar hours: 32 and 34 h, respectively. Women in dual earner households with children have median hours of 28 per week.

On the other hand, men's hours are less diverse. Men with partners are working a median of 45 h or more per week. Breadwinning men without children report the longest paid work hours per week (50 h) while single fathers report the shortest work weeks among the male groups (38 h). Men in dual earner households have roughly the same paid work hours per week regardless of the presence of children.

These data suggest that when faced with decisions about paid work and care each member of the couple will take on primary responsibility for either the provision of

care or financial support. While women still appear to make a substantial contribution to paid work they appear to reduce their paid work hours to be able to fulfil the primary care role. It has been documented in Australia that many of the extra hours (that is, over and above the 'standard' 38 or 40 h week) worked by full time employees are technically unpaid. That is, for any extra hour worked the employee still continues to receive the same fixed salary (Campbell 2002). However, what may be on offer are bonuses or the chance to be promoted and earn more money. This is particularly common in workplaces with a culture of long hours.

Constrained Choices and Preferred Working Hours

The rise of dual-earner households and the changing nature of work have altered the nature and quality of family life. There has been increased attention on the 'time-squeeze' felt at home, indicated by workers' preferences for fewer hours of work (Schor 1992; Pocock et al. 2001). Jacobs and Gerson (2001:46–7) argue this is not a result of rising work hours but rather the changing composition of families that result in work and family conflicts, namely the growth of dual-earners and single parents. Gauging the subjective working time experience through preferences indicates whether individuals consider their working hours to be problematic. It is also important to bear in mind that these preferences have been formed within the working time regime and are still likely to reflect, to some extent, the limited options available.

We have already seen that in Australia's working time regime the particular strategy of dual-earner couples is to allocate one member to the 'full time worker' role which often leads to working extended hours, while the other is allocated to the 'primary carer' and part time hours. Is this the result of true preferences or constrained choices? While it is almost impossible to empirically answer this question, it is still useful to examine preferences of workers with different couple strategies. These are displayed for women in Fig. 10.2a and for men in Fig. 10.2b.[3] Overall, women are more likely to be content with their working hours than men (62 compared to 50%). There are two factors that may explain this. First, women's median working hours are lower than men's thus the desire for fewer hours is likely to be less common. Second, as women tend to take on the primary carer role, it is more pressing for them to achieve their desired hours as they are required to fit their paid work around their unpaid work obligations. In these situations, workings hours tend to be 'non-negotiable'. Men who take on the primary earner role are more likely to be employed in full time careers, and may as a result have less control over their working hours. This is supported by the finding that women in dual-earner households with children appear to be the most content with their paid working hours. Fig. 10.2a shows that 68% of women do not wish to change their hours. Single women (with or without

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[3] Only the preferences for 'fewer' and the 'same' hours are shown here. The preference for 'more' hours has been omitted due to the small sample size (and unreliability of the data).

a

Household type	Same	Fewer
Dual earner w kids	68%	25%
Breadwinner w kids	56%*	37%*
Single w kids	56%	26%*
Dual earner	62%	29%
Breadwinner	62%*	34% *
Single worker	54%	29%

b

Household type	Same	Fewer
Dual earner w kids	47%	48%
Breadwinner w kids	47%	46%
Single w kids	67%*	11%*
Dual earner	49%	47%
Breadwinner	50%*	44%
Single worker	56%	34%
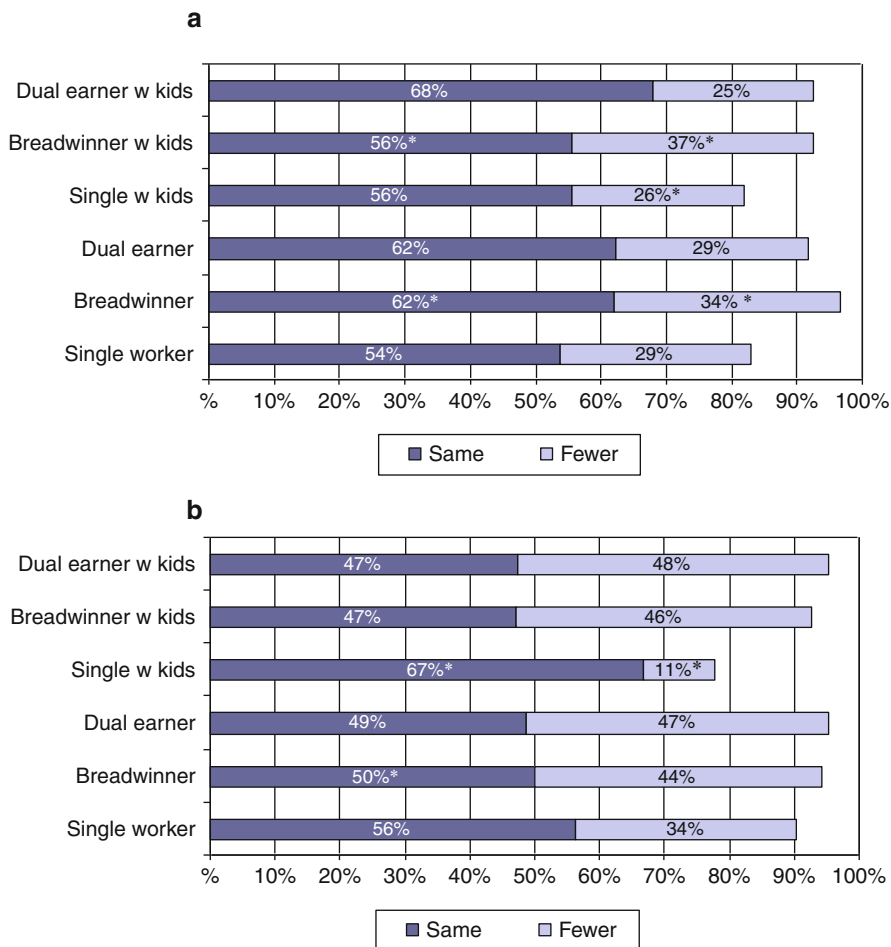
Fig. 10.2 (**a**) Women's working hour preferences by household type, 2000. (**b**) Men's working hour preferences by household type, 2000. *Estimate not reliable *n* < 20 (Source: NLC W2)

children), who have the primary responsibility for their financial wellbeing, are the least content with their working hours, with just under half desiring a change in their hours.[4]

Just as median hours spent in paid work among men were consistently high across all household types (excluding single men), so too is the preference to reduce the number of paid hours they work. Nearly half of men who are either dual-earners or breadwinners would like to work fewer hours as shown in Fig. 10.2b. The presence

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[4] Unfortunately, due to the small number of breadwinning women (with or without children) we are unable to reliably comment on their preferences.

of children does not appear to impact on men's working hour preferences, rather men's work hours preferences appear to be a direct result of the number of hours they work. Note too that the group that is most likely to be content with their hours of work are single men (56%), who also work the shortest median hours. Breadwinning men without children were found to have the longest median working hours at 50 per week, and surprisingly, their preference for fewer hours is slightly lower at 44%. This may be a result of having primary financial responsibility but without the 'pull' of children at home.

Gendered roles within households are also evidenced by working time preferences. In dual-earner households with children, women are most likely to be content with their hours (68%) while men are most likely to desire a reduction in their hours (48%); whereas single women and men without children show the same level of contentment with their hours (54 and 56%, respectively).

The results so far indicate that working-hour preferences may be a result of the level of caring and financial responsibility. Men tend to spend longer hours in paid employment, often unwillingly, most likely as a result of work pressures as well as their primary financial responsibility for the household. Women are particularly unhappy with their hours if they are the sole earner for their household, but report contentment with their hours when they have a caring role. A study from the United States found that working time preferences among different family structures are counterintuitive—male breadwinners without children and women in dual-earner couples without children were more likely to desire a decrease in hours (Reynolds 2003). Those families who are expected to have the most work-family conflict—working parents—are also those that experience more financial pressure and therefore are unwilling to work fewer hours. The researchers concluded that a large mitigating factor in this relationship is financial pressure: 'in the US, economic pressures appear to have the upper hand' (Reynolds 2003:1192).

The next section examines the actual number of hours people would prefer to spend in paid employment. Figure 10.3a, b show the median preferred working hours for men and women who reported a preference for fewer hours and the median usual paid working hours for those who did not have a preference to change their hours, that is, their usual hours are their preferred hours. The figures show that median preferred hours of those who want the same hours and those who want fewer hours are fairly similar (with women in dual-earner couples the exception). But the preferred hours of those who want to change tend to be fewer than those who are happy with their current hours.

From the outset it is clear that men and women prefer very different weekly working hours. Again, single workers are the only group where women and men are aligned in terms of their preferred hours. Among people who do not wish to change their hours of paid work, men are spending 40 h per week and women are spending 38 h per week in employment. But even among those who have a desire for fewer hours, single women prefer fewer hours (35 h per week) while men prefer 38 h per week. Among dual-earner households without children, the men and women who are working their desired hours are working similar hours at 38 and 41 per week respectively. Dual-earner women without children who want fewer hours have a

a

b
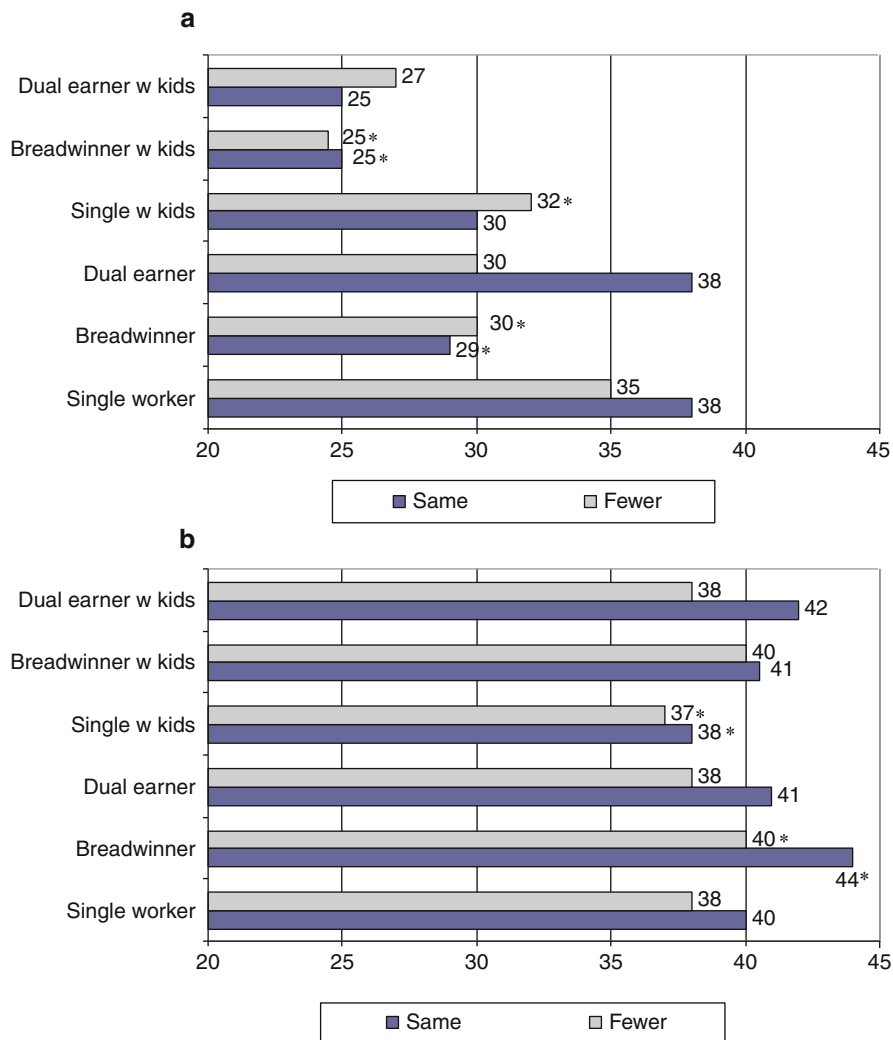
Fig. 10.3 (**a**) Women's median preferred working hours by household employment, 2000. (**b**) Men's median preferred working hours by household employment, 2000. * Estimate not reliable $n < 20$ (Source: NLC W2)

median preference of only 30 h per week, possibly meaning a change from full time to part time work for many. However, the biggest discrepancies in preferred hours among men and women exist in households with children, reinforcing the neo-traditional couple strategy. It appears that women in these households would still prefer to work longer part time hours, while men prefer around the 'standard' full time working week: 38 h among men who want fewer hours and 42 h among those who desire no change.

