

report

Millennium Mums Report, waves 1-5



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

ISSR

Institute for Social Science Research

Authors	Belinda Hewitt (lead author) (in alphabetical order) Marian Baird, Janeen Baxter, Michelle Brady, Laetitia Coles, Jane Dickenson, Lyndall Strazdins, Gillian Whitehouse, Ning Xiang, Mara Yerkes
Acknowledgements	The Millennium Mums project emerged from the larger Paid Parental Leave evaluation that was led by Professor Bill Martin at the Institute for Social Science Research between 2010 and 2014. Sadly Bill passed away in April 2016 before the completion of the Millennium Mums project (2013 – 2016), but we acknowledge his leadership and major contributions to the study design and high quality data produced. He is deeply missed.
Prepared by	Institute for Social Science Research The University of Queensland Long Pocket Precinct Level 2, Cycad Building (1018) 80 Meiers Rd Indooroopilly Queensland 4068 Australia Phone +61 7 3346 7471 Email issr@uq.edu.au
Date prepared	[February 2017]
ISSR Project number	[ISSR010012]

CONTENTS

Contents	3
List of tables	5
List of figures	6
Executive Summary	1
Key Results	2
1 Mothers' Return to Work	5
1.1 Employment status transitions: the first year	6
1.2 Employment status changes over subsequent survey waves	9
1.3 Experiences at work: flexible working arrangements and perceptions of career prospects.....	14
1.4 Parental leave after a subsequent birth	16
1.5 Summary	17
2 Child care	18
2.1 Mothers' attitudes to child care and change over time	18
2.2 Age of child at uptake of formal and informal care	19
2.3 Child care packages: combining formal and informal child care.....	21
2.4 The importance of employment status for child care package and usage.....	22
2.5 Problems with child care.....	23
2.6 Summary	27
3 Fathers' leave-taking and work patterns in the early years	29
3.1 Fathers' leave-taking patterns	30
3.2 Work-related factors associated with leave-taking	34
3.3 Fathers' work hours and use of flexible work practices	36
3.4 Summary	41
4 Gender Equity	43
4.1 Data	44
4.2 Household divisions of labour	45
4.3 Perceptions of equity and wellbeing	51
4.4 Summary	54
5 Mothers' health	57
5.1 Mothers' health and wellbeing in the preschool years	58
5.2 Mothers' health, wellbeing and employment status	59
5.3 Mothers' health, wellbeing and sleep, with babies' age.....	62
5.4 Children's health and wellbeing	65
5.5 Summary	69
References	71

Appendix I: Technical Appendix	1
Project Design	1
Sample recruitment	1
Response rates	2
Interview schedules	2
Sample Size and demographics.....	3
Attrition bias.....	4
Weighting	5

LIST OF TABLES

Table 2.1	Type of child care package used and age of child.....	21
Table 2.2	Percentage of mothers in each employment status group over the 5 waves	22
Table 2.3	Mother's child care usage patterns by labour force status and age of the child ..	23
Table 2.4	Child care problems and solutions to these problems	25
Table 3.1	Fathers' access to leave at Wave 1	31
Table 3.2	Fathers' leave usage at Wave 2 (reference child ~ 12 months)	34
Table 4.1	Coefficients of mothers' leave taken for mothers' hours on housework and child care	50
Table 4.2	Coefficients of partners' leave taken for partners' hours on housework and child care	51
Table 4.3	Adjusted Odds Ratios (ORs) for mothers' perceived housework and child care fairness at Wave 5.....	53
Table 4.4	Adjusted Odds Ratios (ORs) for mothers' relationship satisfaction, Wave 5.....	54
Table 5.1	Percentage of mothers in each employment status group over the 5 Waves.....	60
Table 5.2	Percentage of babies experiencing sleep problems, Waves 1-5.....	63
Table 5.3	Children who had an illness that lasted a week or more, Waves 1-5	67

LIST OF FIGURES

Figure 1.1	Mothers' actions at the time of the reference child's birth.....	7
Figure 1.2	Working-time status transitions, from before the reference child's birth to return to work arrangements at Wave 2.....	7
Figure 1.3	Average weekly working hours of mothers and fathers before and around 1 year after the birth of the reference child, by birth order of reference child.....	8
Figure 1.4	Proportion of fathers who took additional leave in the 6-12 months period after birth of the reference child, by mother's working-time status	9
Figure 1.5	Working-time transitions among mothers who did not have another baby during the five waves, by pre-reference child working-time status.....	10
Figure 1.6	Working-time transitions among mothers who had another baby at Wave 3, 4 or 5, by pre-reference child working-time status.....	11
Figure 1.7	Employment contract transitions among mothers who did not have another baby during the five waves, by pre-reference child employment contract	12
Figure 1.8	Employment contract transitions among mothers who had another baby at Wave 3, 4 or 5, by pre-reference child employment contract	13
Figure 1.9	Mothers' use of formal and informal flexible working-time arrangements, by size and sector of employer (Wave 4)	15
Figure 1.10	Mother's use of formal and informal flexible location arrangements, by size and sector of employer (Wave 4)	15
Figure 1.11	Perceptions of career opportunities among mothers who had returned to work at Waves 3, 4 and 5.....	16
Figure 2.1	Mothers' attitudes to child care	19
Figure 2.3	Survival estimates for children who had NOT attended formal care.....	20
Figure 2.4	Survival estimates for children who had NOT had any formal or informal non-parental care.....	21
Figure 3.1	Fathers' length of leave by type and weeks, Wave 1 (at 6 months)*, of those who had access to any type of leave**	32
Figure 3.2	Fathers' length of leave by type, Wave 4*, for new baby born within previous 12 months of interview date**	33
Figure 3.3	Fathers' length of leave* by occupation sector and size (Waves 1 and 4)	35
Figure 3.4	Percentage of fathers who took additional leave by size and sector*, Wave 2**... ..	36
Figure 3.5	Trends in fathers' work hours, Waves 1-5	37

Figure 3.6	Change in fathers' work hours around birth by parity, Waves 3 – 5	38
Figure 3.7	Formal provision and usage* of flexible arrangements+, partner with and without a new baby at Wave 4**	39
Figure 3.8	Fathers' flexible work hours provision and usage* by size and sector of employer at Wave 4	40
Figure 3.9	Fathers' flexible work location arrangement provision and usage* by size and sector of employer at Wave 4.....	40
Figure 4.1	Mother and partner's mean hours in housework	45
Figure 4.2	Mother and partner's mean hours in child care	46
Figure 4.3	Mother and partner's total weekly hours in paid and unpaid work.....	46
Figure 4.4	Mean hours for women on housework per week by labour force status (full-time, part-time, on leave, and not in the labour force).....	47
Figure 4.5	Mean hours for women on child care per week by labour force status (full-time, part-time, on leave, and not in the labour force).....	48
Figure 4.6	Mean hours for men on housework per week by their partners' (the mother's) labour force status (full-time, part-time, on leave, and not in the labour force)	49
Figure 4.7	Mean hours for men on child care per week by mothers' labour force status (full-time, part-time, on leave, and not in the labour force).....	49
Figure 4.9	Mothers' fairness perception with housework and child care at Waves 4 & 5 ...	52
Figure 4.10	Mothers' relationship satisfaction across 5 waves.....	53
Figure 5.1	Trends in mothers' physical and mental health	58
Figure 5.2	Trends in life satisfaction, Waves 1 – 5	59
Figure 5.3	Trends in mothers' mental health by employment status, Waves 1-5	60
Figure 5.4	Trends in mothers' physical health by employment status	61
Figure 5.5	Trends in mothers' life satisfaction by employment status	62
Figure 5.6	Child sleep problems and mothers' mental health	63
Figure 5.7	Child sleep problems and mothers' physical health.....	64
Figure 5.8	Child sleep problems and mothers' life satisfaction	64
Figure 5.9	Breastfeeding duration.....	65
Figure 5.10	Hazard of breastfeeding cessation by mothers' employment status	66
Figure 5.11	Immunisations and mothers' employment status.....	67

Figure 5.12 Child care attendance and illness lasting a week or more..... 68

Figure 5.13 Child care attendance and average number of illnesses lasting a week or more
..... 69

EXECUTIVE SUMMARY

This report presents key findings from *Enhancing Mothers' Workforce Engagement in the Preschool Years*, an Australian Research Council Linkage project in partnership with the Department of Social Services, commonly referred to as the Millennium Mums (MM) project. The aims of the project were to examine women's expectations of employment and their experiences of returning to employment following the birth of a baby. More broadly, the project provided an opportunity to investigate a range of related issues including child care, father's leave taking arrangements, gender divisions of labour within the household and the health and wellbeing of mothers and children. All of these issues are of interest to those concerned with women's employment transitions and all are intricately bound up with mother's expectations and experiences of combining employment with the care of a young child or children.

Women's involvement in paid employment has increased markedly in recent decades, but stubborn gender gaps persist in several areas. During the 1980s mothers' workforce participation rates increased from 44 per cent in 1979 to 60 per cent in 1990, but since then appears to have stalled (ABS, 2000). Despite major changes to legislation and improvements to employer provisions for working mothers over the last two decades, mothers' participation in the workforce has only marginally increased to 64 per cent since the end of the 1980s (ABS, 2008). The participation rate of mothers with preschool children (aged 0-4) is 52 per cent, a figure that is much lower than the average for mothers with a youngest child aged 5-9 years (71 per cent) and for mothers with a youngest child aged 10-14 years (77 per cent) (ABS 2008). Many women exit the workforce during their children's preschool years with 29 per cent of women with a child under two leaving their job permanently before or after the birth of their child (ABS, 2013).

In recent years a major policy initiative has been introduced with the potential to disrupt these long-standing employment patterns, in addition to persistent gender divisions in paid and unpaid work. The Paid Parental Leave Act 2010 introduced Australia's first national Paid Parental Leave (PPL) scheme. Since 1 January 2011 eligible parents can receive up to 18 weeks of Australian Government-funded Parental Leave Pay (PLP) when they take time off from work to care for a newborn or recently adopted child. The objectives of the scheme are to:

- Allow carers to take time off work to care for the child after the child's birth or adoption;
- Enhance the health and development of birth mothers and children;
- Encourage women to continue to participate in the workforce; and
- Promote equality between men and women, and the balance between work and family life.

From 1 January 2013 the scheme was expanded to include Dad and Partner Pay (DAPP). DAPP provides eligible fathers and partners with up to two weeks' pay at the rate of the national minimum wage, when they take unpaid leave or are not working for pay, to spend time with their newborn or recently adopted child. The objectives of this scheme are to provide financial support to fathers and partners caring for newborn or newly adopted children, in order to:

- Increase the time that fathers and partners take off work around the time of birth or adoption;
- Create further opportunities for fathers and partners to bond with the child; and
- Allow fathers and partners to take a greater share of caring responsibilities and to support mothers and partners from the beginning.

The Australian welfare state is thus undergoing significant change, with major new policy initiatives having potentially far-reaching consequences for gender equity in paid and unpaid work. The MM project produced

a unique and powerful longitudinal data source for examining mothers' workforce participation and retention in Australia at this time, as well as a range of related issues.

KEY RESULTS

This report presents only a selection of the key insights from the large amount of data generated from the project. In this report we focus on return to work patterns of mothers, use and experiences of formal and informal child care, father's leave taking, gender equity in unpaid work and care and the health and wellbeing of mothers and children. Key results include:

Mothers' return to work

- High levels of transition from full- to part-time work after the birth of a child, with mothers giving birth to a first child reducing their weekly hours by 15 hours per week on average on return to work around one year after the birth.
- Ongoing prevalence of part-time work among working mothers with pre-school children.
- High proportion of mothers not working during pre-school years, particularly among those who had another child during the study, but also around 20 per cent of those who did not have another child over this time period.
- Comparatively high return to work rates among self-employed mothers, with this group least likely to be 'not working' after the birth of another child.
- Lowest return to work rates among mothers in casual positions prior to the birth of the reference child and among those whose pre-reference child income was in the lowest range; this was the case both for those who did and did not have another baby after the reference child.
- Highest uptake of flexible working-time arrangements in small private sector organisations, although the highest uptake of formal provisions was in the public sector.
- Comparatively low uptake of flexible location arrangements, but highest (for both formal and informal provisions) in small private sector organisations.
- Most mothers reported that their career opportunities on return to work were 'about the same' as in their pre-reference child job at Wave 2, but the proportion declined over subsequent waves regardless of whether there was a new baby or not.
- Some mothers who had a new baby after the reference child altered their labour force behaviour to ensure they would qualify for Parental Leave Pay (the highest proportion who did this was 14 per cent at Wave 5).