Table 10.3 Dual earner's median usual hours and hours ratio by gender and presence of children, 2000

Preference	Respondent's usual hours	Partner's usual hours	Female: male hours ratio	Preferred hours	Ratio using preferred hours
Dual-earners with children					
Women					
Fewer hours	40	45	0.84	25	0.57
Same hours	25	45	0.53	25	0.53
Men					
Fewer hours	55	30	0.56	38	0.85
Same hours	42	25	0.59	42	0.59
Dual-earners with no children					
Women					
Fewer hours	41	42	1.00	30	0.67
Same hours	38	40	0.80	38	0.80
Men					
Fewer hours	55	40	0.84	38	1.11
Same hours	42	38	0.84	42	0.84

Source: NLC W2
Population: Employed persons who live with an employed partner

Couples' Shares of Paid Work

The final part of this chapter examines the relative share of paid work within dual-earner households. The purpose is to explore whether workers use their partners' working hours as a reference point in determining their own preferences. For example, the couple's ideal situation may be that the husband works full time and the wife part time, but if men are only able to find part time employment, women may prefer to work full time to compensate for this. To do this, a variable has been created that expresses couples' working hours as a ratio. The ratio has been calculated as a female to male ratio, so a ratio score of 2 would mean that the woman is working twice as many hours as her partner and a ratio score of 0.5 means that the man is working twice as many hours as his partner. Table 10.3 shows the median usual hours of both respondent and partner, the median hours ratio within a couple and whether the respondent has a preference for fewer hours or is content with their hours. The last two columns show the respondents' preferences, that is, median preferred hours and the ratio of paid work if this preference was achieved.[5] This table only examines those respondents who have an employed partner (i.e. dual-earner households).

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[5] This analysis is obviously limited as the partner's preferred hours are not available. Therefore, it is implicitly assumed that the partner does not have a preference to change their hours. However, we can use the respondent's preferred working hours to determine how the balance of hours within the household would be affected if they were achieved.

One of the first points to note in Table 10.3 is that men's median hours are the same, for each preference group, regardless of whether they have children in the household. Among men who want to work less, median usual hours are 55 and for those men who are content median usual hours is 42. Further, within the two types of households the median household hours ratios are very similar regardless of men's working hours preference. Men with children spend almost twice as many hours in paid employment as their partner. While men without children spend just as much time in paid employment as their counterparts with children, but their hours are more comparable to their partners'. Both these observations confirm that presence of children and share of paid work do not affect men's working hours preferences. It is ultimately the number of hours they work, with 55 h being too long, and a median of 42 h, apparently, just right. Table 10.3 also shows that men's median preferred hours are also the same, regardless of children, at 38 h per week. If men in dual-earner households without children were to achieve their preferred hours they would be working fewer hours than their partner; but those with children would still be working more due to the part time employment status of their partner.

Women in dual-earner couples with children have partners who are working a median of 45 h per week. Among these women, those who want fewer hours are working a 40-h week, resulting in a ratio of 0.84. However, their median preference is to work 25 h – the same number of hours worked by their counterparts who are content with their hours. If women who want to work less achieved their desired hours, they would be spending almost half as much time in paid work as their partner. This is the current situation of their counterparts who are happy with their hours.

Women in dual-earner couples with no children work full time hours: 41 h for those who want fewer and 38 h among those who are content. Of the women who do not seek a change in their hours, their partners work slightly longer full time hours, resulting in a median hours ratio of around 0.80. On the other hand, of those women who want to reduce their hours their share of paid work is roughly equal with their partner. If they did achieve their median preference of 30 h per week their share of paid work would be reduced substantially to 0.67. Unlike the men, women without children have different preferences to those with children. Thus, the presence of children and share of paid work appear to be interrelated factors influencing women's preferences.

Discussion

It is clear that Australian workers employ strategies in relation to employment hours that relate to their stage in the life course and their employment situation. Couple strategies are necessary for men and women who have children to care for and want to participate in the labour market. Australia's working time regime constrains the choices available to couples who wish to balance the care of children and paid employment. In most cases, men's attachment to the labour force increases and

women's decreases where children are present. The default to the 'neo-traditional' strategy can be attributed to, among other things, long-hours full time jobs, poor provision of affordable childcare, and the availability of part time work.

An egalitarian share of paid work is rare and is not the strategy employed or preferred by Australian couples with children. An influential factor is likely to be that the average full time job involves 44 usual hours per week, making it impossible for families to balance two full time jobs. This imbalance in paid work spills over into the household reinforcing the uneven share of unpaid household work. The other option would be for a couple to take on two part time jobs. However, in most cases this is neither a secure or financially viable option for many couples.

The couple strategy of balancing one full time job with another part time job and care of children reinforces gender roles within the household. While this may be partly attributable to social norms, it is also constrained by men's higher labour market earning power. As men tend to take on paid employment as their primary role it is no surprise that other household factors such as the presence of children or the number of hours their partner spends in paid work have little effect on their working hours and preferences. Rather, it is more likely to be work pressures that directly influence the number of hours they work. Therefore, it appears that much of variability in the couple strategy is attributable to women, who determine how many hours they can contribute to paid work, dependent upon their level of caring responsibilities. It is probably no mistake that the preferred median hours of women with children is 25 h per week, which is equivalent to 5 h a day and coincides with school hours of 9 a.m. to 3 p.m. But it is not only children that influence women's preferred hours – their relationship status, employment status of their partner and share of paid work all appear to have some influence on their practice and preferences.

The life course influence of linked lives on people's working hour preferences has been demonstrated by closer examination of the share of paid work within the household. Women's working hour preferences are influenced by the time their partner spends in paid employment and the presence of children in the household. Thus, the linkage becomes more important at certain stages of the life course as couple strategies are used to manage work and family responsibilities, within the constraints of the Australian labour market. These constraints are aptly described by the globalisation framework, which recognises the influence of social and institutional regimes within a country, as well as the increasing economic insecurity across all countries.

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Chapter 11
Occupational Standing over the Life Course: What Is the Role of Part Time Work?

Jenny Chalmers

Abstract Although part time employment allows women to meet their caring responsibilities and earn income from paid employment, it stalls careers. This chapter examines Australian women's experiences of occupational change in relation to transitions between part time and full time employment using 4 waves of data from the Negotiating the Life Course project. It shows, consistent with the findings of recent United Kingdom studies, that careers are stalled by the need to move into lower ranked occupations to secure part time hours and family friendly work. Occupational down-grading is less likely to occur if a woman can reduce her hours of employment without changing employer. Women who return to full time employment after a period of part time employment can regain their former occupational standing, although the continued need for family-friendly employment is an impediment. People find it difficult to reduce their hours of employment and remain with the same employer, and even more difficult to reduce hours and stay in the same job. In 2010 Australia introduced a workplace procedure for employee requests to change working time arrangements for parents of children under school age or children under 18 with a disability. Although this is a step in the right direction, the findings of this chapter remind us that conversion to part time hours in a family unfriendly job may impede women's careers.

Parents invest substantial amounts of time in their children, particularly mothers' time (Craig and Bittman 2008; Baxter et al. 2005). In all industrialized countries women perform far more unpaid domestic and care work than men, even when also engaged in paid employment (Gershuny 2000; Baxter et al. 2012, Chap. 8, this volume). The time demands of motherhood detract from women's ability to undertake paid work and earn income on their own behalf (Breusch and Gray 2004; Budig and England 2001).

J. Chalmers (✉)
National Drug and Alcohol Research Centre, University of New South Wales, Sydney, Australia
e-mail: j.chalmers@unsw.edu.au

Governments provide varying levels of assistance to parents to combine paid work with child-care responsibilities. One indicator of the effectiveness of this assistance is the level of interruption to women's involvement in paid work as a result of parenting responsibilities. Australian women with pre-school aged children are substantially less likely to be employed than the Organisation for Economic Co-operation and Development (OECD) average (45% versus 60% in 2002). On the other hand, Australian mothers whose youngest child is school aged are as likely to be employed as the OECD average (67% for both) (OECD 2006).

The most common approach to reconciling paid work with parenting in Australia today is for mothers to combine care with paid employment on a part time basis (Abhayaratna et al. 2008). The incidence of part time employment amongst Australian women in paid employment was 39% in 2007, equal to the United Kingdom and well above the OECD average of 26% (OECD 2009). Australian mothers are more likely to be employed on a part time basis than a full time basis, even when their children are in high school (Australian Bureau of Statistics 2010). In couple families this allows the father to devote his energies to full time employment while the mother maintains some attachment to the paid labour market and contributes some income (Van Wanrooy, Chap. 10, this volume). As such, part time employment is crucial to the maintenance of the standard normative family in Australia (Thomson et al. Chap 2, this volume). Although somewhat less likely to work than partnered mothers, single mothers also favour part time employment (Abhayaratna et al. 2008), suggesting that family transitions associated with the Second Demographic Transition are also supported by part time employment (Mills and Blossfield 2012, Chap 1, this volume).

In an ideal world, the part time worker should expect to be fully integrated into the paid labour market, with all the employment benefits and opportunities for training and career progression associated with full time employment (O'Reilly and Bothfield 2002). However, a growing body of research finds that, especially in countries where women commonly use part time employment to combine paid work with parenthood, part time employment is associated with stalled careers, both when women are working part time and when they return to full time employment (Olsen and Walby 2004; Francesconi and Gosling 2005; Myck and Paull 2004; Roman et al. 2004; Chalmers and Hill 2007).

Researchers in the United Kingdom have identified a key component of the career-stalling effect of part time employment. Women who reduce their hours of work from full time to part time are more likely than women whose hours of work are unchanged to change their occupation. Women who change occupations when reducing their hours of work tend to move into a lower ranked occupation, whether ranked by average pay or educational attainment. Conversely, these studies found that shifts from part time to full time hours were associated with occupational change to a higher ranked occupation (Blackwell 2001; Manning and Petrongolo 2008; Connolly and Gregory 2008; Grant et al. 2005). Part time employment in most OECD countries is primarily located in low skill occupations in the poorly paid retail and service sector industries (Fagan 2004). Australia is no exception (Preston and Whitehouse 2004; Abhayaratna et al. 2008; Preston and Jefferson 2009).

This chapter presents findings from analyses which exploit the longitudinal nature of the Negotiating the Lifecourse project to examine Australian women's experiences of occupational change around transitions between part time and full time employment. Occupation is ranked by skill and the impact of hours of employment is examined in relation to whether or not a woman is employed in the highest ranked occupation she has occupied over her employment history. The analyses first determine whether Australian women, like their UK counterparts, move into lower ranked occupations when they reduce their hours of employment. The chapter then examines whether women employed on a part time basis move to lower ranked occupations to access family friendly working conditions beyond the reduced hours of employment. It identifies whether education protects against occupational down-grading, pinpoints the occupations most amenable to changes in hours of employment, and ascertains whether staying with the same employer provides protection from occupational down-grading. Importantly, the chapter also investigates whether women can regain lost occupational status when returning to full time hours of employment.

The next section briefly reviews what is known about occupational down-grading associated with part time employment. The chapter then describes the occupational ranking system used here and explains the concept of a woman's "best" occupation. The Negotiating the Life Course data is then examined to determine whether Australian women employed on a part time basis work in lower ranked occupations than their fulltime counterparts. The chapter goes on to present the findings of a longitudinal exploration of the process of occupational change associated with movements between part time and full time employment. It concludes by tying together the study findings in view of their implications for policy directed towards facilitating worker flexible working time arrangements.

Occupational Down-Grading Associated with Part Time Employment and Possible Explanations

Research from the United Kingdom finds that women who reduce their hours of employment are more likely than those who remain in full time employment to change occupations and experience a downward shift in their occupational ranking, whether ranked by pay or educational attainment. Conversely, shifts from part time to full time hours are associated with increases in occupational ranking (Blackwell 2001; Manning and Petrongolo 2008; Connolly and Gregory 2008; Prowse 2005, 2008). According to Connolly and Gregory (2008), between 14% and 25% of UK women who move from full time to part time hours change to a lower–ranked occupation.[1]

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[1] This is likely to be an underestimate based on the findings of analyses of returning to work after maternity leave undertaken by Houston and Marks (2003), which showed that this group of mothers may be given less responsibility in the same job. Furthermore, around half the women in part time employment interviewed by Grant et al. (2005) felt they were working below their potential.

It is difficult to move between full time and part time employment without changing employer (Connolly and Gregory 2008; Blundell et al. 2008; Altonji and Paxson 1988, 1992; Euwals 2001; Böheim and Taylor 2004). The downward shift in occupational ranking is intensified when women move from full time to part time hours by changing employer. Likewise, women returning to full time employment from part time employment by changing employer are more likely to increase their occupational ranking (Manning and Petrongolo 2008; Connolly and Gregory 2008). It appears that occupational change is associated more with the switch between hours than continuing employment (Connolly and Gregory 2008).

Some occupations are more accommodating of working hour changes than others. It appears that women employed in managerial positions prior to their reduction in working hours are most likely to move into less skilled occupations. Almost half of women employed in managerial positions in restaurants, shops or hairdressers and nearly one-third of corporate managers give up their managerial roles when reducing their hours of work. In stark comparison less than 10% of women employed as teachers or nurses or employed in caring services, cleaning and sales changed occupations (Connolly and Gregory 2008). Nonetheless, a university education does not protect women from occupational down-grading associated with part time work (Prowse 2006, 2008; Manning and Petrongolo 2008).

The existing literature uses longitudinal data to examine changes in occupational ranking that occur when women move between full time and part time employment, either directly or via a period of time out of the paid labour market. By controlling for differences between women's educational attainment and work-experience and using longitudinal analyses to absorb differences in women's career aspirations the literature shows that occupational down-grading is linked directly to the reduction in hours of employment.

The reason for the down-grading is multi-faceted. Movement between full time and part time hours in one occupation may be thwarted by the segmented nature of the labour market. A feature of Organisation for Economic Cooperation and Development (OECD) labour markets is the concentration of part time work in low skill occupations and poorly-paid retail and service sector industries (Fagan 2004). Mothers and women with caring responsibilities who reduce their hours of paid work from a full time to part time level may simultaneously choose to work in a job that requires less effort or has family friendly conditions, trading off these non-pecuniary benefits for lower wages or less career opportunity (Francesconi and Gosling 2005; Budig and England 2001). Alternatively, the existence of institutional 'family barriers' in the labour market, may restrict mothers and carers to family-friendly jobs with part time or flexible hours, which just happen to be poorly paid (Waldfogel 1995).

It is not the aim here to assess the importance of these various explanations, each of which has found some support in previous research (Grant et al. 2005). It is difficult to distinguish between preferences that exist independently of labour market structures and preferences that are developed in order to accommodate

market constraints. Regardless of the nature of the paid labour market, the gender division of labour in the home is an overriding constraint on women's labour market outcomes. This chapter contributes by considering whether women who experience occupational down-grading when moving to part time employment are in part time jobs with the most family friendly attributes.

The Approach

The existing literature ranks occupation and uses longitudinal data to examine changes in occupational ranking that occur when women move between full time and part time employment, either directly or via a period of time out of the paid labour market (Connolly and Gregory 2008; Manning and Petrongolo 2008). In a similar vein, this study follows the experience of a cohort of women over a 12 year period. As well as examining the implications of movements between full time and part time hours, it reveals the repercussions of extended periods of time in part time employment for occupational status and follows the experiences of women returning to full time employment after a period of part time employment for some years.

A woman's occupational status reflects a range of factors, including educational attainment, family background, career aspirations and plans for combining work and family roles over their life course. When attempting to examine the impact of changes in hours of employment on occupational status, it is a Herculean task to account for all those factors, particularly career aspirations and attitudes about work and family. Longitudinal analyses, which control for systematic, time invariant differences between women, go some way towards achieving that goal. Alternatively, the approach used in this study is to compare each woman's current occupation with what is henceforth described as her 'best occupation'. Best occupation is the highest ranked occupation held by a woman during her working life to date, encapsulating all those factors associated with occupational status. The implication of moving from full time to part time employment, for example, is measured by whether a woman is working in her best occupation, rather than whether the rank of her part time employment occupation is lower than the rank of her full time employment occupation. Assuming that unobserved attributes such as career aspirations have similar impacts on the ranking of the 'best occupation' and the desire to maintain that occupational attainment when changing hours of work, this measure of occupational standing has the potential to provide a purer picture of the possible career damaging effect of part time employment. It also allows exploration of the protective role of factors, such as education and allows consideration of the question, 'do women who return to full time employment after a period of part time employment regain the occupational standing of their previous full time job?'

Ranking Occupations by Skill

In studies of the relationship between hours of employment and occupational standing, occupation has been ranked in two complementary ways, depending on the purpose of the analyses. One purpose is to document the underutilisation of skills of women in part time employment (Connolly and Gregory 2008; Prowse 2005; Prowse 2008) while the other is to explain the wages gap between part time and full time workers (Manning and Petrongolo 2008). Manning and Petrongolo (2008) rank the 370 occupation groups distinguished by the Standard Occupation Classification 1990 (SOC90) by the average wage of women working in each of the groups. The wage attached to an occupation reflects not only the education, experience and training of those employed in the occupation, but also factors such as non-pecuniary job characteristics and scarcity of the skills relevant to the occupation (Prowse 2008). To rank by skill, Connolly and Gregory (2008) combine the 370 SOC90 occupation groups into 15 categories using the educational qualification of people working in each occupation as a guide. They ensure that the qualification level of people working within each occupational category is similar and rank the categories by the time taken to earn a qualification, as an approximation of skill. On the basis of this approach teachers are ranked first, other professionals second, and nurses are ranked third. Connolly and Gregory (2008) chose not to rank skill on the basis of SOC90's nine major occupation categories, concerned that this grouping conflates skill level with the nature of the job. For example, the first major occupation category in SOC90 – managers and administrators – includes owners/managers of shops and hairdressing salons and top corporate managers while the seventh major category – sales occupations – includes relatively high skill jobs (buyers and brokers) and shop assistants and checkout operators.

With its focus on the career advancing potential of part time work the aim of this chapter fits with the utilisation of skills literature. It is presumed that to best advance careers women should be working in and accumulating human capital in jobs which use and extend their skill base. To this end occupation is ranked here in terms of the nine most aggregated groupings of the Australian Standard Classification of Occupations, Second Edition (ASCO II) (Australian Bureau of Statistics 1997). This is a skill-based classification of occupations. Skill level is defined and ranked in terms of the range and complexity of tasks and is measured primarily by the 'formal education and/or training and previous experience usually required for entry to an occupation' (Australian Bureau of Statistics 1997:5). The nine major occupational groups ranked from 1 to 9 are: managers and administrators (1); professionals (2); associate professionals (3); tradespersons and related workers (4); advanced clerical and service workers (5); intermediate clerical, sales and service workers (6); intermediate production and transport workers (7); elementary clerical, sales and service workers (8); and labourers and related workers (9). There are few women working as tradespersons (4) and manual workers (7 and 9).

To illustrate that ASCO II is more of a skill-based classification of occupations than SOC90, managers of hair-dressing salons are included in SOC90's first ranked

Table 11.1 Occupational status of women employed at Wave 1 of Negotiating the Life Course project (weighted percentages)

Occupation	Employed full time			Employed part time		
	Current job (%)	First main job (%)	Best job (%)	Current job (%)	First main job (%)	Best job (%)
Managers and administrators (1)	6.6	1.2	9.3	2.7	0.8	5.1
Professionals (2)	29.6	22.7	33.5	24.1	23.0	34.4
Associate professionals (3)	18.0	6.7	22.1	7.9	5.8	13.1
Tradespersons etc. (4)	4.8	6.6	4.3	2.5	3.2	6.7
Advanced clerical (5)	7.8	7.1	7.1	9.8	9.7	9.3
Intermediate clerical (6)	24.4	38.0	21.0	28.4	31.1	23.1
Intermediate production (7)	1.1	1.3	0.5	2.7	2.9	1.9
Elementary clerical (8)	5.2	14.5	2.0	12.9	19.2	5.9
Labourers and related (9)	2.5	2.0	0.1	9.0	4.3	0.6
Mean years since started first main job	17.5 (10.3)			21.4 (8.4)		
Age	35.0 (9.3)			39.2 (8.2)		
In best occupation (%)	74.7	44.4		60.8	54.1	
Unweighted numbers	386	386	386	328	328	328

'managers and administrators' grouping but are included in ASCO II's third ranked 'associate professionals' grouping. While buyers and brokers are included with shop assistants and checkout operators in the SOC90, buyers and brokers are classified by ASCO II as 'associate professionals' and shop assistants and checkout operators are included in the 8th ranked 'elementary clerical, sales and service workers' grouping.

Difference in Women's Occupational Ranking Associated with Hours of Employment

The analyses use the only large-scale Australian dataset that collects information on employment history differentiated by part time and full time employment, the Negotiating the Life Course project. The project also collects data on occupational history, albeit not as detailed as employment history. The first wave of data was collected in late 1996 and early 1997. The respondents represent a national representative sample of Australians aged 18–54 years, selected from the electronic white pages of the Australian telephone directories.

Table 11.1 summarizes the occupational attainment of women employed in the paid labour market in wave 1, differentiating between women employed on a part time basis and women working on a full time basis. Occupational attainment is represented by a woman's current occupation, occupation in her first main job and

her 'best occupation.' The Negotiating the Life Course project contains four occupation variables: current occupation, occupation in first main job and two other variables reporting any other occupation that the respondent had worked in during the interim.[2] Best occupation is the most highly ranked of these four occupations.

The frequencies and means are person weighted to better represent the population of women of this age.[3] The table reveals that women employed part time are concentrated in clerical and lower level occupations. How much of this difference can be explained by individual level heterogeneity? On average part time workers are four years older than full-time workers. By subtracting the time that has elapsed since the women commenced working in their first main job from their age, it appears that women from both groups commenced working in their first main job at around 18 years of age on average. This suggests that women in part time employment have similar levels of education to women in full time employment.

But what of less visible differences, such as career aspirations and employment-related ability not reflected in educational attainment? There appears to be little difference in the distributions of occupational ranking of the first main job held by women, whether currently in full time or part time employment. On this basis, attitudes and ability not reflected in educational attainment would appear remarkably similar. However, in terms of best occupation, women in full time employment are more likely to have worked in the top three occupations, from managerial through to associate professional occupations. Is this evidence of different ambitions or the stultifying effects of part time work? Comparison of current occupation with best occupation reveals that while substantial numbers of both groups of women tend not to be in their best occupation, a woman employed part time is less likely to be working in her best occupation (75% and 61% of women employed full time and part time respectively, are working in their best occupations). Comparison of current occupation with occupation in first main job shows that women in full time work tend to be in a higher ranking occupation than when they commenced working whereas women working part time are working in occupations of much the same level as their first job.

Occupational Mobility with Changes in Employment Status: Random Effects Logistic Regression Estimates

This section presents the results of longitudinal analyses of the relationship between women's hours of employment (part time versus full time hours) and occupational standing using the first four waves of the Negotiating the Life Course project panel

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[2] There are instances when the respondent might have worked in more than four occupations over her working life. In calculating "best occupation" this is a concern for less than ten percent of the women.

[3] See Breusch (2003) for a description of the weighting process.

data, encompassing 12 years. The Negotiating the Life Course project was, until wave 4, a cohort. In wave 4, a new sub-sample was added to the original cohort but the new sub-sample is not included in this analysis. The analyses were undertaken with multivariate logistic regressions of the likelihood that employed women are in their best occupation.