Child care

- Formal child care use is age dependent with more informal child care use when the reference child was young.
- Mothers working full-time or long part-time hours have very similar patterns of child care use.
- The most common child care problem experienced by mothers was finding care for a sick child (34 per cent) while the least common problem was managing multiple care arrangements (10 per cent).
- Across all child care problems grandmothers were overwhelmingly the person that mothers turned to most.

Fathers' leave-taking and work patterns

- Nearly all (95 per cent) fathers who were reported as having access to leave, took some form of leave in connection with the birth of the reference child.
- Fathers use multiple types of leave in order to increase their time off work in connection with the birth of a new baby.
- Fathers in the public sector have the highest use of formal flexible work time.
- Fathers who work in a not-for-profit or a large company in the private sector are the most likely to use formal or informal flexible work location provisions.
- Fathers in the not-for-profit sector had the highest usage of informal flexible work place from all five workplace size and occupation sector types.

Gender equity

- Substantial gender inequity in households in relation to housework, child care and total work with women reporting much longer time spent on unpaid work than men.
- Time spent on child care outweighs time spent on housework for both men and women.
- Women report much longer total paid and unpaid work weeks than men across all 5 waves.
- Women who are employed full-time spend much less time on child care and housework than women who are employed part-time or not at all.
- Taking less than 1 year of leave is associated with fewer hours of housework and child care for women in subsequent years.
- Men who take longer paid leave spend more hours on child care and housework.
- Taking leave does not appear to be related to perceptions of fairness of household arrangements or variations in relationship satisfaction.

Mothers' and children's health

- Mothers' health and wellbeing declined over time across all three indicators of physical health, mental health and life satisfaction.
- Mothers' health and wellbeing was shaped by their employment status.
- Mothers who worked full-time have the lowest mental health and life satisfaction overall, whereas mothers not in the labour force had the highest levels of mental health and life satisfaction.
- The best physical health was reported by mothers who work regular part-time hours (<30 hours per week).
- Almost half of all mothers continued to breastfeed until the child reached six months of age.
- When babies were six months of age, mothers who worked full-time are consistently more likely to be up to date with their child's immunisations than mothers who work part-time, are on leave or are not in the labour force.
- The occurrence of illness in children (that lasted a week or more) was 42 per cent when children are 1 and 2 years of age, and subsequently declined to 36 per cent (3 years old) and 34 per cent (4 years old).

- We find no clear pattern indicating that children attending child care are more likely to have a significant illness compared to those who do not attend formal care

1 MOTHERS' RETURN TO WORK

Gillian Whitehouse and Ning Xiang

The Millennium Mums survey provides the opportunity to deepen understanding of Australian mothers' return to work patterns by tracking labour force experience following the birth of child and over the preschool years. This chapter focuses in particular on the transitions mothers made on return to work, particularly changes in contract status (such as working hours and permanency) and the extent to which these were sustained or reversed over subsequent survey waves. It also identifies the prevalence and uptake of flexible working arrangements and mothers' perceptions of change to their career prospects. The data presented are descriptive but indicate the potential for future analysis of the labour market choices of Australians with young children and for studies examining the gendered impacts of parenthood.¹ Later chapters of the report will address issues that are potentially influenced by the timing of return to work and conditions of employment.²

Patterns of return to work are shaped by a number of overarching influences, including the prevailing 'gender order' (i.e. the social norms and expectations around gender roles and parenting), the structure of the labour market and the public policy framework.³ In Australia, the overall gender order can broadly be described as a contemporary variant of a 'male-breadwinner work/care regime', in which primary breadwinner roles are usually assumed by men, with mothers of young children less likely to be in the labour force than women of the same age without children, and the majority of mothers of young children in paid employment working part-time.

While the transition from male breadwinner to 'dual earner-dual carer' family models has not been fully achieved anywhere, comparative data show that Australia is a long way from the forefront of such movements. Although the proportion of Australian women participating in the labour force increased markedly in the second half of the twentieth century and continued to rise over recent decades, OECD data from 2013 show a 'motherhood employment gap'⁴ wider than the OECD average; in comparison, very high maternal employment rates and negligible motherhood employment gaps were recorded in countries such as Sweden and Denmark (OECD Family Database, Chart LMF1.2.A Maternal employment rates, 2013). In addition, a high proportion of female (and particularly maternal) employment in Australia is part-time. Australia has ranked fourth highest among OECD countries on the proportion of women in part-time employment over recent years (OECD 2012: 161), and Australian Census data indicate that among working mothers whose youngest child was under six years of age, more than half were in part-time jobs (a proportion that has increased from 1991-2011) (Baxter, 2013: 3).

¹ The impact of motherhood on gender equality in employment has been extensively researched, with studies focusing on a wide range of issues including motherhood wage penalties and loss of career continuity (e.g. Evertsson & Grunow, 2012; Gangl & Ziefle, 2009; Waldfogel, 1997). The Millennium Mums data has potential to extend knowledge on these issues in the Australian context.

² A longstanding literature also exists in these areas, addressing issues such as the impact of mothers' employment during the first year of a child's life on maternal and child health and well-being (e.g. Baker & Milligan, 2008; Chatterji, P., Markowitz, S. & Brooks-Gunn, 2013) and child development (e.g. Brooks-Gun, Han & Waldfogel, 2010; Joshi, Cooksey & Verropoulou, 2009).

³ Studies of the impact of policy frameworks have underlined the complexity of these relationships, with different types of work/family reconciliation measures shown to have contrasting and potentially perverse effects on gender equality (see, e.g., Gornick & Meyers, 2003; Mandel, 2012; OECD, 2012: Chapter 13; Pettit & Hook, 2009).

⁴ Defined as the difference between the average employment rates of all women aged 25-54 and mothers of at least one child aged 0-14 years in that age group.

The Millennium Mums survey was conducted within the setting of this overarching (albeit not totally static) gender order and patterns of labour force participation. It also took place in a new policy environment following the implementation of the PPL scheme: it was the first longitudinal study to focus explicitly on the experiences of mothers returning to work after the birth of a child in this context. It thus provides observations over a sustained period in essentially the same social, industrial and policy context and helps to build a picture of gendered labour market behaviour that can inform the policy process. The following sections of the chapter address, respectively: mothers' employment status transitions in the first year after the birth of the reference child; employment status changes over Waves 3-5 (distinguishing between those who did and did not have another child during this period); and experiences on return to work (focusing on the use of flexible working arrangements and perceptions of career prospects). The final section reflects on the use of parental leave among those who had another child during the course of the study, identifying the extent to which labour market behaviour was modified to qualify for PLP.

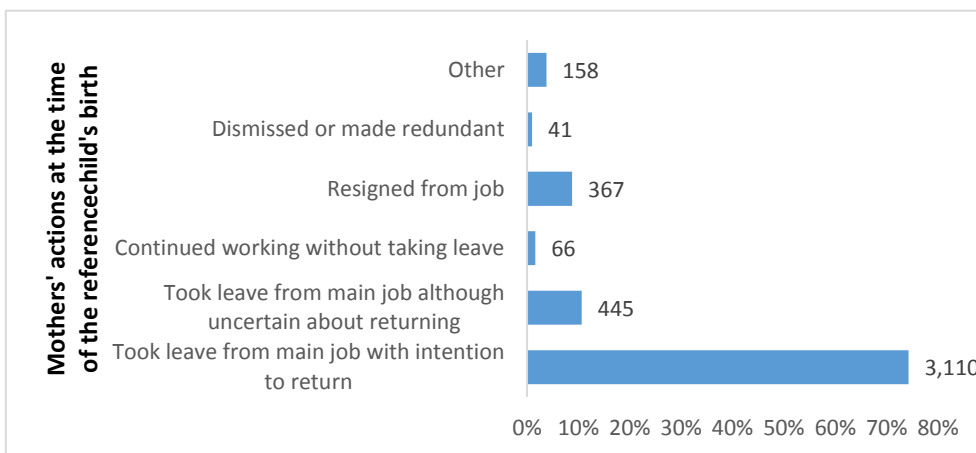
1.1 EMPLOYMENT STATUS TRANSITIONS: THE FIRST YEAR

The Millennium Mums survey collected information on a variety of employment status indicators. Although all mothers were employed prior to the birth of the reference child, this was not necessarily the case afterwards, hence the most basic 'status' distinction captured was between 'employed' and 'not employed'. Those in employment were classified as employees or self-employed, and information was collected on working hours, permanency of employment contract and occupation. The focus in this section is primarily on 'working-time status', a measure based on weekly working hours, with distinctions between full- and part-time work (the former defined as more than 35 hours per week) as well as between 'short part-time' (defined as <18 hours/week) and 'long part-time' (defined as ≥ 18 and ≤ 35 hours per week). Permanency of employment contract (whether on a permanent, fixed-term or casual contract) is also addressed briefly in this section and developed further in the following section. Occupational status is not discussed due to the low proportion of mothers who changed occupations.

Before turning to patterns of return to work, a preliminary observation is that after the birth of the reference child not all mothers took leave from employment with the intention of returning. Figure 1.1 presents information on mothers' actions at this time, indicating that although the majority (around 85 per cent) took leave, albeit in some cases without being certain they would return to work, and a small number continued working without taking any leave⁵, around 10 per cent left the labour market. The majority of these 'leavers' (367, or around 9 per cent of all mothers) resigned from their jobs although a small number (41) were dismissed or made redundant. Among mothers who resigned from their job before the birth, over half (54 per cent) had been in a permanent job, while 31 per cent had been in a casual position, 11 per cent on a fixed-term contract and 4 per cent in self-employment. In terms of family characteristics, 59 per cent were first-time mothers and 77 per cent were married or cohabiting (20 per cent were single mothers). Almost half this group (48 per cent) were not currently working at Wave 5.

⁵ Among these 66 mothers, the majority (around two-thirds) were self-employed.

Figure 1.1 Mothers' actions at the time of the reference child's birth

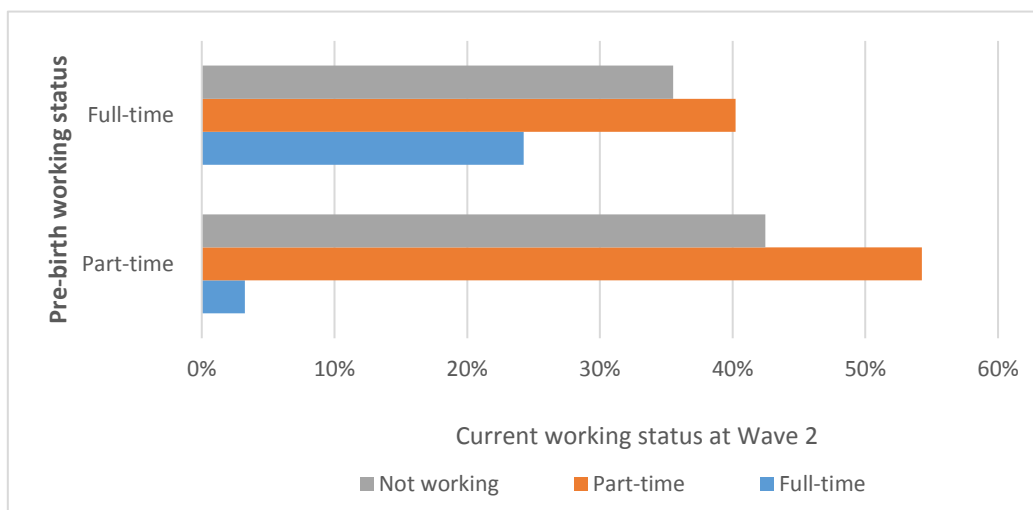


Source: MM survey, Wave 1

By Wave 2 (when the reference child was around 12 months old) a little over 60 per cent of mothers had returned to work, with around 10 per cent still on leave and around 25 per cent not in employment. The most marked employment status transition on return to work was a change in working-time status, with a relatively small proportion of returners (around 9 per cent) changing from permanent to casual status.