Two popular estimators for longitudinal analyses are the fixed effects and random effects estimators. The choice of which estimator to use is best based on assumptions regarding the unobserved or unmeasured differences between women. The random effects approach assumes that unmeasured differences between the women in relation to their tendency to work in their best occupation are unrelated to the observed explanatory variables. The fixed effects estimator alleviates the bias associated with unmeasured differences that might impact simultaneously on the dependent variable and one or more of the explanatory variables.

The analyses reported here use the random effects estimator. Key explanatory variables, describing presence of children and educational attainment, may be impacted by career aspiration, for example. However, career aspiration is unlikely to be simultaneously implicated in the likelihood of being in one's best occupation. Consider women with little intention of having a career. In comparison to similarly aged women more intent on establishing a career they will, in general, have undertaken less education and established a lower ranked best occupation. Nonetheless, there is no reason to believe that they will be any less likely to work in their best occupation than more career minded women.

The sample comprises women over the age of 19 years who have commenced their paid work career[4] and are currently in paid employment. A small number of women employed on a part time basis were excluded because they had not previously worked full time, as were the women whose best occupation was in the lowest ranked occupational group – labourers and related workers. Exclusions were also undertaken to ensure information was available for all explanatory variables used in the regression analysis, as described below.

The sample comprises 2,071 observations or women-waves, representing the experiences of 942 women; 158 women appeared in every wave (31% of the sample), 323 of the women only appeared in one wave (16% of the sample – 9% in wave 1; 4% in wave 2; 2% in wave 3 and 2% in wave 4) and the remaining 461 women appeared in multiple waves, but not every wave (54% of the sample).

The top half of Table 11.2 summarises employment status. Employment was not consistently measured in all waves. In wave 1 a woman was defined as employed if she was in paid employment during the week prior to interview. In waves 2, 3 and 4

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[4] The paid work career is assumed to commence when a woman spends 1 year in paid employment that does not coincide with full time study. Years of part time and full time employment are assumed to accumulate from this point, thus excluding part time employment associated with full time education from the measure of part time experience. Although a relatively new phenomenon, recent figures show that over 70% of women aged 15–24 working part time cite education as their reason for working on a part time basis. In contrast almost 60% of women aged 25–44 cited caring for children as their reason for working part time (Abhayaratna et al. 2008: 78).

Table 11.2 Characteristics of employed women by wave, Negotiating the Life Course project

| | | Employed part time (%) | Employed full time | |
| | | | Has worked part time (%) | Hasn't worked part time (%) |
	N			
Wave1 (1996–1997)	688	44.0	28.2	27.8
Wave 2 (2000)	611	45.2	36.2	18.7
Wave 3 (2003–2004)	441	48.5	36.3	15.2
Wave 4 (2006–2007)	331	50.2	37.2	13.0
Total	*2071*	*46.3*	*33.7*	*20.0*
Proportion in best occupation	%	%	%	%
Wave1 (1996–1997)	69.3	60.4	71.6	81.2
Wave 2 (2000)	68.4	60.1	74.2	77.2
Wave 3 (2003–2004)	73.0	64.0	70.6	74.6
Wave 4 (2006–2007)	58.9	56.0	61.8	59.5
Total	*67.1*	*60.5*	*70.5*	*76.8*

a woman was defined as employed if she was in paid employment in the week prior to interview or on paid leave, other than paid maternity leave. Women with more than one job were excluded from the wave 1 sample, since information on hours worked in each job was not collected. Women with more than two jobs were included in the samples from the later waves because information on hours worked was collected for each of the jobs. Women were classified as working full time if they worked for at least 35 h per week in their main job and part time otherwise. Women with multiple jobs were classified as working full time if they worked at least 35 h per week in their main job and part time otherwise, even if their combined hours of work for all jobs was 35 h or more.

Less than half the observations (46%) involved a woman in part time employment. The proportion in part time employment increases over the waves, as the cohort of women ages (from 44% to 50%). In wave 1 approximately half the women employed full time have been employed part time. By wave 4 three-quarters of the women employed on a full time basis have been employed part time.

The bottom half of Table 11.2 shows how the tendency to be in one's best occupation varies with employment status. On the basis of this bivariate analysis, Australian women, like their United Kingdom counterparts, are likely to experience downward occupational mobility when employed on a part time basis and this downward mobility may be alleviated on returning to full time employment. Women employed on a full time basis without part time experience were most likely to be employed in their best occupation (77%) whereas women employed on a part time basis were least likely to be in their best occupation (61%). Seventy-one per cent of women employed on a full time basis with part time experience were employed in their best occupation.

The goal of the base-line analyses is to provide evidence that occupational down-grading is associated with part time employment in Australia, to determine whether that down-grading is linked to motherhood and to establish whether a return

to full time employment mitigates the damaging effect of part time employment. The random effects logistic regression of the probability that a woman is in her best occupation includes a series of zero–one dichotomous variables describing women in terms of their current and past hours of employment, motherhood status and age of youngest child. The woman's age is included as a control.

In terms of current and past employment status women are grouped into three categories representing stages in transition between full time and part time employment – women in full time employment with no experience of part time employment; women in part time employment (all who have previously been in full time employment); and women in full time employment with past experience of part time employment. Based on the UK literature Australian women in part time employment should be less likely than women in full time employment to be employed in their best occupation. Although the UK literature showed that women improve their occupational standing if they return to full time employment from part time employment, it did not consider whether women regain their best occupation (Blackwell 2001; Manning and Petrongolo 2008; Connolly and Gregory 2008; Grant et al. 2005). This is an important empirical question. Each of the variables describing transition stage between part time and full time employment is interacted with a set of indicator variables reflecting stage in life-course – childless women, mothers with a child younger than 5 years of age, mothers whose youngest child is aged from 5 to 17 years and mothers whose youngest child is at least 17 years of age. Mothers might be more likely than childless women to trade off occupational standing for family friendly working conditions when moving into part time employment (Manning and Petrongolo 2008). The presence of a pre-school child has been shown to increase the vulnerability of occupational downgrading when moving from full time to part time hours (Connolly and Gregory 2008).

The results of the logistic regression analysis are reported in Table 11.3. The coefficient estimate for age is insignificant. The group represented by the intercept comprises childless women in full time employment, none of whom has been employed on a part time basis. Constituting 11.4% of the sample, this group includes women who will go on to become mothers and women who will remain childless, and is the traditional control group when analysing the impacts of parenthood on employment outcomes.

Motherhood and the associated care responsibilities lead most women to reduce their hours of paid employment. The relevant coefficient estimate for mothers of a pre-school child, employed full time without part time experience is 2.07 (odds ratio = 7.90) and significant at the one per cent level, suggesting that they are more likely to be in their best occupation than their childless counterparts. Prowse (2006) found similarly, surmising that mothers of young children who remain in full time employment might be more selective about their jobs. Employed mothers of older children are no less likely than their childless counterparts to be in their best occupation. The coefficient estimates attached to them are insignificant at the five per cent level.

Turning now to women employed on a part time basis, the results of estimation suggest that they are significantly less likely to be working in their best occupation

Table 11.3 Parameter estimates from random effects logistic regression of the probability that employed women are working in their 'best occupation': Baseline Model

	Mean	Coefficient	Z statistic	Odds ratio
Age	41.79 (9.63)	−0.136	−1.55	0.873
Age squared/100	18.39 (7.97)	0.125	1.21	1.001
Working full time with no part time experience				
Mother with youngest child aged 0–4	0.016	2.067	2.00	7.904
Mother with youngest child aged 5–16	0.038	1.026	1.57	2.789
Mother with youngest child aged 17+	0.032	−0.176	−0.25	0.839
Working part time	0.463	−1.459	−2.75	0232
Mother with youngest child aged 0–4	0.075	1.302	2.38	3.678
Mother with youngest child aged 5–16	0.201	0.401	0.80	1.493
Mother with youngest child aged 17 years +	0.149	−0.045	−0.08	0.956
Working full time with part time experience	0.337	0.147	0.31	1.158
Mother with youngest child aged 0–4	0.017	1.272	1.37	3.569
Mother with youngest child aged 5–16	0.114	−0.707	−1.46	0.493
Mother with youngest child aged 17 years +	0.120	−1.046	−2.01	0.352
Constant (working full time, no part time experience, childless)		5.426	3.10	
Rho		0.696	303.14 (L-ratio test)	
Log likelihood		−1116.82		
Wald Chi-square		62.04		
Sample size	2,071			

than similarly aged women working full time *without* part time experience (the group represented by the intercept), regardless of motherhood status. The coefficient estimate for the indicator variable *working part time* represents the effect common to all women in this group. Since we control for motherhood, it is specific to childless women and is − 1.46 (odds ratio = 0.23), significant at the one per cent level (Z statistic = −2.75). The coefficient estimates for mothers in part time employment show whether they are as likely to be employed in their best occupation as similarly employed childless women. For both mothers whose youngest child is 5–16 years old and mothers whose youngest child is at least 17 years of age the coefficient estimates are insignificant, suggesting they are just as likely to be in their best occupation as childless women. However, there is evidence that mothers with a pre-school child are more likely to be working in their best occupation than their childless counterparts; the relevant coefficient estimate, significant at the one per cent level, is 1.30. The ultimate coefficient estimate for this group is − 0.16 (1.30 – 1.46). In comparison with similar mothers in full time employment without part time experience (coefficient estimate of 2.07), there is evidence of a part time penalty.

Childless women who have returned to full time employment from part time employment (women working full time *with* part time experience) are just as likely to be in their best occupation as childless women in full time employment *without* part time experience. The estimated coefficient on the relevant variable is 0.147 and

insignificant. In contrast, mothers (with a pre-school child or a youngest child aged 17 years or older) in full time employment are significantly less likely to be in their best occupation if they have been employed part time. Recall that, the coefficient estimate for mothers with a pre-school child and no part time experience is 2.07 whereas the coefficient estimate for similar mothers with part time experience is 1.27 but insignificant. For mothers whose youngest dependent child is at least 17 years of age, the relevant coefficient estimates are – 0.18 and insignificant (no part time experience) and – 1.05 and significant at the 1% level (part time experience). However, these results suggest that mothers in full time employment with a youngest dependent child in the 5–16 year age range are not penalised by having worked part time.

In summary, these findings suggest that women who reduce their hours of employment to a part time level tend to move into a lower ranked occupation, regardless of whether the move is associated with motherhood. On returning to full time employment, there is evidence that childless women reclaim their occupational status while some mothers, depending on the age of their children, do not.

Table 11.4 reports the results of estimation of the base model including a wider set of independent variables designed to control for systematic differences between

Table 11.4 Parameter estimates from random effects logistic regression of the probability that employed women are working in their 'best occupation' with controls

	Mean	Coefficient	Z statistic
Age	41.79 (9.63)	−0.159	−1.81
Age squared/100	18.39 (7.97)	1.378	1.34
Working full time with no part time experience			
Mother with youngest child aged 0–4	0.016	2.568	1.52
Mother with youngest child aged 5–16	0.038	1.272	1.43
Mother with youngest child aged 17+	0.032	0.052	0.07
Working part time	0.463	−1.474	−1.79
Mother with youngest child aged 0–4	0.075	1.915	1.31
Mother with youngest child aged 5–16	0.201	0.833	1.03
Mother with youngest child aged 17+	0.149	0.679	1.17
4–7 years part time experience	0.110	−0.369	−1.03
8+ years part time experience	0.244	0.110	0.30
Works 1–15 hours/week	0.139	−1.213	−3.22
Works 16–29 hours/week	0.224	−0.343	−1.04
Working full time with part time experience	0.337	−0.935	−1.03
Mother with youngest child aged 0–4	0.017	2.222	1.42
Mother with youngest child aged 5–16	0.114	0.003	0.00
Mother with youngest child aged 17+	0.120	−0.223	−0.36
4-7 years part time experience	0.091	−0.155	−0.33
8+ years part time experience	0.118	0.105	0.21
Best occupation			
Associate professional (3)	0.175	−0.362	−0.96
Tradesperson/advanced clerical (4,5)	0.130	−0.382	−0.96

(continued)

Table 11.4 (continued)

	Mean	Coefficient	Z statistic
Intermediate clerical through to labourers (6–9)	0.195	1.133	2.90
Interacted with full time + part time experience			
Associate professional (3)	0.067	−0.094	−0.18
Tradesperson/advanced clerical (4,5)	0.031	−1.316	−2.02
Intermediate clerical through to labourers (6–9)	0.051	−0.412	−0.64
Education			
Degree	0.281	1.495	1.92
Diploma	0.139	−0.495	−0.63
Vocational	0.224	−0.262	−0.37
Secondary	0.154	0.033	0.04
Interacted with part time			
Bachelor	0.096	0.737	0.85
Diploma	0.063	1.269	1.41
Vocational	0.117	0.827	1.05
Secondary	0.071	−0.703	−0.83
Interacted with full time + part time experience			
Bachelor	0.121	1.375	1.42
Diploma	0.050	1.820	1.86
Vocational	0.069	0.524	0.62
Secondary	0.043	1.133	1.21
Family friendly work conditions			
Has flexibility	0.722	−0.243	−0.85
Satisfied with flexibility	0.835	−0.195	−0.57
Satisfied with security	0.830	0.023	0.08
Has family leave	0.509	−0.085	−0.35
Interacted with mother of 0–4 year old			
Has flexibility	0.083	−1.204	−1.27
Satisfied with flexibility	0.097	1.421	1.22
Satisfied with security	0.097	−0.407	−0.39
Has family leave	0.052	−0.438	−0.66
Interacted with mother with youngest aged 5–16 yrs			
Has flexibility	0.270	−0.459	−0.97
Satisfied with flexibility	0.302	1.332	2.35
Satisfied with security	0.288	−0.872	−1.73
Has family leave	0.176	0.065	0.17
Years not working adjusted for children born	2.86 (4.33)	0.127	0.86
For part time workers	1.78 (3.86)	−1.128	−0.85
For full time workers with part time experience	0.89 (2.66)	−0.080	−0.52
Constant (working full time, no part time experience, childless)		5.792	2.93
Rho		0.649	213.16 (L-ratio test)
Log Likelihood		−1040.848	
Wald chi-square		138.98	
Sample size	2,071		

the three groups of women – women in full time employment without part time experience, women in part time employment and women in full time employment with part time experience. The first subset of controls includes education, best occupation, accumulated years of part time employment and accumulated years of labour market inactivity. UK research shows that some occupations are more accommodating of part time employment (Connolly and Gregory 2008) while a university education does not protect against occupational downgrading associated with part time employment, apart from its impact on occupational attainment in general (Prowse 2006; Manning and Petrongolo 2008). The inclusion of accumulated years of part time employment allows us to determine whether all occupational down grading takes place immediately women move into part time employment and whether extended periods of part time employment hinder women regaining their best occupation after they return to full time employment. The UK literature suggests that part time down grading might coincide with the transition since women in continuous part time employment are unlikely to experience down grading (Connolly and Gregory 2008). However, the impact of the duration of part time employment on occupational standing in subsequent full time employment has not been directly considered. Women who leave the labour market for extended periods of time do tend to earn less when they return to paid work (Datta Gupta and Smith 2002). Human capital theorists surmise that productivity enhancing human capital is specific to paid work and atrophies when the individual is not in paid employment (Polachek 1975). Others query the rusting of skills (England 1984). Regardless of the cause it is important to take account of labour market inactivity in case its impact on occupational standing is absorbed into the estimated association with part time employment.

The second subset of independent variables depicts the family-friendliness of women's jobs, providing insight into the question of whether occupational outcome is impacted by the need or desire to be in family-friendly employment. Traditionally, family friendliness refers to employment conditions and work practices that assist workers with caring responsibilities to better manage competing time demands; including paid maternity or paternity leave, time off to care for sick children and flexible work hours or employee control over scheduling of hours and start and finish times (OECD 2007). Arguing that parental well-being underpins the quality of parenting and family relationships, Strazdins et al. (2007) build on the literature relating psychosocial characteristics of jobs to physical and mental health, to develop an index of family friendly work practices and conditions that extends beyond the management of time. Their index proved to be an important explanator of the mental health, coping and self-rated health of mothers surveyed in the Longitudinal Study of Australian Children study. It included measures of; flexibility, job security, family-related leave and job control. Workers who perceive that their job is insecure, or unlikely to continue, are less likely to ask for variations in working time arrangements (Chalmers et al. 2005) and perceived insecurity is strongly associated with psychological distress (Ferrie 2001) and future job loss (Green 2006). Job control relates to the worker's power over the way their work tasks are organised and how they are performed (European Foundation 2002). The measures

used in the current analyses are: flexibility (satisfaction with the jobs' flexibility and availability of flexible hours if needed); job security (satisfaction with the job's security); and whether the job has paid family leave. The Negotiating the Life Course project does not contain any measures of job control. The indicator variables for family friendliness are interacted with the age of the woman's youngest child. Women in part time employment are also differentiated by weekly hours of employment (1–15; 16–29, 30–34). In an extension of the Strazdins et al. (2007) study Charlesworth et al. (2011) found that short-hour part time jobs were least likely to have family friendly practices.

As in the base model, the group represented by the intercept comprises childless women in full time employment, none of whom has part time experience. As a consequence of the added controls mothers in full time employment with a pre-school child are no more likely to be in their best occupation than similarly employed childless women.

Despite the added controls women employed on a part time basis are still significantly less likely to be in their best occupation than women in full time employment without part time experience, regardless of motherhood status. The relevant coefficient estimate is – 1.47 (significant at the 10% level). In contrast to the base-line findings, mothers of pre-school children are no more likely to be in their best occupation.

Whereas the base-line findings suggested that mothers were penalised on returning to full time employment after a period of part time employment, the inclusion of the more detailed controls absorbs that penalty. The relevant coefficient estimate is – 0.94. This coefficient lost significance following the addition of the controls for family friendliness of the job, suggesting that mothers in full time employment are penalised, more by their need for family-friendly employment than their part time experience.

Although highly correlated, both education and best occupation are individually related to occupation outcome. Regardless of current employment status, women whose best occupation is in the intermediate clerical and production or elementary clerical, sales and services fields were significantly more likely to be employed in that occupation than other women. Amongst women employed full time with part time experience there is a further delineation – women whose best occupation fell in the tradesperson or advanced clerical categories were less likely than managers, professionals and associate professionals to be employed in that occupation. Women are disproportionately represented in clerical, sales and services jobs. In 2002 women hold nearly 90% of advanced clerical jobs, three-quarters of intermediate clerical, sales and services jobs and 65% of elementary clerical, sales and services jobs. Slightly more women were employed on a full time basis than on a part time basis in the advanced and intermediate categories whereas most women were employed on a part time basis in the elementary group (Preston and Whitehouse 2004). Hence, the relative ease of transferring from full time to part time status in the advanced and intermediate groups.

Women with a bachelor's degree are most likely to be working in their best occupation, regardless of employment status. The relevant coefficient estimate is

1.495, significant at the 5% level. For women employed full time with part time experience, education to the diploma level also increases their chances of being in their best occupation. The relevant coefficient estimate is 1.820, significant at the 10% level. Although a university education did not protect UK women from occupational down-grading associated with part time work, beyond its association with a woman's best occupation, a university education appears to help Australian women maintain their best occupation if employed full time and protect Australian women from losing their occupational status when moving into part time employment.

As in the UK, occupational down-grading associated with part time employment appears to be immediate. There are no significant differences between the returns to accumulated years of part time employment when grouped into 0–3 years, 4–7 years, and 8+ years. The impact of up to 3 years of part time employment is incorporated in the *working part time* coefficient (−1.474). The estimate of the incremental effect of 4–7 years of part time employment is – 0.369 but insignificant, and the estimated increment for 8 or more years is 0.110 and insignificant.

Furthermore, there is no evidence that women who return to full time employment after working part time are hampered in returning to their best occupation by long periods of part time employment . The estimated coefficients for the indicator variables 4–7 years part time experience and 8+ years part time experience are both insignificant for women in full time employment with part time experience.

The only statistically significant variables in the set of family friendly indicators are satisfaction with security and satisfaction with flexibility for women whose youngest child is aged from 5 to 16 years. Women with flexible work hours and/or satisfaction with the security of their job are less likely to be found working in their best occupation. Hours of part time employment, as a proxy for family friendly conditions unmeasured by the indicators included in the analyses, was also significant. Women employed in short hour part time jobs (1–15 h) were even less likely than other part time workers to be employed in their best occupation. They comprise almost one third of mothers in part time employment (Charlesworth et al. 2011).

It was the inclusion of the indicator variable 'satisfaction with flexibility' that resulted in the loss of significance for the variable working full time with part time experience, suggesting that satisfaction with flexibility is positively associated with occupational standing. Women in high-status jobs are, after all, more likely to have access to family-friendly provisions (Gray and Tudball 2003). Mothers with children younger than 17 years of age employed part time are most satisfied with flexibility (over 90%), followed by mothers in full time employment with part time experience (about 85%) and mothers employed full time without part time experience (less than 70%). Mothers in full time employment without part time experience are also least likely to report having flexible hours, but mothers employed part time are no more likely to have flexible hours than mothers employed full time with part time experience. That part time employees seem to be more satisfied with flexibility than would be suggested by the availability of flexible hours is perhaps due to working fewer hours than they would in a full time job. It may also reflect the ability of part time employees to negotiate unanticipated absences from

work, for example, by trading hours with co-workers rather than through formal arrangements.

In summary, these findings indicate that part time employment penalises women, regardless of motherhood status, even after controlling for family-friendly conditions attached to their job. It is not the case that women trade occupational standing for family-friendliness, beyond the reduction in hours worked. However, women who return to full time employment after part time employment seem not to be penalised by their part time experience. The penalty is linked instead, to their need to work in a family-friendly job.

Education appears to protect women against losing occupational status beyond its association with women's best occupation. Women employed in the intermediate clerical and production or elementary clerical fields find it easiest to change their hours of work while women whose best occupation was in an advanced clerical position found it most difficult to regain that position on returning to full time employment.

Table 11.5 reports the results of estimation of the base model including an alternate set of independent variables designed to control for the nature of the transitions between part time and full time hours and the elapsed time since the transition. Key explanatory variables include whether, in making the transition, the woman changed employer,[5] the time that has elapsed since the transition (length of part time employment spell and length of full time employment spell) and accumulated years of part time experience. The following set of controls is also included; age and its square, accumulated years of part time employment, full time employment and absences from the labour market.[6] As in the two previous analyses, the intercept includes women in full time employment who have not been employed part time.

The indicator variable for women in part time employment is delineated by the length of the current spell of part time employment. It reflects the experiences of women who have been employed for at least 12 years on a part time basis over their working lives, and have not changed employer since full time employment. Consistent with the findings of the two previous specifications the estimated coefficients on each of the part time spell length indicator variables are significant and negative. Regardless of the length of their current spell women in part time employment were significantly less likely to work in their best occupation than women in full time employment who had no part time experience. Consistent with studies in the United Kingdom (Manning and Petrongolo 2008; Connolly and Gregory 2008), women who had changed employer since working full time were even less likely to be employed in their best occupation, although the difference is significant only for employment spells of 1–10 years in length.

The indicator variable for women in full time employment with part time experience is delineated by the length of the current spell of full time employment. It reflects the experiences of women who had not changed employer since working

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[5] Change in employer is not directly reported in the data set. A woman is assumed to have changed employer if her reported tenure in her current job is less than the elapsed time since she was last employed.

[6] For each child born a year is subtracted to account for absences associated with maternity leave.