Working-time transitions (between full- and part-time work) at this time are illustrated in Figure 1.2, which highlights the prevalence of part-time work among mothers of a child around one year old. Among those working full-time prior to the birth, 40 per cent were employed in a part-time position at Wave 2, compared with 24 per cent who returned to a full-time job (36 per cent were not working). Among those who worked part-time prior to the reference child's birth, over half returned to a part-time position by Wave 2, compared with around 3 per cent who converted to full-time (over 40 per cent were not working).

Figure 1.2 Working-time status transitions, from before the reference child's birth to return to work arrangements at Wave 2



Notes:

'Not working' includes those on leave, those not in the labour force and missing Data weighted by balanced-panel longitudinal weight

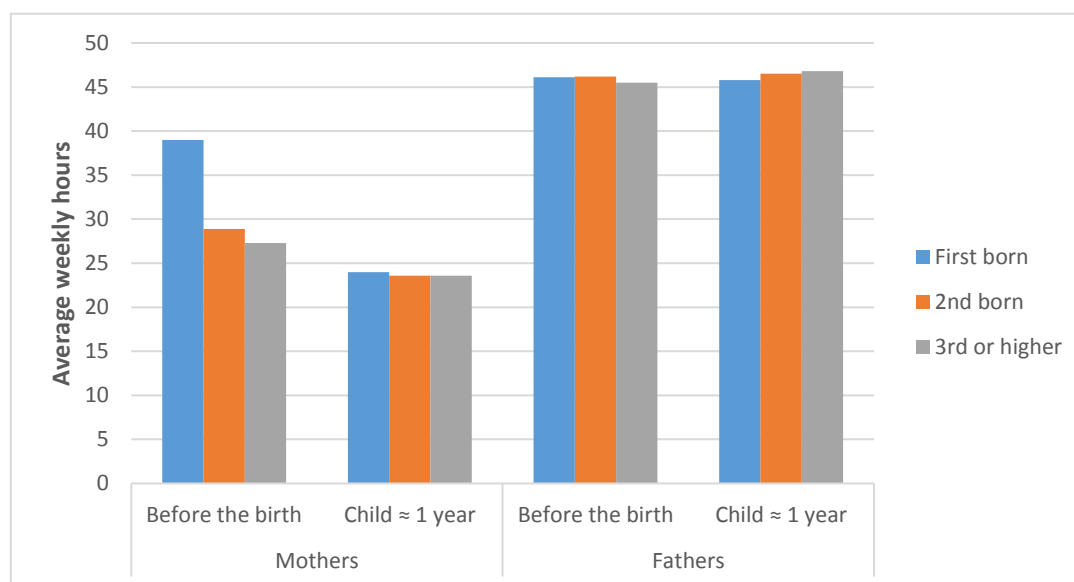
Source: MM survey, Waves 1 and 2

These return to work patterns at around 12 months after the birth of the reference child varied in line with mothers' pre-birth income: 28 per cent of those in the highest income bracket (\geq \$78,000) had returned full-time while only 8 per cent were not in the labour force. In comparison only 6 per cent of those in the lowest income bracket (\leq \$36,399) had returned full-time and 33 per cent of this group remained out of the labour force. Fathers' income prior to the birth of the reference child was not significantly associated with mothers' return to work patterns.

The prevalence of mothers' transitions from full to part-time employment shown in Figure 1.2 is consistent with the type of 'male breadwinner work/care regime' discussed earlier, although this also depends on any changes in working hours made by fathers. If fathers also reduced their weekly hours after the birth of a child, this would be conducive to a more gender-egalitarian division of labour; alternatively if men lengthened their working hours when they became parents this would exacerbate the gender divisions underpinning the male breadwinner model.

Figure 1.3 examines this issue with a comparison of mothers' and fathers' average weekly working hours before and around one year after the birth of the reference child. It distinguishes between those for whom the reference child was a first, second or higher order birth. It shows that among mothers for whom the reference child was a first birth (the group most likely to be working full-time prior to the birth) there was a decrease of around 15 hours in weekly hours on return to work around one year later. Declines were also evident, although less marked, among mothers for whom the reference child was a second or higher order birth (who were more likely to be working part-time prior to the reference child's birth). There was no significant change in average weekly hours among fathers – hence no evidence of either a gender-egalitarian trend towards reduced hours to facilitate shared parenting or further exacerbation of gender differences in working-time already widened by mothers' reduced hours. While the picture could thus have been worse in terms of gender egalitarianism it nevertheless indicates consolidation of, rather than any challenge to, existing gendered divisions of labour.

Figure 1.3 Average weekly working hours of mothers and fathers before and around 1 year after the birth of the reference child, by birth order of reference child



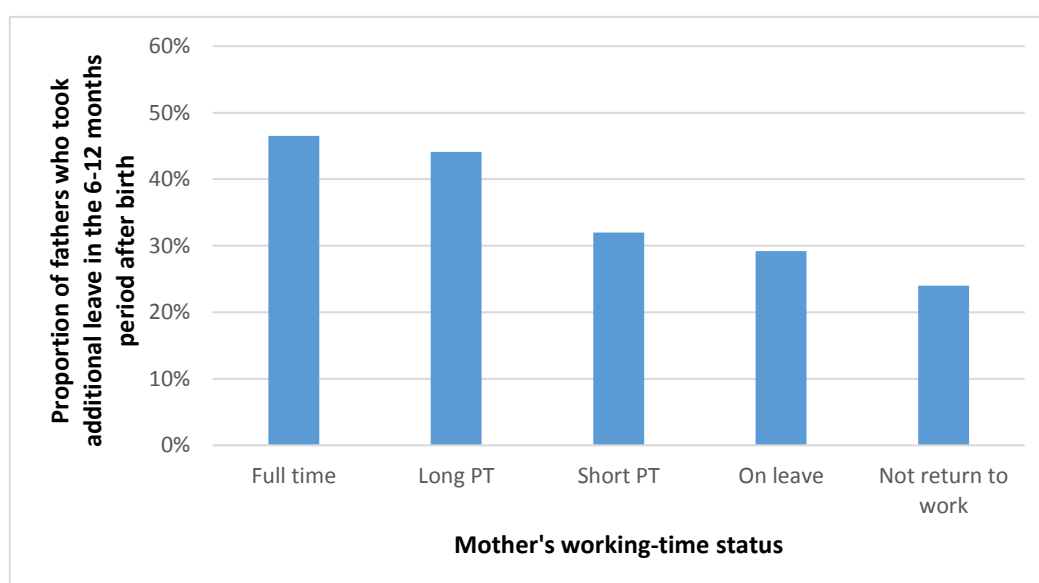
Note: Data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1 and Wave 2.

One of the pressures that might lead fathers to take on a greater share of parental care is mothers' workforce status: if mothers return to work full-time fathers may be less likely to work long hours and more likely to take leave for parenting purposes. While the aggregate figures presented thus far underline the limited variation in fathers' weekly hours following the birth of children, there is some evidence from the

Millennium Mums survey that their leave-taking patterns were affected by mothers' employment status. This is not apparent in the first six months after the birth of the reference child, when over 90 per cent of fathers with access to leave took some form of leave regardless of the mother's employment status (see details in Chapter 3). However fathers' use of leave for parenting purposes in the period 6-12 months after the birth of the reference child is associated with mothers' working-time status.

This is illustrated in Figure 1.4, which shows that among mothers working full-time at Wave 2, almost half (47 per cent) had partners who had taken more leave since Wave 1. This was the case for a similar proportion (44 per cent) of mothers who had returned to 'long part-time' hours, however the proportion was significantly lower among those working short part-time hours (32 per cent of whom had partners who took some additional leave) and lower again among those still on leave or not in the labour force at Wave 2 (29 and 24 per cent respectively). These figures add to the picture presented in Chapter 3, which shows that fathers' use of additional leave in the 6-12 month period after the reference child's birth also varied by size and sector of employment (underlining the importance of access and acceptability in determining leave uptake).

Figure 1.4 Proportion of fathers who took additional leave in the 6-12 months period after birth of the reference child, by mother's working-time status



Notes:

Long PT=Long part-time, defined as ≥18 and ≤35 hours/week;

Short PT=Short part-time, defined as >0 and <18 hours/week

A small proportion of respondents (2.6 per cent) refused or responded 'don't know' to the questions about their employment status.

Data weighted by balanced-panel longitudinal weight

Source: MM survey, Wave 2

1.2 EMPLOYMENT STATUS CHANGES OVER SUBSEQUENT SURVEY WAVES

The working-time patterns for mothers illustrated thus far are consistent with expectations – less well documented are subsequent transitions back to full-time work and longer durations out of (or re-entering and re-exiting) the labour market when children are young. Some of the ways in which the Millennium Mums survey sheds light on these issues are illustrated below.

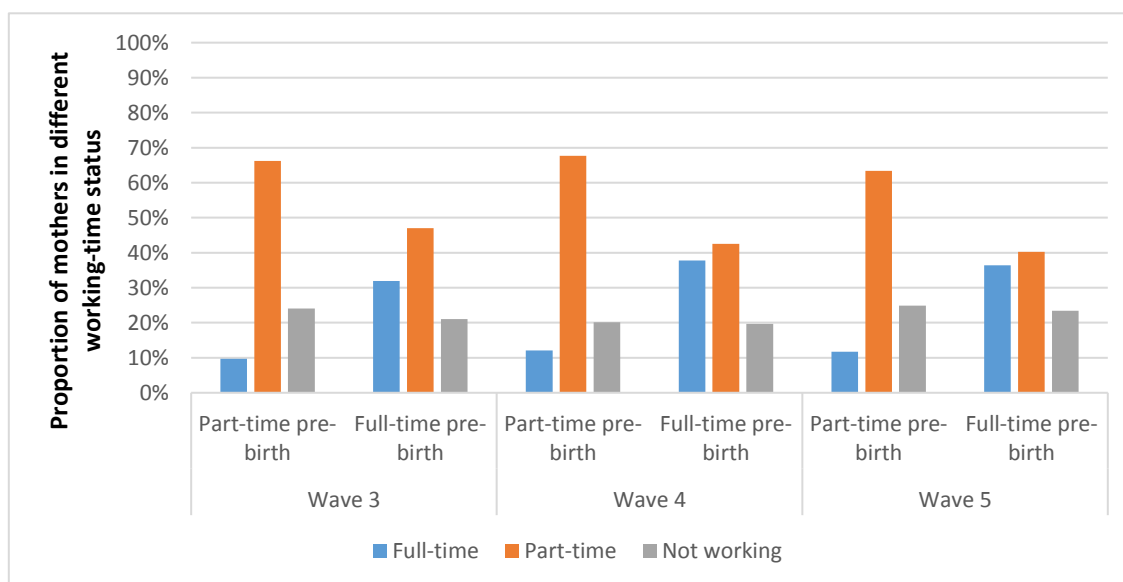
An important distinction in what follows is between those who did not have another new baby over the remainder of the Millennium Mums waves (this group was comprised of 1,095 mothers or a little over half the sample at Wave 5) and those who had a subsequent child during this time span. These groups differ on the basis that the reference child was a first birth for 29 per cent of those who did not have another child

during the Millennium Mums study, compared with 79 per cent of those who did have a subsequent child during the study. For reasons of space and clarity, this distinction on the basis of birth order is not represented in the following tables, although future analyses will have the capacity to explore its potential impact.

Figure 1.5 shows that, among those mothers who did not have another child during the Millennium Mums study, transitions from full- to part-time in the first year after the reference child’s birth were only partially reversed in subsequent years. Among mothers who had worked full-time prior to the birth of the reference child, 32 per cent were in full-time work at Wave 3, 38 per cent at Wave 4 and 36 per cent at Wave 5. These figures compare with the 24 per cent of full-timers prior to the birth who were in a full-time position at Wave 2 (see Figure 1.2). This increase over the waves in the proportion in full-time work was accompanied by a reduction in the proportion of ‘pre-reference child full-timers’ in part-time positions: from 47 per cent at Wave 3 to around 40 per cent at Wave 5.