Table 11.5 Parameter estimates from random effects logistic regression of the probability that employed women are working in their 'best occupation' controlling for nature of employment transition and time between employment transitions

	Mean	Coefficient	Z statistic
Age	41.79 (9.63)	−0.016	−0.19
Age squared/100	18.39 (7.97)	0.036	0.37
Working part time	0.463		
Length of current spell of part time employment			
Less than 1 year	0.092	−2.054	−4.12
1–5 years	0.187	−1.575	−2.78
6–10 years	0.094	−1.120	−1.56
11+ years	0.090	−1.889	−1.95
Length of current spell of part time work if changed employer since working full time			
Less than 1 year and changed employer	0.035	−0.672	−1.23
1–5 years and changed employer	0.113	−0.996	−2.42
6–10 years and changed employer	0.067	−1.844	−2.89
11+ years and changed employer	0.077	−0.704	−0.79
Accumulated years of part time employment			
1–3 years	0.077	1.300	2.79
4–7 years	0.110	0.163	0.41
8–11 years	0.095	0.436	1.17
Working full time with part time experience	0.337		
Length of current spell of full time employment			
Less than 1 year	0.061	−0.405	−0.73
1–5 years	0.139	0.088	0.18
6–10 years	0.067	−0.526	−0.87
11+ years	0.070	1.031	0.99
Length of current spell of full time work if changed employer since working part time			
Less than 1 year	0.014	−1.521	−1.92
1–5 years	0.069	−1.309	−2.99
6–10 years	0.039	−0.334	−0.55
11+ years	0.057	−1.077	−1.03
Accumulated years of part time employment			
4–7 years	0.091	−0.544	−1.19
8–11 years	0.056	−0.700	−1.28
12+ years	0.062	−1.632	−2.62
Years not working adjusted for children born	2.86 (4.33)	−0.069	−1.85
Years of full time work	13.23 (8.61)	−0.087	−3.16
Constant (working full time, no part time experience)		4.129	2.35
Rho		0.689	281.19
			(L-ratio test)
Log Likelihood		−1103.42	
Wald chi-square		81.79	
Sample size	2,071		

part time and only accumulated 1–3 years of part time work experience. Regardless of the length of current full time employment spell, women were no less likely to be working in their best occupation than women in full time employment without part time experience.

In contrast, women who had changed employer since working part time were significantly less likely to be employed in their best occupation, at least for full time employment spells of 5 or less years in length. The change in employer effect observed in this analysis may simply reflect the experiences of women who had both changed employer and down-graded their occupation when moving from full time to part time hours. These women would be most obliged to change employers to move back into full time employment.

There is evidence that occupational down-grading associated with part time employment can be mitigated with time in full time employment. Women, with full time employment spells of 6 or more years in length were no less likely to be employed in their best occupation than women who had not changed employer. While the United Kingdom studies found that people did regain some occupational ground on moving from part time hours to full time hours by changing employer, they made no attempt to determine whether people re-gained all the occupational ground they had lost when moving to part time hours (Manning and Petrongolo 2008; Connolly and Gregory 2008).

These findings support a range of interpretations. Women who lose occupational status on working part time may re-establish that occupational standing after working for some years in full time employment and changing employer. Alternatively, the women with relatively long full time spells may have altered their hours of work without changing occupation. Another interpretation is that the women who are unable to return to their best occupation with their return to full time employment become disgruntled and return to part time employment or leave the paid work-force altogether.

In summary, it appears that a small group of Australian women do successfully move between full time and part time hours without changing employer or occupation. However, women do tend to move out of their best occupation when reducing their hours of employment to a part time basis, even if they stay with the same employer. On returning to a full time position with the same employer it is possible that they reclaim their old full time job.

Women who change employer to reduce their hours of work are even more likely to move to a lower ranked occupation. Since the tendency for women to be employed in their best occupation appears not to be systematically related to the length of the spell of part time employment, occupational down-grading would appear to take place when hours of employment are reduced. Although not conclusive, the analyses suggest that occupational down-grading associated with a reduction in work hours can be reversed with time once a women returns to full time employment, as long as she finds a new employer.

Discussion

Part time employment allows women to meet their caring responsibilities and earn income from paid employment. However, part time employment, based as it is in low-skill and low-wage jobs, stalls careers (Olsen and Walby 2004; Myck and Paull

2004; Chalmers and Hill 2007). The empirical analyses presented in this chapter confirms the findings of recent studies from the United Kingdom that key to career-stalling is the fact that Australian women are compelled to move into lower ranked occupations to secure part time hours, be it with their current employer or with a new employer. This occupational down-grading is not restricted to mothers. However the need for family friendly work, beyond the reduction in hours worked, is a driver of this down-grading. Segmentation of the part time labour market and the lack of family-friendly work in more highly ranked occupations stand at fault.

Women who return to full time employment after a period of part time employment may be able to regain their former occupational standing. Childless women do so more readily than mothers, presumably because they have less need for family friendly working conditions. It is not clear that the occupational status of mothers who return to full time employment is directly hindered by having been employed part time. Instead, the analysis suggests that it is the continued need for family-friendly employment that inhibits mothers from regaining lost occupational ground.

Education, in the form of a bachelor's degree, does appear to offer some protection to women's occupational standing, both when they reduce their hours of employment to part time and after returning to full time employment. Women who had worked full time in advanced clerical and service work, perhaps in management roles, may have particular difficulties returning to full time employment; whereas women employed in the intermediate clerical and production or elementary clerical fields find it easiest to change their hours of work.

Consistent with overseas studies, the analyses show that occupational down-grading is less likely to occur if a woman can reduce her hours of employment without changing employer. On returning to full time employment after a period of part time employment, these analyses show that women who stay with the same employer are the least likely to have experienced occupational down-grading. However, the results are equivocal on the question of whether a woman, who moves to a lower ranked occupation when converting to part time hours with the same employer, is able to reclaim her old position by returning to full time hours. Changing employers is an inevitable part of working life for most people and it appears that women whose occupational status fell when they reduced their hours of work may need to find a new employer to return to full time hours. On a positive note, women who continue to work full time may be able to regain lost occupational ground with time.

People find it difficult to reduce their hours of employment and remain with the same employer, let alone the same job (Altonji and Paxson 1992; Euwals 2001; Böheim and Taylor 2004). Following in the tradition of Dutch, United Kingdom and German legislation to facilitate employees' adjustment to working hours, January 2010 saw the introduction in Australia, of 'a workplace process and a procedure for making and considering employee requests to change working time arrangements' as one of the ten National Employment Standards (NES) established by the *Fair Work Act 2009* (Charlesworth and Campbell 2008: 118). Parents of children under school age or children under 18 with a disability can request flexible work arrangements including changes to hours, patterns (job-sharing) or location, if they have 12 months continuous employment with one employer. Employers must respond in

21 days in writing and can refuse only on reasonable business grounds. The Fair Work Australia tribunal can mediate in any disputes on the issue.[7] Although this has the potential to make it easier for parents to vary their hours of work in the same job, there are concerns that the right to request is far less limited in countries like New Zealand and the United Kingdom where there are both meaningful reviews of employer refusals to grant requests and less strict age of child and length of service restrictions (Work + Family Policy Roundtable 2010).

Policy makers need to be aware that conversion to part time hours in a job that demands family unfriendly flexibility of the worker is not the answer. The findings of this study reveal that part of the reason women change occupations when moving to part time hours is to secure family-friendly work conditions, even when staying with the same employer. Furthermore, women's ability to return to full time employment worthy of their skills and past experience is hampered by the lack of full time employment that allows work-life balance.

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Appendix: Negotiating the Life Course Project

Anna Reimondos and Sue Trevenar

Abstract This appendix provides an overview of the design and implementation of the first four waves of the Negotiating the Life Course project. The first section provides an outline of the questionnaire content, including a summation of the standard demographic questions as well as modules that were introduced after the first wave. In the second section we present an explanation of the sample design and sampling frame. This includes information about the interval between waves, the inclusion of a top-up sample (N = 2,000) in Wave 4, and the basic demographic characteristics of the respondents. We then describe the data collection method (CATI), and the strategies used to keep track of respondents between waves. The final section summarises non-response categories and attrition of the sample over time.

The Negotiating the Life Course project is aimed at improving our understanding of the work and family lives of Australian men and women. The project collects information about a broad range of demographic, social and economic characteristics including education and training, income and labour force participation, division of labour, relationship transitions, childbearing, and attitudes and values. Background variables collected also include the country of birth of individuals and their parents, religion, health, housing and household composition. While the Negotiating the Life Course project can be used as a cross-sectional survey, its strength lies in the ability to explore how individuals' life circumstances and experiences change over time. Used longitudinally, the data presents a number of analytical advantages (Lynn 2009). The data provides a rich source of time-related information which can be used to study the timing of events such as leaving home or entering a first union,

A. Reimondos (✉) • S. Trevenar
Australian Demographic and Social Research Institute,
Australian National University, Canberra, Australia
e-mail: anna.reimondos@anu.edu.au; susan.trevenar@anu.edu.au

or the duration of spells in a particular state such as unemployment. It is also ideally suited for examining the interaction between transitions and changes in one domain of life such as childbearing, on other areas such as labour force participation or the organisation of domestic work. The ability to observe the ordering of life events also means that research is able to go beyond descriptions of association and give greater insight into the causality behind changes in various areas of life.

This appendix provides an overview of the design and implementation of the first four waves of the survey. The first section includes an outline of the questionnaire content, followed in the second section by an explanation of the sample design and sampling frame. The third section deals with the panel maintenance efforts used to keep track of respondents between waves, and the final section discusses issues relating to non-response and attrition of the sample over time.

Questionnaire Content

The survey questions are designed to be retrospective in the first wave, and prospective in subsequent waves. The first time individuals were interviewed they were asked to provide information regarding their past experiences (retrospective), such as their work history to date since the time they were 15. In subsequent interviews, respondents are only asked about changes since the previous wave (prospective). In this way the data provides a detailed documentation of the continuous work, education, relationship, and childbearing histories of each respondent.

A key strength of the Negotiating the Life Course project is that it collects information not only about respondents, but also about their partners. The data on partners is collected prospectively and includes background variables such as the partner's age and country of birth as well as information about their partner's employment and education. The addition of the partner information gives a better context for understanding the circumstances of respondents as well as enabling examination of the effect of the interaction between the work and family lives of the two partners.

Table A.1 provides a broad overview of the major topic areas covered by the survey and the content of each wave. In addition to the core questions regarding employment, education, relationships, and children, a variety of additional modules have been included in particular waves to provide additional information on topical issues such as the Higher Education Contribution Scheme, maternity leave, retirement and contraception.

Sample Design and Sampling Frame

The Negotiating the Life Course project was designed to provide a national random sample of the Australian population aged 18–54 in wave 1. The initial sampling frame consisted of 7,721 telephone numbers randomly selected from the Electronic White Pages. However, since the unit of interest was the individual rather than the

Table A.1 Topics covered by the Negotiating the Life Course project, Waves 1–4

Topic	Wave 1 1997	Wave 2 2000	Wave 3 2003	Wave 4 2006
Demographics	•			•[a]
Partner's demographics	•	•	•	•
Parents' history	•			•[a]
Education	•	•	•	•
Employment	•	•	•	•
Partner's education	•	•	•	•
Partner's employment	•	•	•	•
Work and Study history	•	•	•	•
Income	•	•	•	•
Children and Childcare	•	•	•	•
Relationships	•	•	•	•
Caring and community work	•	•	•	•
Housework and household responsibilities	•	•	•	•
Housing and household information	•	•	•	•
Household composition	•	•	•	•
Attitudes and values	•	•	•	•
Religion	•	•	•	•
Health	•	•	•	•
HECS			•	
Contraception			•	•
Maternity leave			•	•
Retirement		•	•	•
Youth				•
Grandparents				•
Contact with family and friends				•

[a] Only asked of new respondents to Wave 4

household only one person per household was interviewed. In households with multiple eligible individuals aged 18–54, the person to be interviewed was chosen randomly on the basis of having the most recent birthday. The Electronic White Pages contains a comprehensive listing of residential numbers in Australia, excluding unlisted numbers, and in the late 1990s it provided a good coverage of the population of Australia living in households (Wilson et al. 1999). At the time of the first wave, in 1997, mobile phones were only beginning be used regularly in Australia (Goggin 2006) and most people would still have used a home telephone number as their primary contact number.