These changes, while in the expected direction, were not particularly large, and the overall picture is one in which part-time employment remains common for mothers even as their youngest child approaches school age. This is emphasised also by the high proportion (over 60 per cent) of those in part-time roles prior to the reference child’s birth who remained in part-time positions at Waves 3, 4 and 5 of the survey. A small proportion of mothers who had been working part-time prior to the reference child’s birth moved into full-time roles over the three waves, increasing from three per cent at Wave 3 to 12 per cent by Wave 5, however part-time remained the most prevalent working-time status among both those who worked full-time and those who worked part-time prior to the reference child’s birth. Figure 1.5 also indicates that around one-fifth of these mothers were not working at each of these waves, underlining the prevalence of this status among mothers of young children.

Figure 1.5 Working-time transitions among mothers who did not have another baby during the five waves, by pre-reference child working-time status



Notes:

‘Not working’ includes those on leave and those not return to work

Data weighted by balanced-panel longitudinal weight

Source: MM survey Wave 1, Wave 3, Wave 4 and Wave 5.

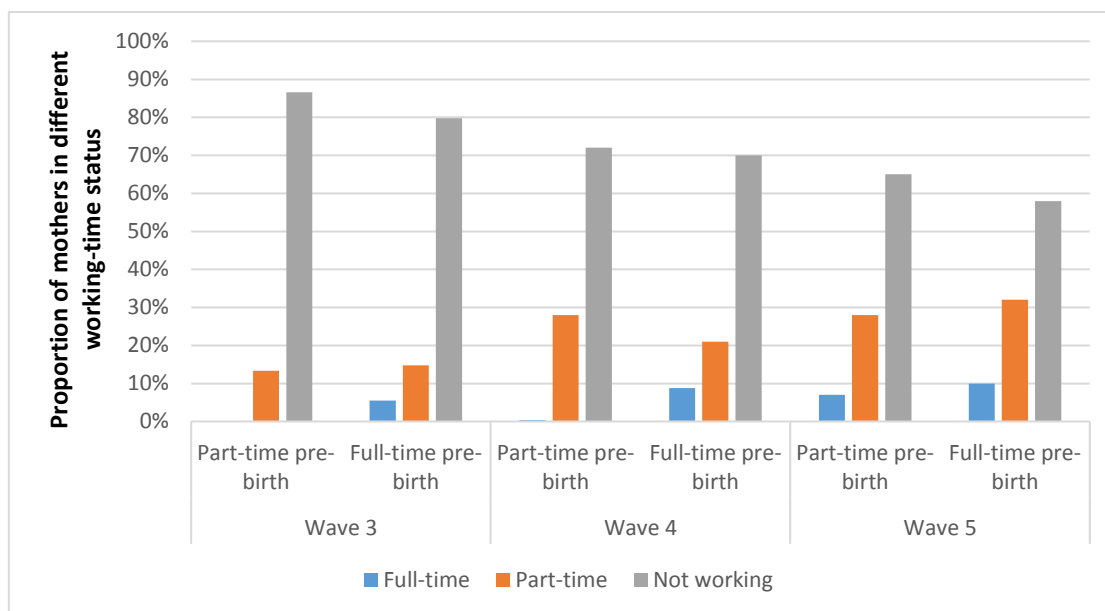
Unsurprisingly, the proportion of mothers not working was considerably higher among those who reported having another child at Wave 3, 4 or 5. Figure 1.6 presents data for this group, showing that among those who reported having another baby in the year leading up to the Wave 3 interview, 80 per cent of those who had worked full-time prior to the reference child’s birth, and 87 per cent of those who had worked part-time, were not working. The proportion not working was lower at Wave 4 and lower again at Wave 5: among

those who reported having another baby in the year leading up to the Wave 5 interview, 58 per cent of those who had worked full-time, and 65 per cent of those who had worked part-time, prior to the reference child's birth were not working. While the precise reasons for these differences across waves cannot be ascertained from the survey data, it is likely that the higher proportion of mothers not working after another birth reported at Wave 3 reflects the additional pressure of having at least two very young children and a narrow age gap between the reference child and the new baby.

Among those mothers who had returned to work after a subsequent birth at Wave 3, 4 or 5 most were in part-time work. Among those who had been in a full-time position prior to the reference child's birth, five per cent were in full-time work at Wave 3 after the birth of another child, and 15 per cent were in part-time work. Among full-timers prior to the reference child's birth with a new baby at Wave 4, 9 per cent were working full-time and 21 per cent part-time; and for those with a new baby at Wave 5, 10 per cent were in full-time and 32 per cent in part-time work. Part-time work was also considerably more prevalent than full-time work among mothers who had been in part-time positions prior to the birth of the reference child, with none transitioning to full-time work at Wave 3 or 4, although 7 per cent of this group were in full-time work after the birth of a new baby in the year prior to the Wave 5 interview. These figures illustrate the varied transitions that mothers make after the birth of children, although the main finding is clearly the high proportion who were not working, particularly after a new baby at Wave 3.

As observed at Wave 2, across Waves 3, 4 and 5, mothers return to work patterns continued to be influenced by their income before the birth of the reference child with proportionally more of those who had been in the highest income bracket returning to work full-time, and proportionally more of those who had been in the lowest income bracket remaining out of the labour force. Preliminary analysis shows that fathers' income before the birth of the reference child was not associated with mothers' return to work patterns at any wave.

Figure 1.6 Working-time transitions among mothers who had another baby at Wave 3, 4 or 5, by pre-reference child working-time status



Notes:

'Not working' includes those on leave and those not return to work

Data weighted by balanced-panel longitudinal weight

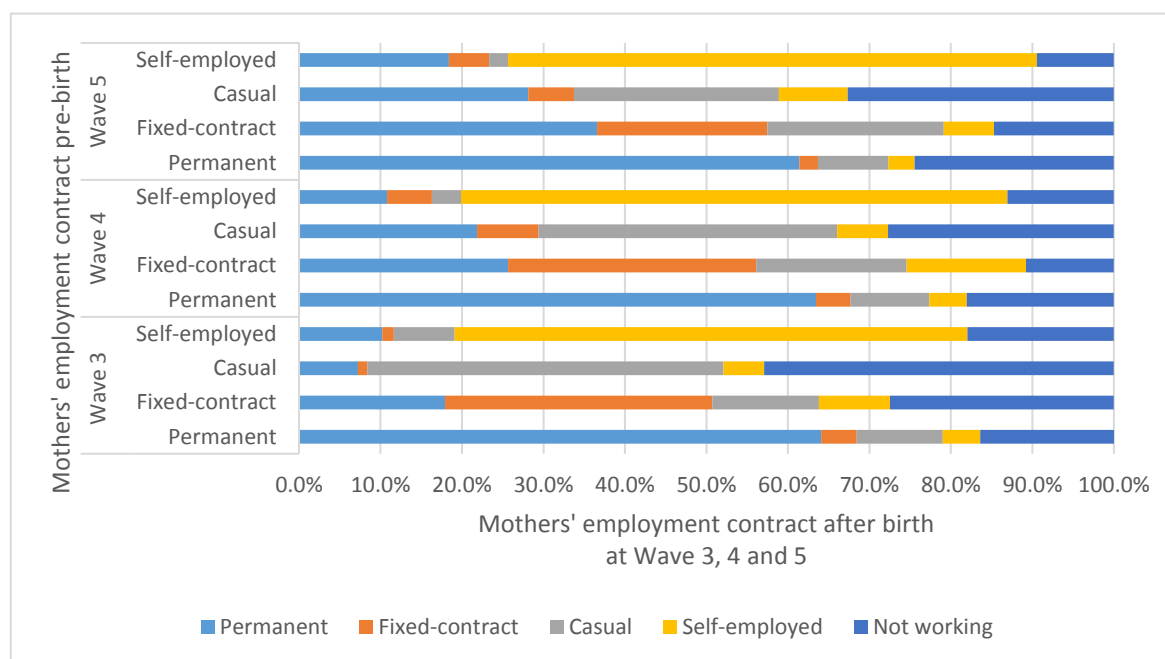
Source: MM survey Wave 1, Wave 3, Wave 4 and Wave 5.

While transitions from full- to part-time status may in some cases be associated with poorer employment conditions and career prospects this is not necessarily the case; in fact the flexibility to move to shorter hours in the same job is an entitlement designed to enhance mothers' labour force attachment and

potential for career progression, and legislated in several countries (including Australia) as a ‘right to request’ flexible working arrangements.⁶ The transition from permanent to casual status is less likely to be benign, especially if such changes are not reversed over time, however evidence from the Millennium Mums survey shows movements in both directions on this dimension rather than a persistent picture of reduced employment status.

As noted earlier, only a small proportion of mothers changed from permanent to casual status on return to work around one year after the birth of the reference child. Turning to the changes in subsequent waves, Figure 1.7 presents data on mothers who did not have another child over the course of the study. It includes transitions into and out of self-employment as well as movement to and from permanent, fixed-term contract and casual positions. The focus here is primarily on changes between permanent and casual status, which Figure 1.7 shows can occur in both directions. Among those who were in permanent positions prior to the reference child’s birth, 64 per cent were in permanent jobs at Wave 3, while around 10 per cent had changed to casual status (16 per cent were not working). Similar proportions (over 60 per cent) of those who were in permanent positions prior to the reference child’s birth were in permanent jobs at Waves 4 and 5, again with around 10 per cent in casual positions. Some movement in the opposite direction can also be observed in Figure 1.7: among those who were in casual jobs prior to the reference child’s birth, around 7 per cent were in permanent positions at Wave 3, with this figure rising to 22 per cent at Wave 4 and 28 per cent at Wave 5.

Figure 1.7 Employment contract transitions among mothers who did not have another baby during the five waves, by pre-reference child employment contract



Note: Data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 3, Wave 4 and Wave 5.

Another pattern illustrated in Figure 1.7 is that those who had been in casual roles prior to the reference child’s birth were most likely not to be working in subsequent waves: 43 per cent were not working at Wave 3, and this was the case for 28 per cent at Wave 4 and 33 per cent at Wave 5. This underlines the contingency of casual work, and may reflect limited labour force attachment and/or difficulty finding suitable positions for these mothers. It is also the case that mothers who had been in casual positions prior to the

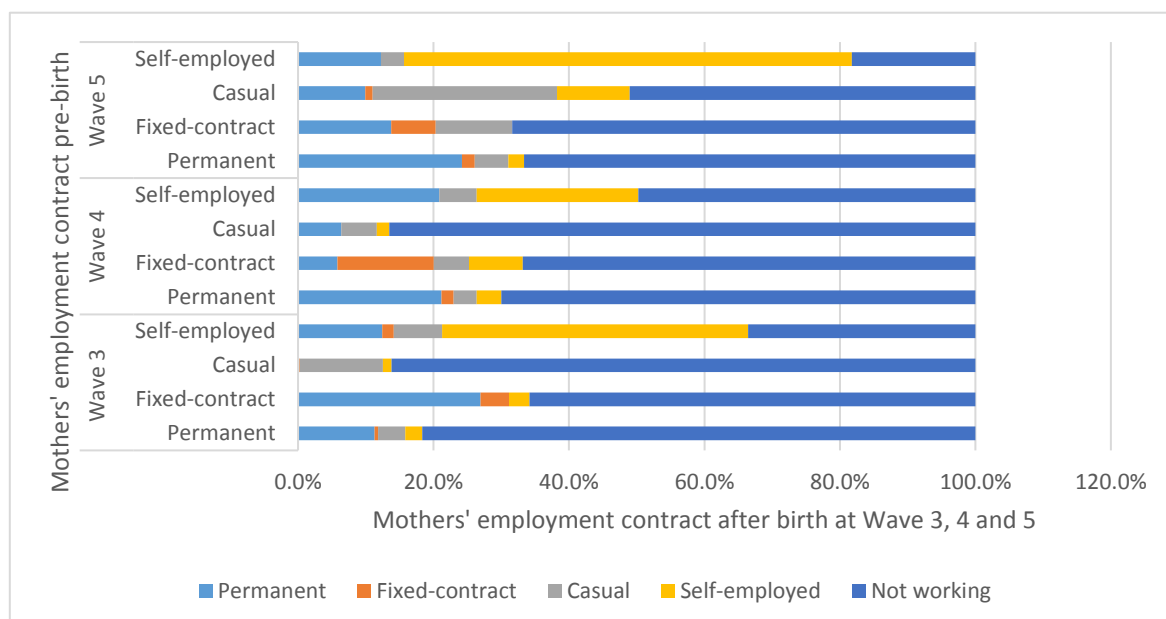
⁶ Uptake of such provisions may nevertheless bring status penalties, such as a ‘flexibility stigma’ that labels users as less career committed (see, e.g. Williams, Blair-Loy & Berdahl, 2013).

birth of the reference child were most likely to be in the lowest income category of <=\$36,399 (75 per cent of casuals were in this band, compared with around 25 per cent of permanent employees). Thus casual status and low income are likely to influence return to work patterns.