In 2006, at the time of the Wave 4 interview, an additional top-up sample was introduced. These new respondents were sampled using random digit dialing. The random digit dialing did not include mobile phone numbers, and it is possible that this may have led to some bias if there are differences between young people living in households with fixed telephone lines, and those living in households with no fixed telephone lines. While mobile phones were not included in the sampling frame

for Wave 1 or the top-up sample in Wave 4, mobile phones were used as a means for contacting respondents if a mobile number was provided after the initial contact to the household.

Interval Between Waves

The survey is conducted roughly every 3 years, on an indefinite basis. The timing of each round of interviews in the first four waves, is shown in Fig. A.1. The first wave of data was collected between October–November 1996 and February–April 1997 by the Australian Institute of Family Studies. The second wave, collected by the University of Queensland's Social Research Centre, took place between April 2000 and September 2000, Roy Morgan Research Pty Ltd collected the third wave between December 2003 and February 2004, and the fourth wave was collected by the Deakin Computer Assisted Research Facility between September 2006 and May 2007. Compared to other longitudinal surveys which may be conducted annually, the wave-to-wave interval of 3 years in the Negotiating the Life Course project has several advantages as well as disadvantages. From the respondent's point of view, a gap of 3 years between surveys means that they may feel less burdened compared to a situation where they are re-interviewed every year. This could potentially lower the proportion of respondents who refuse to participate over time. On the other hand, particularly in the first few waves respondents may over the 3 years have enough time to forget that they have been interviewed before and may not feel the same investment and commitment to the survey as those who clearly remember taking part in previous waves, thus increasing refusal rates. A time frame of 3 years also increases the likelihood of respondents moving and changing telephone numbers between waves, making it more difficult to locate and contact them in subsequent waves.

Sample Size

A total of 2,231 persons were interviewed in the first wave. The Negotiating the Life Course project was initially intended to be a fixed panel survey, collecting data from these same individuals at every wave. However at the time of the Wave 3 survey, 6 years after the first round, only around half of the Wave 1 respondents remained in the survey. Furthermore, the remaining respondents had aged and were now around 24–61 years old.[1] The decision was therefore made to introduce a refresher sample into Wave 4, with the purpose of increasing the sample size as well as making the sample more representative of the Australian population, aged 18–63 in 2006. When selecting the members of the top-up sample, sample members were chosen from all ages between 18 and 63. However, a quota system was used to

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[1] Two individuals were aged over 61.
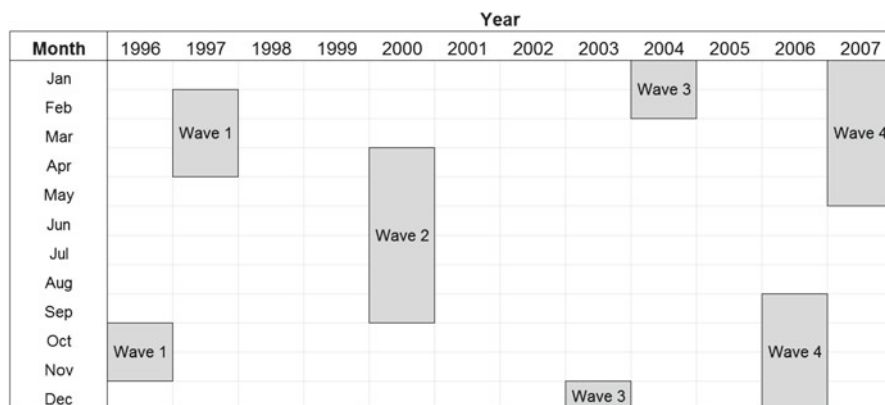
Fig. A.1 Dates of the Negotiating the Life Course project data collection, Waves 1–4

ensure that the proportion of 18–24 year olds in the sample matched the distribution of 18–24 year olds in Australian population in 2006. The top-up sample introduced 2,000 new sample members resulting in a total sample size of 3,138 in Wave 4. The evolution of the sample size is discussed in further detail below.

Table A.2 provides an overview of some of the major demographic characteristics of the 2,231 respondents at Wave 1. As is common in many surveys, women were over-represented in the sample compared to men. The higher response rate among women is usually attributed to the fact that they are more likely to be at home and therefore also to be successfully contacted. Analysis by McDonald et al. (2000) comparing the demographic characteristics of the Wave 1 sample with the Australian population aged 18–54 from the 1996 Census has shown that the Negotiating the Life Course sample broadly follows the age distribution of the Australian population. However, the initial sample is slightly biased towards those in the older age groups, with those aged under 25 being the most under-represented. Again this may be because older respondents are more likely to be at home and therefore easier to contact, compared to those aged under 25 (Stoop 2005).

Over half the respondents were legally married. Of those not legally married, around 18% were in a cohabiting relationship, and a further 18% were in a relationship but not living with their partner. Turning to country of birth, only around 9% of the initial sample was born in a non-English speaking country. According to the Australian Census, the corresponding figure in the Australian population[2] was around 16% and therefore this group is under-represented in the survey (McDonald et al. 2000). This is partly due to language difficulties among respondents whose first language was not English, which prevented them from participating in the survey. The proportion of respondents born in English-speaking countries other than Australia is very similar to that in the Australian population.

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[2] Aged 15–54.

Table A.2 Sample characteristics at Wave 1

Variable	Frequency	Percent
Sex		
Male	983	44.1
Female	1,248	55.9
Age (grouped)		
18–24	293	13.1
25–29	295	13.2
30–34	368	16.5
35–39	399	17.9
40–44	362	16.2
45–49	273	12.2
50–54[a]	241	10.8
Number of children		
0	767	34.4
1	294	13.2
2	617	27.7
3	358	16.0
4+	195	8.7
Marital status		
Never married	659	29.5
Divorced	219	9.8
Separated	86	3.9
Widowed	24	1.1
Married	1,243	55.7
Country of birth		
Australia	1,777	79.7
English-speaking country[b]	254	11.4
Non-English speaking country	200	9.0
Total	**2,231**	**100.0**

Source: NLC, Wave 1
[a]Includes three respondents aged 55
[b]United Kingdom, Ireland, USA, Canada, South Africa and New Zealand

Data Collection and Panel Maintenance

Interview Information

Information was collected at each wave using telephone interviews by trained CATI staff. Detailed instructions about the scope of the project were provided to all interview staff, with reluctant respondents allocated to more experienced interviewers. During the collection of the Wave 4 data there was a need to supply three participants with a printed version of the questionnaire. Two of the participants from the original sample had developed hearing difficulties over the course of the project and

found the long telephone interview was too difficult. A third participant did not have access to a telephone at the time the fieldwork was in progress. The latest collection began in February 2010. This fifth round of data is being collected via a mail out questionnaire comprising a shorter version of the telephone interview, with the intention of returning to a telephone interview for the sixth round.

During the earliest rounds of the data collection no incentives were offered to respondents for participation in the project. With the need to top up the sample size for Wave 4 a decision was made to run a lottery for all participants, whereby each completed interview resulted in an entry into a lottery to win $1,000. All panel respondents who had participated in previous interviews, as well as new respondents from the top up sample were eligible to go into the draw.

The transition between the first two waves saw the inclusion of several items from the General Health Survey, and several questions about retirement intentions. Between Waves 2 and 3 questions regarding contraception and maternity leave were also added. The largest addition of questionnaire items occurred with the inclusion of modules for grandparents and youths in Wave 4, as well as a contact matrix for all participants, and a small set of questions for participants who regularly work from home. The longer format of the Wave 4 questionnaire led to a slightly longer average interview of 55 min in that wave, compared to 44 min which was the average time taken to complete interviews in Wave 3.[3]

Tracing

As with all longitudinal projects there has been a natural attrition of the sample due to out of date contact information (names, addresses and phone numbers), the death of some participants, as well as the right of refusal to participate in subsequent waves. It is relatively easy to collect information on both the first and last causes mentioned, but collating information about deceased respondents is more difficult. Australia does have a National Death Index which is updated monthly and has detailed information about all death records, however this database which is maintained by the Australian Institute of Health and Welfare is only available for use by medical researchers, at a cost and under strict guidelines. Death records are also held by each individual state, and while these are publicly available they only allow searches of deaths which occurred more than 30 years ago, and are therefore not useful for tracing respondents that may have passed away recently.

Over the course of the project, staff have been able to verify the deaths of three respondents between Waves 1 and 2, nine respondents between Waves 3 and 4, and to date, 4 respondents between Waves 4 and 5. Generally the confirmation of a death of a respondent has occurred when a family member or close friend is contacted, either on the phone number supplied as the contact number for the respondent, or when further tracing has meant follow up calls to relatives or friends when all primary

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[3] Average interview times for Waves 1 and 2 are not available.

contact information has been deemed invalid. The creation of an online database (The Ryerson Index: http://www.rootsweb.ancestry.com/~nswsdps/dpsindex.htm) that lists obituaries from major Australian newspapers may permit researchers to determine accurate information regarding the deaths of respondents, however, this would take a substantial amount of time, as details of any participant who has not opted out and has not been contacted would need to be entered into the search engine individually.

Due to the length of the interval between interviews the Negotiating the Life Course project does lose track of some respondents. Prior to 2004 the only tracing efforts that occurred for the sample were by calling all contact numbers supplied by respondents at the end of each interview. If a respondent could not be found on any of those numbers they would be lost to the project. In mid 2004 a newsletter was sent to respondents. The newsletter provided some basic information and key findings from the project and had the benefit of providing project staff with information about respondents who had moved between waves. The first newsletter was posted to respondents a few months after they had completed the third round of interviews. At that time there were very few "return to senders," with only around 40 newsletters being returned. The second newsletter was sent in mid 2006, just prior to the fourth round of interviews. By that time almost 3 years had passed since respondents had been interviewed. Just over 1,500 newsletters were posted, this included respondents not only from Wave 3 who had agreed to participate again, but also respondents from Wave 2 who had agreed to participate again, but had not been interviewed at Wave 3. Included with the newsletter was a "Change of address" form that respondents could fill in and return. Approximately 60 of these forms were returned with updated contact details, of course these could only be successful if the respondent received the newsletter (so only those with mail redirection or those moving out of a family home would have been able to send the form back). Approximately 170 newsletters were returned unopened. Extensive tracing using the electronic White Pages, Google searches and the Australian Electoral Roll began at this stage, to maximise the chances of retaining as many of the respondents as possible.

At the same time as this tracing was being conducted, the data collection agency had determined that around 300 phone numbers supplied by the project were no longer current and would also require extensive tracing to find the participant. The tracing efforts went on during the period from the second newsletter mail out through the entire data collection phase. During that time around 350 successful outcomes were achieved, mostly by calling participants on all numbers supplied, sending emails (for participants from Wave 3 only) and calling all secondary contacts supplied by the participants, as well as use of the Australian Electoral Roll (see Table A.3 for more details on successful tracing). It should be noted that while addresses were found using the Australian Electoral Roll, tracing was not always successful, as only respondents who were listed in the electronic White Pages could be contacted. For a number of respondents letters were sent to the address found on the roll giving information about the project and asking for telephone numbers to be supplied, but no response was received.

Table A.3 Successful tracing efforts made for Wave 4

Method	Number
Change of address form	59
Emails received after newsletter mail out	13
Phone calls received after newsletter mail out	15
Emails received in response to emails sent by NLC staff	32
Phone calls made by NLC staff	97
Australian Electoral Roll checks	137
Google traces	10
Total	**363**

As can be seen later in this chapter the attrition rate for Wave 4 was minimal, due in part to the extensive tracing efforts used, and by including the respondents who had not participated in Wave 3, but had indicated at Wave 2 that they would like to continue with the project.

Non-response and Attrition

Similar to cross-sectional surveys, longitudinal surveys such as the Negotiating the Life Course project have to deal with non-response at Wave 1. In addition to non-response at the initial wave however, longitudinal surveys also have to deal with non-response at every other wave, and the process of attrition or loss of sample members over time can have a negative effect on the final sample size. The following section outlines the level and pattern of non-response in the first wave of the Negotiating the Life Course project, as well as across the waves.