It is also notable in Figure 1.7 that among mothers in permanent positions prior to the reference child's birth, around one-quarter were not working at Wave 5, compared with 16 per cent at Wave 3. Sustained movements back into employment, even among those who did not have another child over the course of the project, were thus far from universal, and least likely among those with a prior history of casual employment. In contrast, mothers who had been self-employed prior to the reference child's birth were very likely to have returned to self-employment (over 60 per cent at each of the three waves), and were among the least likely to be not working at each wave.

The situation for mothers who had another child over the course of the study is illustrated in Figure 1.8, which again underlines the high proportion of these mothers who were not working at Waves 3, 4 and 5. As in Figure 1.6, this was the case particularly at Wave 3, when over 80 per cent of those who had been in permanent or casual positions prior to the reference child's birth were not working. Among those in permanent positions prior to the reference child's birth, 11 per cent were in permanent positions again at Wave 3 (when 82 per cent were not working), with this figure rising to 21 per cent at Wave 4 (when 70 per cent were not working) and 24 per cent at Wave 5 (when 67 per cent were not working). Only a small proportion (four, three and five per cent respectively in Waves 3, 4 and 5) of mothers who had been in permanent jobs prior to the reference child's birth returned to work in casual positions over the time period. Again there was some movement in the opposite direction: although none of those in casual positions prior to the reference child's birth were in permanent roles at Wave 3, the figures at Waves 4 and 5 were six per cent and ten per cent respectively. Overall these figures extend the data presented in Figure 1.6, underlining the propensity of Australian mothers with preschool children, particularly those who have more than one child in this age group and those with a history of casual employment, not to be working while their children are young. They also echo patterns shown in Figure 1.7, with those who had been self-employed prior to the reference child's birth most likely to have returned to work at each of the three waves, and more likely to remain self-employed than to change employee status.

Figure 1.8 Employment contract transitions among mothers who had another baby at Wave 3, 4 or 5, by pre-reference child employment contract



Note: Data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 3, Wave 4 and Wave 5.

1.3 EXPERIENCES AT WORK: FLEXIBLE WORKING ARRANGEMENTS AND PERCEPTIONS OF CAREER PROSPECTS

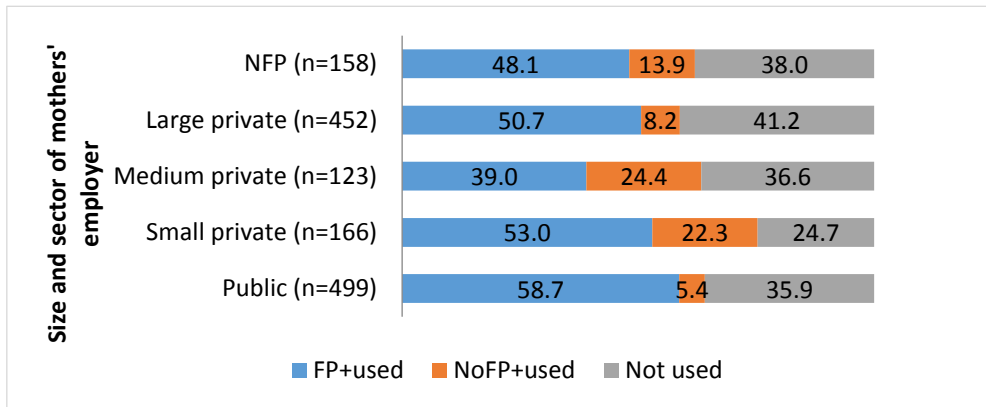
In this section attention is turned to the experiences of working mothers, focusing on evidence of workplace support through access to, and use of, flexible working arrangements and examining mothers' perceptions of change in their career prospects (in comparison with the job they held prior to the birth of the reference child). These issues are indicative of job quality and family-supportiveness and illustrate some of the components of the Millennium Mums data that might be used in future analyses of the impact of parenthood on employment trajectories.

1.3.1 Flexible working arrangements

The use of flexible working arrangements (which overlaps with the uptake of part-time employment discussed above) is an increasingly important area of analysis given the demand for, and widespread adoption of, these kinds of family-supportive policies at both national and organisational levels. The Millennium Mums data can be used to map mothers' and fathers' usage of both formal and informal flexibility arrangements in the workplace. Figure 1.9 presents data on mothers' use of flexible working-time provisions (such as shorter working hours, flexible start and finish times) and Figure 1.10 does the same for location flexibility (i.e. the ability to work from home or another location). Comparable data for fathers are presented in Chapter 3. Data from a single wave (Wave 4) are used for illustrative purposes as there was not significant variation across waves; nor was there marked variation between those who did and did not have another baby over the time span.

Figure 1.9 distinguishes between the use of formal flexible working-time provisions, the use of working-time flexibility arrangements in spite of the absence of formal provisions in the workplace, and non-use of provisions. Patterns of usage are broken down by employer type: public sector, private sector (divided into three size categories: small=fewer than 20 employees, medium=more than 20 and fewer than 100, large=100 or more employees) and not for profit organisations. The data show mothers' widespread use of working-time flexibility arrangements: uptake was around 60 per cent in all employer categories with the exception of small private sector organisations, where the proportion rose to 75 per cent. Formal provisions were used more frequently than informal arrangements across all employer types – this distinction was most marked in the public sector where almost 60 per cent used formal arrangements and only five per cent had accessed informal provisions. This no doubt reflects the high level of availability of formal provisions in the public sector, although it is notable that over half the mothers in small private sector organisations had also used formal provisions, while an additional 22 per cent had accessed informal arrangements.

Figure 1.9 Mothers' use of formal and informal flexible working-time arrangements, by size and sector of employer (Wave 4)



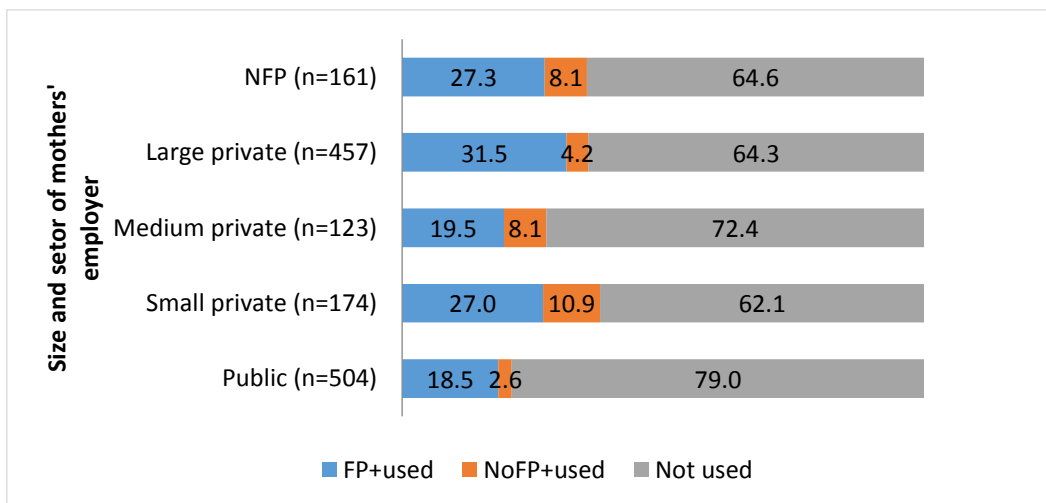
Notes:

FP+used = formal provision available and used
 NoFP+used = No formal provision available but used some flexible arrangements
 Not used = Did not use any flexible arrangements

Source: MM survey Wave 4

Figure 1.10 presents comparable figures for flexible location arrangements, showing that these are much less frequently taken up by mothers. Uptake was highest overall in small private sector organisations, with 27 per cent using formal, and 11 per cent informal, provisions. While the use of location flexibility may be something that employees need less of if they have good working-time flexibility, taken together Figures 1.9 and 1.10 identify a comparatively high level of usage of formal flexibility arrangements in small private sector organisations. A higher level of informal flexibility in such organisations is not unexpected given the likelihood of a more personal management style and greater ability to adapt to the needs of individuals, however the relatively high usage of formal provisions indicates that many small organisations are also finding it useful to formalise provisions of this nature.

Figure 1.10 Mother's use of formal and informal flexible location arrangements, by size and sector of employer (Wave 4)



Notes:

FP+used = formal provision available and used
 NoFP+used = No formal provision available but used some flexible arrangements
 Not used = Did not use any flexible arrangements

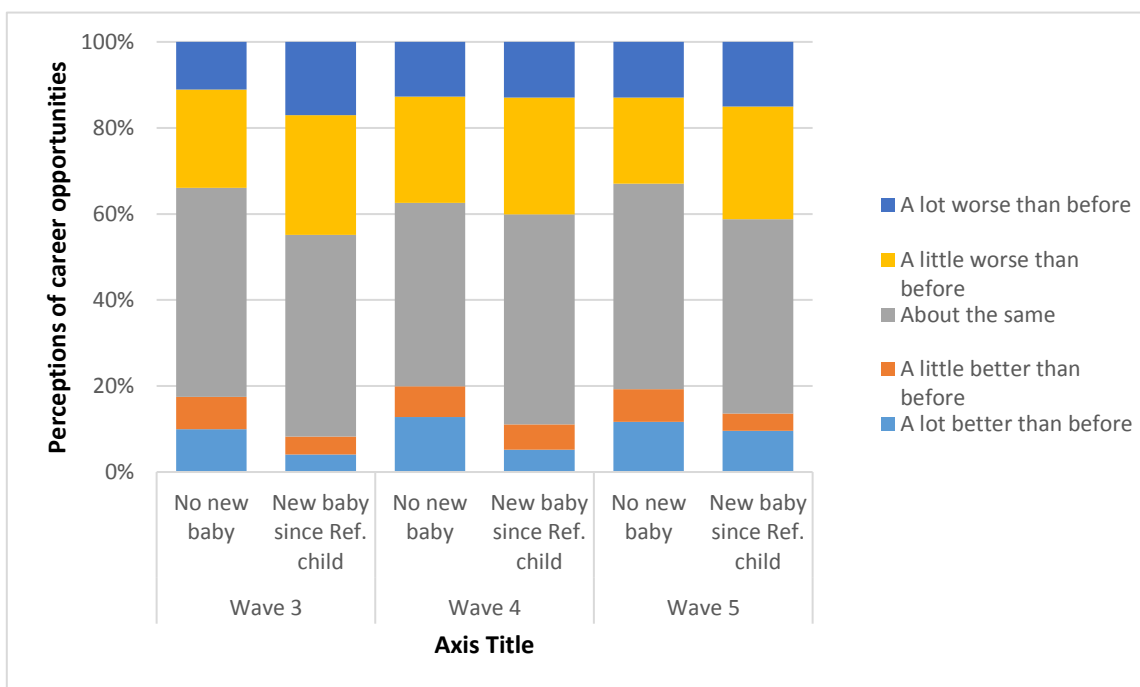
Source: MM survey Wave 4

1.3.2 Perceptions of career opportunities

At Wave 2, when the reference child was around one year old, most mothers who had returned to work reported that their career opportunities were about the same as before the reference child’s birth. This was the case for 58 per cent of respondents, compared with 27 per cent who felt they were a little or a lot worse and 15 per cent who felt they were a little or a lot better. The extent to which this picture changed over the preschool years is particularly important for understanding the impact of parenthood on career paths and the prevalence of ‘mommy track’ trajectories.