Non-response at the First Wave

In the first wave, the inclusion of a respondent into the initial sample is conditional on two processes, achieving contact with the individual and obtaining cooperation (Stoop 2005). The two main reasons why a targeted sample member may not end up being included in the survey is therefore non-contact, and refusal to participate. Non-contact may occur if telephone calls to a respondent's home are not answered due to the person being temporarily absent or out of the house. Making contact with a respondent is the first step, but non-response is still a possibility if the (eligible) individual makes the decision that they do not wish to participate in the survey. There are numerous reasons why individuals may refuse to participate including concerns about the length, burden and complexity of the survey as well as fears about privacy and confidentiality (Lynn et al. 2005).

Table A.4 Response rate at Wave 1

Eligible	
Interviewed	2,231
Refused but eligible	1,089
Partial interview	39
Language difficulty	174
Ineligible	2,283
Unknown eligibility	
Refused immediately	611
Interview not possible	150
Business number	154
Disconnected	561
Non-contactable	429
Total	**7,721**
Response rate (high)	63.0 %
Response rate (low)	52.0 %

Source: Adapted from McDonald et al. (2000:2)

In the first round of the Negotiating the Life Course project, out of 7,721 randomly selected telephone numbers, 2,231 respondents were interviewed. Table A.4, shows the numbers of households where there was an eligible respondent, where there was no eligible respondent and where eligibility was unable to be determined. The latter group resulted from households that were successfully contacted but refused to participate immediately, without answering the screening question which was used to determine if anyone in the household was eligible. In other households refusals to participate came after the screening question, in which case eligibility could be confirmed. The overall response rate is estimated to be between 52 and 63%. The high response rate estimate is based on including those 2,231 who were interviewed in the numerator and all those determined to be eligible in the denominator. The lower estimate is based on also including those of unknown eligibility in the denominator (McDonald et al. 2000).

Sample Attrition Across Waves

Non-contact

The reasons for non-response or attrition in later waves were similar to those at the first wave. Individuals may have failed to be contacted at their previously recorded location because they were unavailable at the time of calling, or alternatively they may have changed address since the time of the last survey. While newsletters and other mail sent to the respondents which were returned to sender provided evidence that the respondents had moved, it was not always possible to identify the reason for the failure to contact the individual.

Refusal to Participate

Other respondents were successfully re-contacted at subsequent waves, but refused to participate and therefore left the sample. The reasons for the refusal to participate in subsequent waves are the same as for the first wave, however a key difference is that after the first wave respondents also have additional information about what participating in the interview entails, and their choice to participate again will be partly influenced by their survey experience the previous time they were interviewed (Lynn et al. 2005). The strength of the effect of the prior wave experience on cooperation at later rounds is dependent on a number of factors including the salience of the previous experience, the time between waves, as well as the degree of contact with the respondent between waves (Lepkowsi and Couper 2002:261).

Permanent and Temporary Attrition

When discussing attrition, an important issue is whether the attrition is of a permanent or temporary nature (Winkels and Withers 2000). In the former case, respondents leave the sample forever because they cannot be located or because they voice a wish to never be surveyed again. In the case of temporary attrition, a respondent does not participate for one or more waves but is then successfully re-interviewed at a subsequent wave. Again this may be because subsequent attempts to locate an individual are successful, or because the respondent does not wish to participate in one particular wave due to circumstances such as health or family problems but agrees to be contacted again at the next wave. Since the Negotiating the Life Course project is a survey of indefinite length it is difficult to make an exact distinction between permanent and temporary attrition, although in practice the difficulty of locating and contacting a respondent who has been missing for more than one wave (3 years) means that they can be classified as permanent losses.

Attrition in the Negotiating the Life Course project

The diagram below traces the evolution of the Negotiating the Life Course project sample size across the first four waves. The sample started with 2,231 respondents in Wave 1. At the time of the Wave 2 survey, nearly 80 % of respondents from the first wave were successfully contacted and re-interviewed. The 463 individuals who did not respond, may not have been able to be contacted, may have refused to participate, or may have died. Between Wave 2 and Wave 3 another 576 respondents were lost, however 224 of these respondents, only left the sample temporarily in Wave 3 and they were subsequently contacted and successfully interviewed at the time of the fourth wave in 2006. With the addition of the 2,000 members of the top-up sample that was introduced in Wave 4, the final sample size in that wave was 3,138 (Fig. A.2).
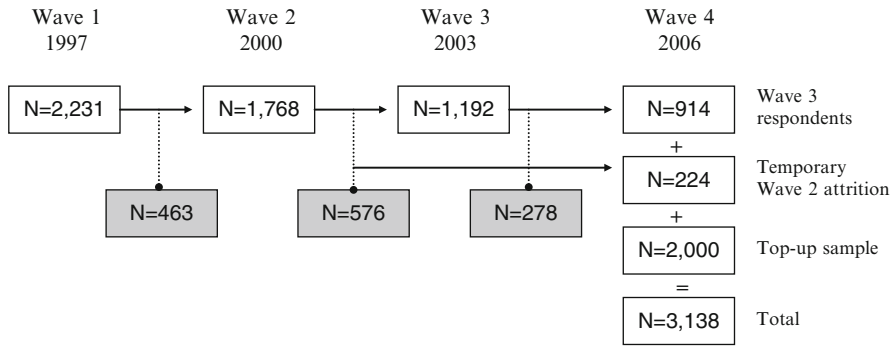
Fig. A.2 Evolution of the NLC sample, Waves 1–4

Attrition and Selectivity Bias

One reason why attrition raises concerns is that the overall decrease in the sample size has a negative effect on the precision of estimates. Another cause for concern is that, depending on the selectivity of the attrition, if those who drop-out of the sample are different from those who remain in the sample it may also introduce substantial bias to the estimates (Watson and Wooden 2009). Research has shown that the pattern and level of non-response across time, in longitudinal surveys may be affected by particular individual level characteristics such as age, education and marital status, but also that some of these determinants may vary in importance from country to country (Behr et al. 2005). It is also important to note that the degree of selectivity bias introduced by different types of non-response (non-contact, refusal, language difficulties) is likely to be quite different (Lynn and Clarke 2002).

Analysis of another Australian survey, the Household, Income and Labour Dynamics in Australia (HILDA) survey has shown that the probability of contacting an individual across the waves was higher for women and married persons, as well as those from English-speaking backgrounds (Watson and Wooden 2009). The study also found that contact probabilities increased with age, and that is was easier to contact those who were employed, with the exception of those working more than 55 hours a week. While HILDA uses a different form of data collection, namely face-to-face interviews at the respondents home, many of the individual determinants of having a high contact probability are likely to be the same for the Negotiating the Life Course project.

As mentioned earlier, non-contact across the waves may be due to a number of reasons including failing to reach the respondent at home or because the respondent has moved to an unknown new address. The characteristics mentioned above which resulted in higher or lower contact probabilities may be a result of both the at-

home patterns of individuals as well as their level of geographical mobility. In terms of establishing contact with someone known to be living at a particular address, men, younger persons, as well as those working more than 55 hours a week may be more difficult to catch at home, if they spend large parts of their days outside of the home. In terms of geographic mobility it is also known that young people tend to be more mobile than those in the older age groups. For example, according to the Australian Bureau of Statistics (2003) between the 1996 and 2001 census, around 42 % of the Australian population aged 5 years and over changed their place of residence, but it was those in the age group 25–29 who were most mobile and also the most likely to move interstate. The age pattern of mobility is also related to the occurrence of key life events, such as births, marriage and job changes which often result in a household move (Lepkowsi and Couper 2002).

In order to test for selectivity between responders and non-responders in longitudinal studies, a number of methods may be used ranging from bivariate tests to regression models (Miller and Wright 1995; Ahern and Le Broque 2005). Here we compare the demographic characteristics at Wave 1, 2 and 3 of respondents who proceed to the next wave with those who drop out, and test for statistical significance using a chi-square test. It should be noted that no distinction is made between attrition due to non-contact, refusal to participate or to the loss of sample members through death, as this information was not available in detail for all waves. The variables we examine are sex, age, marital status, employment, education and country of birth. All the variables except for sex and country of birth are time-varying in that they describe the characteristics at the each wave.

Men were significantly more likely to drop out in between Wave 1 and 2, and between Wave 3 and 4. In general, wave-on-wave participation also appeared to be positively related to age. At every wave, those aged between 18 and 24 and 25 and 29, were significantly more likely to leave the sample compared to those in the older age groups. This is likely to be associated with the higher mobility of respondents in these younger age groups. Attrition was also associated with legal marital status. At every wave, those who were never married were significantly more likely to be missing in the next subsequent rounds of interviews compared to those who were married. There may be an age effect behind this pattern, in that the younger individuals with higher mobility are also the most likely to be never married. Employment showed a mixed pattern. Respondents who were not employed (unemployed or not in the labour force) in Wave 1 were more likely to leave the sample by Wave 2. In Wave 2 there was no significant effect, while in Wave 3 the outcome was reversed with those in employment being more likely to be missing in Wave 4. Attrition also appeared to be associated with education level, university educated respondents in particular having lower percentages of wave-on-wave attrition. Finally respondents not born in Australia were significantly less likely to remain in the sample between Wave 1 and Wave 2, but after this initial attrition a country of birth effect on attrition was not evident in subsequent waves. Any bias introduced by the selective attrition of respondents over time, can be mitigated through the use of the post-stratification respondent weights, which are available for each wave of the NLC (Table A.5).

Table A.5 Percentage of respondents at Wave T who were interviewed or not interviewed, according to age, marital status and employment in Wave T-1

| | Wave 1 respondents | | | Wave 2 respondents | | | Wave 3 respondents | | |
| | Wave 2 outcome | | | Wave 3 outcome | | | Wave 4 outcome | | |
	Interviewed	Missing	N	Interviewed	Missing	N	Interviewed	Missing	N
Sex			**						**
Male	76.7	23.3	983	78.7	21.4	754	73.9	26.1	528
Female	81.3	18.8	1,248	81.2	18.8	1,014	78.9	21.1	664
Age			**			**			**
18–24	72.0	28.0	293	58.3	41.7	108			
25–29	69.2	30.9	295	68.4	31.7	158	52.7	47.3	74
30–39	79.8	20.2	767	78.9	21.1	544	68.6	31.4	264
40–49	84.7	15.3	635	86.9	13.1	609	77.7	22.3	461
50+	84.2	15.8	241	82.2	17.8	349	85.5	14.5	393
Marital status			**			**			**
Never married	72.2	27.8	659	71.5	28.5	403	66.2	33.8	210
Married	82.9	17.1	1,243	84.2	15.9	1,060	80.8	19.2	771
Divorced/separated/widowed	79.3	20.7	329	77.5	22.5	298	73.8	26.2	187
Employment			**			**			**
Employed	80.8	19.2	1,742	80.4	19.6	1,433	75.4	24.6	963
Not employed	73.6	26.4	489	78.9	21.1	327	84.8	15.2	204
Highest education			*						
Bachelor degree or higher	81.7	18.3	449	85.7	14.3	426	78.8	21.2	335
Diploma	83.6	16.4	226	82.0	18.0	183	76.1	23.9	138
Vocational qualification	77.9	22.1	498	79.3	20.7	497	76.5	23.5	353
Secondary school	75.6	24.4	451	78.2	21.8	252	73.8	26.2	145
Incomplete secondary or lower	79.6	20.4	607	75.6	24.4	406	75.7	24.3	218
Country of birth			**						
Australia	81.4	18.6	1,777	80.4	19.6	1,446	76.8	23.2	974
Other	70.9	29.1	454	78.9	21.1	322	76.2	23.9	218
Total	79.3	20.8	2,231	80.1	19.9	1,768	76.7	23.3	1,192

Note: Chi-square test results (**) $p<0.05$, (*) $p<0.10$
Figures provided in italics are frequencies rather than percentages

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Index