Figure 1.11 presents data on mothers’ perceptions of their career opportunities at Waves, 3, 4 and 5. It shows that, among those who did not have another baby after the reference child, the proportion who responded ‘about the same’ was considerably lower than the 58 per cent that it had been at Wave 2; 49 per cent responded in this way at Wave 3, 43 per cent at Wave 4, and 48 per cent at Wave 5. There was little difference in the responses of those who did have another baby during the study; the figures for Waves 3, 4 and 5 for this group were 47, 49 and 45 per cent respectively. This decline from Wave 2 in the proportion answering ‘about the same’ was mainly due to an increase in the percentage reporting that their opportunities were a little or a lot worse than before, particularly among the group with a new baby. This group was least likely to see their career prospects as a little or a lot better, especially at Wave 3.

Figure 1.11 Perceptions of career opportunities among mothers who had returned to work at Waves 3, 4 and 5



Note: Data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 3, Wave 4 and Wave 5.

1.4 PARENTAL LEAVE AFTER A SUBSEQUENT BRITH

Comparisons of mothers’ leave-taking for the reference child and a subsequent birth are complicated by a number of factors. Although the Millennium Mums data indicate a higher uptake of PLP at Waves 4 and 5 (around 80 per cent of respondents) than in the Wave 1 sampling frame (a little over 60 per cent) this primarily reflects changes in policy such as the removal of the Baby Bonus from March 2014. However there was also some evidence that mothers were adapting their behaviour in the context of PLP: among those who reported having a new baby at Wave 3, 4 or 5, a small proportion had extended their labour force participation to ensure they would qualify for PLP. This was the case for seven per cent of those who

had a new baby at Wave 3, for eight per cent at Wave 4 and 14 per cent at Wave 5. Overall, among mothers reporting a new birth at waves 3, 4 and 5, the unweighted proportion who reported altering their labour force participation to qualify was 9 per cent.

The number of weeks of PLP for subsequent births was not collected in the Millennium Mums survey as administrative data indicated that most recipients took the full amount. Information was collected on the duration of employer-paid leave, however the varied timing of births in relation to the data collection waves meant that a number of mothers were still on leave at the time of the interview, hence measures of average leave duration are underestimates. As the values recorded were a little lower than those for the reference child (e.g. 12.7 weeks as Wave 3 compared with 16.7 weeks for the reference child) it is likely that leave durations have remained of similar length on average.

1.5 SUMMARY

The clearest patterns that emerge from the Millennium Mums data on mothers' return to work are the high levels of transition from full- to part-time work after the birth of a child, the ongoing prevalence of part-time work among working mothers with pre-school children, and the proportion of mothers of pre-school children not working. For those mothers who had returned to work, a relatively high proportion were able to access (mostly formal) flexible working arrangements and the majority did not perceive a major change in their career opportunities in comparison with their situation prior to the birth of the reference child (although those who did report a change were more likely to have experienced a deterioration than an improvement).

While this picture does not indicate major problems for Australian mothers, it is certainly consistent with the consolidation of the prevailing variant of a male breadwinner work/care regime. It also suggests that some mothers encounter difficulties in finding suitable working arrangements when their children are young (especially those with a history of casual employment). The policy directions most likely to enhance mothers' choices and gender equality more broadly include measures to improve job quality and security alongside the development of gender egalitarian cultures that challenge the expectation that mothers will be primarily responsible for parenting. These are of course long sought after outcomes that require multi-level strategies – there is no clear policy pathway towards them, and policy directions that might help would undoubtedly be highly contested. Such directions might include:

- The configuration of 'full-time' permanent positions in ways that enable parents to maintain career continuity by varying hours as required, rather than designing jobs as full- or part-time (and having expectations of excessive hours for the former);
- Organisational support for mothers, and especially for fathers, to use shorter hours and other flexible arrangements as required, with the encouragement of this norm-challenging behaviour by government; and
- Reducing the use of casual status for jobs that are not purely temporary.

At a more pragmatic level, maintaining the PPL scheme and its encouragement for women with short hours and in casual positions to retain a level of labour force attachment in order to qualify for benefits, and devising other policies that similarly encourage labour force engagement, would be valuable. Pressure for high quality and gender egalitarian employment options will be strongest when mothers are engaged in the labour market and seeking pathways to jobs that provide these conditions.

2 CHILD CARE

Belinda Hewitt, Michelle Brady, and Jane Dickenson

One of the key aims of the PPL scheme which the Australian Government introduced in 2011 was to facilitate women's labour force participation. However, for most mothers returning to work is also dependent on accessing some form of non-parental child care. Australian child care policy, as in other countries, has a mix of policy objectives including providing early education and supporting maternal labour force participation (Adema, 2012). Australia has a comprehensive formal child care system (meaning regulated child care away from the child's home). Families can obtain assistance with the costs of child care through the means tested Child Care Benefit and the non-means tested Child Care Rebate. In 2009 the Australian Government introduced the National Quality Framework which created a national system for governing and driving quality improvement in Early Childhood Education and Care (ECEC) and Out of School Hours Care (OSHC). The Australian ECEC system provides families with access to a range of different services including Long Day Care (LDC) (a centre-based form of ECEC for children aged 0–6 years); Family Day Care (FDC) (child care that is provided in the private home of the carer who is referred to as an educator), In-Home Care (IHC) (care provided to eligible children by an educator in the family home), Outside School Hours Care (OSHC) (a centre-based form of ECEC for primary school aged children (6–12 years) that cares for children outside school hours and during school holidays), and finally Occasional Care (a form of centre-based ECEC that can be accessed on a regular or irregular basis).

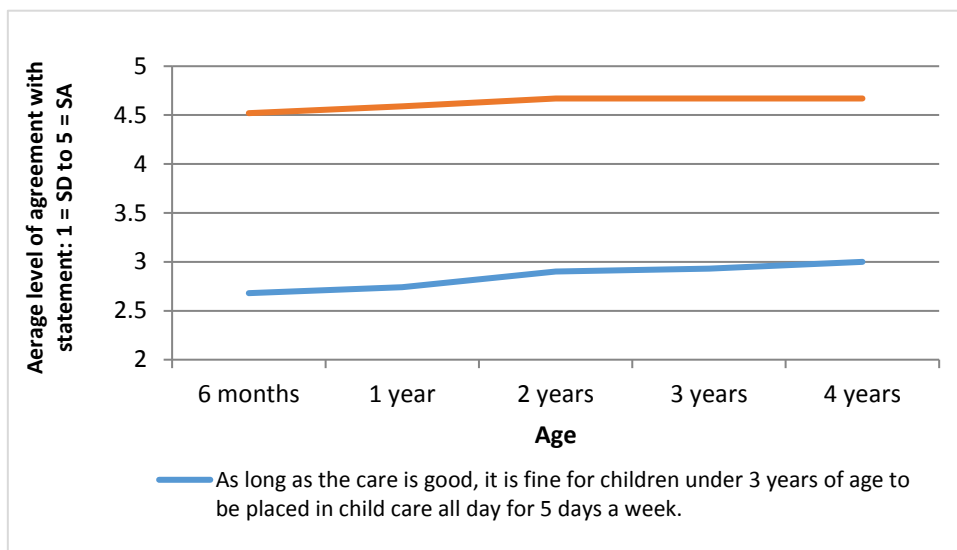
In this chapter we examine the child care attitudes, experiences and usage patterns of mothers who were employed prior to the birth of their child and eligible for PPL. We describe when these mothers first use formal and informal child care, and the extent to which mothers combine formal and informal child care or just use one form of care. We know that patterns of child care use vary by age of the child and the mother's labour force status. Here we examine how the type of child care used varies according to the mother's labour force status and how this changes over time as the child gets older.

We know that many families experience child care problems (McNamara, Cassells, & Lloyd, 2005) but have a less clear understanding of how mothers solve these problems and where they turn for help. In this chapter we not only outline the types of child care problems mothers typically experience and the severity of these problems but we also describe how commonly mothers solve these problems and where they get this help from when they do. We use longitudinal data from the Millennium Mums project to examine these issues and apply longitudinal weights to help account for study attrition.

2.1 MOTHERS' ATTITUDES TO CHILD CARE AND CHANGE OVER TIME

In this section, we examine attitudes towards child care and whether they change over time as children age. We have two main measures that capture attitudes to child care. The first examines whether mothers think it is okay for children under the age of three to be in long stay child care five days a week, and the second captures broader attitudes to the provision of child care so that women can work. The results presented in Figure 2.1 show that on average mothers do not think that it is okay for children under three to be in long stay child care five days a week, in contrast, there is a relatively high level of agreement on average with the statement that satisfactory child care facilities should be in place to ensure that mothers can work outside the home. Average levels of agreement with these statements increased slightly (and significantly) over time.

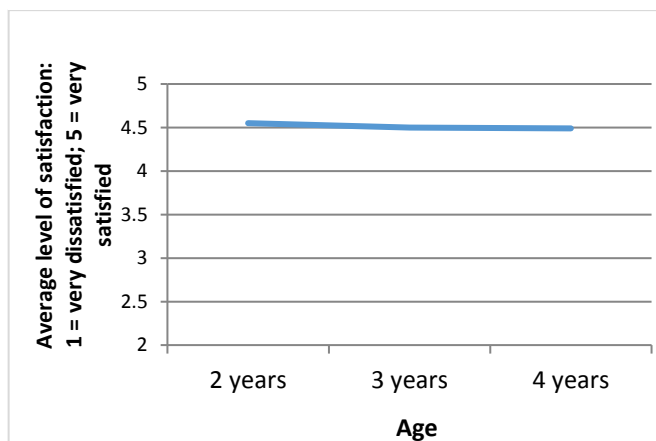
Figure 2.1 Mothers' attitudes to child care



Note: Data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 3, Wave 4 and Wave 5.

Figure 2.2 Overall satisfaction with child care arrangements

In Waves three to five (when the children were aged two to four years) we asked mothers about their level of overall satisfaction with their childcare arrangements. The results presented in Figure 2.2 indicated mothers were overall very satisfied with their child care arrangements. As the reference child got older, mothers' satisfaction with child care arrangements declined slightly, but this decline was not statistically or substantively significant.



Note: Data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 3, Wave 4 and Wave 5.

2.2 AGE OF CHILD AT UPTAKE OF FORMAL AND INFORMAL CARE

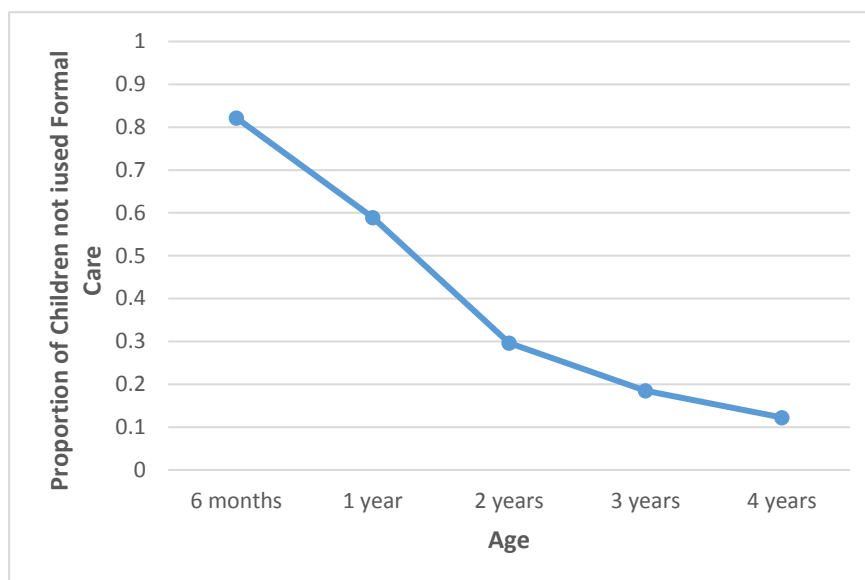
As mothers return to paid work after the birth of a child they generally needed to use either formal or informal child care. The age at which mothers first use informal or formal care has implications for government policy. To examine this we used the following questions:

Have you ever used formal care, family day care, long day care or any other care at a child care centre, for (REFERENCE CHILD)? And how old was (REFERENCE CHILD) when (he/she) first attended family day care, long day care or a child care centre?

In Figure 2.3 we present the survival estimates of whether or not a child had attended formal child care at each wave. The survivor function tells us the proportion of mothers who had NOT used formal child care for their child at each survey age. Overall, very few mothers used formal care soon after birth but the

majority reported using formal care for their child at some point during the five waves (Figure 2.3). Within the first six months after birth just over 80 per cent of children had not attended any formal care. By 12 months of age this figure had dropped substantially, where only 60 per cent of children had not attended formal care. By two years of age the vast majority of children had attended child care, with only around 30 per cent not having attended. When study children were four years of age only 12 per cent of children had not attended formal child care.

Figure 2.3 Survival estimates for children who had NOT attended formal care



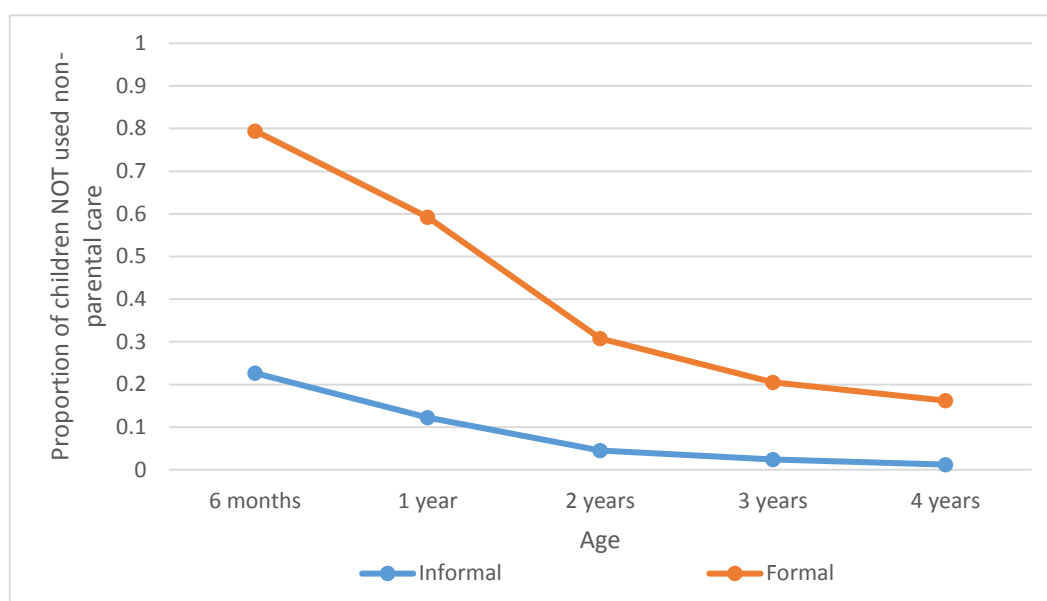
Note: Survival estimates derived from Kaplan-Meier calculations
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5.

Existing research tells us that Australian families also commonly rely on informal care when they are engaging in paid work, but compared to formal care we know much less about the timing and prevalence of informal care (Baxter, 2013). To investigate this we used the following question:

Have you ever used informal care (such as care by grandparents, other relatives or friends) for (REFERENCE CHILD)? And how old was (REFERENCE CHILD) when you first used informal care for him/her?

In Figure 2.4 we present the survival estimates for whether mothers had used either formal or informal care for the study child at each wave. In this graph the survivor function tells us the proportion of mothers who had NOT used informal or formal care at each age. Our comparison of the timing of formal and informal care reveals that a higher proportion of mothers had used informal care when their children were young than formal care. When surveyed at six months a large proportion of mothers (around 80 per cent), who had not used formal care, had used informal care (blue line) for their child. In contrast, only 20 per cent of mothers, who had not used informal care for their child, had used formal care (red line). This gap between formal and informal care usage narrowed at age two. By age two, around 30 per cent of mothers had not used formal care, and only five per cent of mothers had not used informal care. At age four virtually all mothers had used either formal or informal care for their child.

Figure 2.4 Survival estimates for children who had NOT had any formal or informal non-parental care



Note: Survival estimates derived from Kaplan-Meier calculations.
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5.

In summary, amongst this population of mothers who were employed prior to the birth of their child rates of child care use are high. By the time their child is two years of age almost all mothers have used either formal or informal care. In the next section we examine the combinations of child care mothers reported using at each wave.

2.3 CHILD CARE PACKAGES: COMBINING FORMAL AND INFORMAL CHILD CARE

We know from previous research that many working families combine formal and informal care to meet their child care needs (Baxter, 2013; Brady & Perales, 2016). Much less is known about how combinations of child care usage changes over time. In Table 2.1 we present the proportion of mothers using each type of care formal care only, informal care only, both formal and informal care, or no regular care. As outlined in the previous section the proportion of mothers using no care at all dropped sharply from Wave one to five (from 61 per cent to 13 Per cent). The type of care used also changed substantially as the children got older. When the children were six months old around one in four (23 per cent) were only using informal care and less than half that number (11 per cent were using only formal care. As children got older mothers’ use of formal care increased while their use of informal only care dropped. By the time the children were aged four only one in ten (11per cent) were using informal only and almost half (48 per cent) were using only formal child care. Mothers’ use of mixed care (combining formal and informal) also increased sharply between when the child was six months only and two years (from 5 per cent to 25 per cent and then continued to increase very slightly until Wave 5 (to 29 per cent).

Table 2.1 Type of child care package used and age of child

Child care package	6 months (per cent)	1 year (per cent)	2 years (per cent)	3 years (per cent)	4 years (per cent)
Formal only	11	25	40	47	48
Informal only	23	26	18	12	11
Mixed	5	13	25	27	29
No regular care	61	36	17	14	13

Note: data weighted by balanced-panel longitudinal weight

2.4 THE IMPORTANCE OF EMPLOYMENT STATUS FOR CHILD CARE PACKAGE AND USAGE

Not surprisingly, mothers' labour force status changed as their child got older (see Chapter 1 on mothers' return to work). Over the five waves the proportion of mothers on leave drops sharply (from 35 per cent to 7 per cent) while the proportion in full-time employment doubles (from 11 per cent to 21 per cent) and the proportion in long part-time more than doubles (from 13 per cent to 33 per cent).

Table 2.2 Percentage of mothers in each employment status group over the 5 waves

	FT (per cent)	Long PT (per cent)	PT (per cent)	On leave (per cent)	NILF (per cent)
6 months	11	13	13	35	26
1 year	14	25	22	10	26
2 years	18	29	19	8	24
3 years	20	30	18	9	20
4 years	21	33	18	7	20

Note: data weighted by balanced-panel longitudinal weight

In this section we examine whether mother's child care usage patterns varied by labour force status and age of the child (Table 2.3). We created a three-way table that allowed us to examine how the type of child care varies by employment type and whether this changes over time as the reference child gets older.

First, we look at mothers working full-time. As shown in Table 2.3 when mothers were working full-time and their babies are six months old the most common child care package was informal care only (35 per cent) but as the reference child gets older this option is much less common and this group of mothers working full-time tend to shift to using either formal care only (an increase from 28 per cent to 51 per cent) or mixed care (from 14 per cent to 36 per cent). By the time the reference child is four years old only 7 per cent of mothers working full-time are using informal care only. The pattern of child care use for mothers working long part-time (between 30 and 35 hours per week) is similar.

In contrast, women working shorter part-time hours per week have quite a different pattern of child care. The majority of those working part-time were not using regular care (41 per cent) when their babies were six months old and compared to those working full-time or long part-time hours they were much less likely to be using formal only care (15 per cent) or mixed care (7 per cent). However, the rate at which those working part-time used informal care only (38 per cent) was similar to those working full-time or long part-time hours.

Interestingly the pattern of child care use amongst mothers on leave also changed sharply as the reference child got older. When children were aged six and 12 months, mothers were typically still on leave after the birth of the reference child and the vast majority (79 per cent) were not using any form of child care. However, when the reference children were aged two, three and four years, mothers were typically on leave for another baby born during the panel and thus over half (54 per cent) of the mothers on leave in Wave 5 (when the child was aged four) were using formal only child care.

Table 2.3 Mother's child care usage patterns by labour force status and age of the child

Employment status	Child care package	Age of reference child				
		6 months	1 year	2 years	3 years	4 years
Full-time	Formal only	28	36	46	50	50
	Informal only	35	28	15	10	7
	Mixed	14	19	33	35	36
	No regular care	22	17	6	4	7
Long part-time	Formal only	26	38	47	50	50
	Informal only	36	28	16	10	10
	Mixed	13	22	32	34	35
	No regular care	24	12	5	5	5
Part-time	Formal only	15	25	35	41	45
	Informal only	38	36	28	21	16
	Mixed	7	11	20	26	26
	No regular care	41	28	17	12	13
On leave	Formal only	4	8	39	55	54
	Informal only	15	13	13	7	5
	Mixed	1	2	17	18	17
	No regular care	80	77	30	20	23
Not in the labour force	Formal only	4	9	25	37	38
	Informal only	15	14	15	12	14
	Mixed	1	3	9	10	12
	No regular care	80	74	51	41	36

Note: data weighted by balanced-panel longitudinal weight

In summary mothers' use of child care for an individual child is shaped strongly by her own labour force status as well as child's age. Overall, the higher level of involvement in the workforce, the more mothers rely on informal or mixed child care. Nevertheless, we also note that mothers who are on leave for another child also rely heavily on formal child care.

2.5 PROBLEMS WITH CHILD CARE

Media commentary, policy analysis and academic research have all identified that mothers commonly experience child care problems (Australian Government: Productivity Commission, 2014; Browne & Ireland, 2015; McNamara et al., 2005). In Waves 3, 4 and 5 when children were aged between two and four, we asked mothers a series of questions about whether they had experienced a particular problem finding care for the reference child in the last 12 months, the problems included: finding care for a sick child; finding care at short notice; getting care when your work hours changed; and, getting care for the hours you need; and managing multiple child care arrangements. We further asked for their assessment of how much difficulty was experienced with each problem, whether or not they were able to solve the problem and if they solved the problem the main source of help. In this section we examine responses to these questions. We aggregate responses over the five waves of data collection as we did not find much change in the problems experienced over time.

As shown in the table below (Table 2.4) the most common problem, experienced by 34 per cent mothers, was finding care for a sick child. According to the mothers' reports this problem posed the most difficulty and was the least likely to be solved, with less than 30 per cent able to find alternative care for a sick child. For those who were able to solve it, grandmothers were overwhelmingly the main source of support, followed by grandfathers (14 per cent) and partner/spouse (13 per cent). Not surprisingly the proportion of mothers who had this problem and were able to find care from formal providers was negligible. The next most common problem, reported by around 30 per cent of mothers, was finding care at short notice. This

also was rated quite highly in terms of the level of difficulty it caused for mothers. In contrast to finding care for a sick child, however, just over 50 per cent of mothers were able to solve the problem. Grandmothers were the most important source of support for finding care at short notice, other family members (grandfathers and other relatives) and friends were also important, but we also note that around one in ten of these mothers solved this problem by turning to formal child care providers. Another common problem was getting care when their work hours changed with this being experienced by one in five mothers. However, on average this problem was seen to pose less difficulty for those mothers and nearly 60 per cent were able to solve the problem. The main source of help came from grandmothers, followed by formal care providers. Finally, as shown in the previous section, a relatively large proportion of working families used more than one source of child care to meet their overall child care needs. Around 10 per cent of mothers experienced some problems with managing their multiple care arrangements. This problem posed on average less difficulty than other problems and over 70 per cent of mothers were able to solve the problem. Grandmothers were the main source of help (40 per cent), followed by formal day care providers (22 per cent), friends and family (other than grandmothers) were also important.

It is notable that a very low proportion of mothers reported that their partner or spouse were a source of help in solving any of these problems and the family support they received was overwhelmingly provided by grandmothers. This may be due to the fact that mothers did not experience the problem because they and their partner had sorted it, which means that partner/spouse support with child care problems will be under reported here. On the other hand it may reflect the gendered nature of responsibility for child care arrangements within households that primarily fall to the mother, and further suggest that there is little capacity at a household level to adapt to changing child care needs. Due to this extended family networks play a crucial role in enabling working families to manage child care problems that arise. However, we also note that not all families can access assistance from extended family due to geographic distance, or the grandparent's capacities (due to poor health, preferences, work obligations or other factors). Unfortunately we do not have the information to disentangle these possible explanations.

Table 2.4 Child care problems and solutions to these problems

Problem	% of mothers who experienced the problem in the last 12 months	Average score of how difficult it was for mothers: 0 not at all – 10 very difficult	% Solved problem?	For those who solved problem, main source of help for each problem (in order of % for each problem)	Per cent
...finding care for a sick child	34 (n=2,050)	7.31 (n=2,047)	29 (n=599)	1. Grandmother 2. Grandfather 3. Partner/Spouse 4. Other relative 5. Neighbour/friend (their home) 6. Neighbour/friend (your home) 7. Babysitter/nanny service 8. Child's older sibling 9. Formal care provider	51 14 13 12 4 4 2 0.5 0.3
...finding care at short notice	30 (n=1,840)	7.18 (n=1,835)	51 (n=935)	1. Grandmother 2. Other relative 3. Grandfather 4. Neighbour/friend (their home) 5. Formal care provider 6. Neighbour/friend (your home) 7. Partner/Spouse 8. Babysitter/nanny service 9. Child's older sibling	38 17 13 13 10 7 5 4 1
...getting care when your work hours changed	20 (n=1,214)	6.88 (n = 1211)	59 (n=716)	1. Grandmother 2. Formal care provider 3. Grandfather 4. Other relative 5. Neighbour/friend (their home) 6. Partner/Spouse/other parent 7. Neighbour/friend (your home) 8. Baby sitter/nanny service 9. Child's older sibling	43 16 15 12 9 5 4 3 0.3
...getting care for the hours you need	15 (n=1,003)	6.81 (n=1,001)	54 (n=540)	1. Grandmother 2. Formal care provider 3. Other relative 4. Grandfather	41 16 12 12

				5. Neighbour/friend (their home)	9
				6. Partner/Spouse/other parent	6
				7. Baby sitter/nanny service	5
				8. Neighbour/friend (your home)	5
				9. Child's older sibling	0.2
...managing	10	6.83	70	1. Grandmother	40
multiple child	(n=589)	(n=589)	(n=409)	2. Formal care provider	22
care				3. Other relative	13
arrangements				4. Neighbour/friend (their home)	11
				5. Grandfather	10
				6. Partner/Spouse	4
				7. Neighbour/friend (your home)	4
				8. Babysitter/nanny service	4
				9. Child's older sibling	1

Note: data weighted by balanced-panel longitudinal weight

2.6 SUMMARY

This chapter examined a range of key issues around child care including mothers' attitudes towards and usage of child care and the problems they experienced with their child care arrangements.

Overall, in relation to mothers' attitudes towards child care we find:

- There was low overall agreement with the statement that it is okay for children under the age of three to be in long stay child care five days a week.
- There was high overall agreement with the statement that government should provide adequate child care services to enable mothers to work.
- Both attitudes remain very stable, but agreement increase slightly (and significantly) as children got older.
- Overall mothers had high levels of satisfaction with their child care arrangements and this did not change over time.

We also examined uptake of formal and informal child care:

- The proportion of mothers who had ever used formal child care for the reference child increased as children got older whereby nearly 90 per cent of all mothers we followed had used formal child care by the time their child was aged four.
- At all ages, mothers were more likely to have used informal child care for the reference child, and virtually all reference children had participated in either informal or formal child care by age four.
- Given the attitudes to having young children in formal care outlined earlier it is not surprising that many mothers do not use formal child care when their children are younger and the use of formal child care increases over time.

Many parents combine formal and informal care into "packages" that meet individual family needs and budgets, and the type of child care package used changed a lot over the five waves:

- From when children were aged six months to four years, the percentage of mothers not using regular care for the reference child declined dramatically from 61 per cent to 10 per cent.
- The use of informal care only declined from 23 per cent to 11 per cent.
- The use of formal only and mixed care increased from 11 per cent to 48 per cent and 5 per cent to 29 per cent, respectively.

Patterns of child care use were also strongly shaped by the mother's labour force status, we found:

- Mothers working full-time or long part-time hours have very similar patterns of child care use. When children are very young, mothers with these employment arrangements most commonly use informal only care but as children get older the most common child care arrangement for these groups is formal only care.
- Mothers working part-time, in contrast, commonly had no child care arrangement and compared to mothers working full-time or long part-time hours they were much less likely to be using formal only care or mixed care.

- Child care arrangements for mothers on leave also changed significantly as their child got older. When the reference child was an infant (6 and 12 months) the vast majority (79 per cent) were not using any form of child care but as the children got older mothers on leave were typically on leave for second or subsequent birth and thus over half (54 per cent) of the mothers on leave in Wave 5 (when the child was aged four) were using formal only care.

Many mothers reported experiencing child care problems.

- The most common child care problem was finding care for a sick child (34 per cent) while the least common problem was managing multiple care arrangements (10 per cent).
- Mothers' success in solving these problems varied from a low of 30 per cent for a sick child to a high of 70 per cent for managing multiple care arrangements.
- Grandmothers were overwhelmingly the person that helped mothers solve their child care problems (ranging from 38 per cent finding care at short notice to 51 per cent finding care for a sick child).
- In only around five per cent of cases did partner/spouses provide a solution to problems mothers faced finding care for the reference child; although it is not certain whether this is due to under-reporting or gender roles and pressures on households.

These patterns have some important policy implications. Mothers' use of formal child care for an older reference child while they are on leave for a second or subsequent birth suggests that it is important not to limit access to child care subsidies and rebates to families where both parents are engaged in either work or study. Second, mothers' reliance on grandparents when they have child care problems suggests that families without access to extended family may struggle to address their child care problems. This in turn suggest that paid carers leave and increased child care flexibility is necessary to assist the many families who do not have access to support from extended family.

3 FATHERS' LEAVE-TAKING AND WORK PATTERNS IN THE EARLY YEARS

Laetitia Coles, Gillian Whitehouse, Belinda Hewitt, Mara Yerkes, Marian Baird

In this chapter, we focus on fathers'⁷ leave-taking patterns as well as fathers' work hours and use of flexible work practices (in both time and work location) that may be associated with the birth of a new baby. There is increasing interest in fathers' involvement in child raising, driven by changing social expectations (Bulanda, 2004; Rose, Brady, Yerkes, and Coles, 2015) and research showing that fathers who are highly involved with infants typically remain more involved than other fathers as children grow (Baxter & Smart, 2010). One way of increasing the time fathers spend caring for infants (Rehel, 2013), and of moving toward more gender egalitarian divisions of household labour and paid work (Brandth & Kvande, 2009; Gregory & Milner, 2009), is to provide sufficient paternity or parental leave and to encourage uptake among fathers. Leave targeted directly at fathers (e.g. through 'daddy quotas'), with a relatively high wage/income replacement rate has led to higher uptake among fathers in countries such as Sweden, Denmark, Finland and Germany (see country profiles in Koslowski, Blum, and Moss, 2016).

Fathers' leave-taking patterns may vary according to the timing of leave-taking (e.g. during the direct post-partum period or later), or in relation to work characteristics (den Dulk, Yerkes, and Peper, 2017, forthcoming; Martin, et al., 2014). We explore the timing of leave by investigating leave-taking patterns during the first six months compared to six to twelve months after the birth. Fathers' access to and sense of entitlement to use leave during these first 12 months also depends on employment characteristics, in particular organisational size and sector (den Dulk et al., 2017, forthcoming). Fathers in the public sector or large, private sector organisations are more likely to have access to leave as well as experience an organisational culture that supports leave-taking (den Dulk et al., 2017, forthcoming).

Fathers may also manage work and care commitments by adjusting work hours or making use of flexible work practices. Fathers may reduce their time in paid work or take some form of parental or paternity leave shortly after the birth of a baby (Baxter, et al., 2007). Fathers can also make use of flexible work practices to manage competing demands of work and family, although research suggests mothers are more likely to access workplace flexibility in relation to child care demands than fathers (Cooper and Baird, 2015; Williamson, Cooper, and Baird, 2015). Fathers' access to and use of flexible work practices is related to work characteristics such as employer size and sector, with significant differences across organisations in relation to workplace culture and "visibility" at the workplace, which can shape fathers' use of such arrangements.

This chapter explores these two issues: fathers' leave-taking, and work patterns, in the months and years following the birth of a baby. We do this using a measure of total leave length (of all types of leave), as well as three measurements of work patterns: work hours, flexible work hours, and flexible work location. Flexible work hours relates to fathers being able to modify their hours of work to accommodate needs. We primarily focus on waves 1 and 2, and Wave 4, in our analyses. The results from Waves 4 and 5 are similar, to avoid

⁷ We use the term "father" to refer to the husband or partner of the mother, and acknowledge that there may be a small proportion of partners captured in this survey who were not necessarily the father of the child referred to in the survey

repetition we do not present results for Wave 5. Waves 1 and 2 provide information about fathers' leave taken within the first 12 months of the reference child, and Waves 4 and 5 provide information about fathers' use of leave for subsequent children after the introduction of DAPP, as well as fathers' use of flexible work arrangements. However, data about fathers' leave in Waves 4 and 5 cannot be directly compared with Wave 1. At Wave 1 all babies ('reference' baby) were approximately six months old. Waves 4 and 5 ask about fathers' leave taken in connection with a new baby born within the preceding 12 months, meaning that babies of interest in these questions are of varying ages. Our estimates, therefore, of the proportions of fathers who have taken leave for a subsequent baby, and of the length of leave taken, may be conservative because some fathers may have taken leave that is not captured in our data.

3.1 FATHERS' LEAVE-TAKING PATTERNS

In this section, we look at fathers' leave-taking patterns in the first 12 months after the birth of a baby. We differentiate leave-taking patterns by looking at the timing of leave, within the first six months after the birth of a baby vs. between six and 12 months old. We then investigate whether fathers' leave-taking patterns (i.e. length of leave) are associated with size and sector of the workplace. We do this using information reported by mothers' about fathers' access to and uptake of paid and unpaid leave from their employer. Information on fathers' access to and uptake of leave was collected in relation to the reference child in Waves 1 and 2. In addition, in waves 3 to 5, mothers who had indicated they had a baby at any point in the previous 12 months were asked about their partners' leave-taking *in connection with this new baby*. By this time, most employed fathers in Australia who earned less than \$150,000 per year had the option to also use the government-funded DAPP around the birth of a child (DHS, 2016), which was implemented from 1 January, 2013 (Martin, et al, 2014). To be eligible, fathers of a new biological or adopted child had to meet the work test⁸, receive an income of less than \$150,000 in the previous financial year, and be on unpaid leave or not working. Mothers who had given birth to a new baby provided information on their partners' access to and uptake of leave, with the addition of DAPP in Waves 4 and 5.

In Wave 1, mothers who were in a relationship at the time of the birth of their baby were asked to report whether fathers had access to leave, and if so, how much they took from a list of seven types of work-related leave. These leave-types included:

1. Employer paid paternity leave,
2. Unpaid leave,
3. Other leave without pay,
4. Annual leave,
5. Long service leave,
6. Sick leave, and
7. Other paid leave.

In Wave 2, mothers were asked: "since we spoke to you (6 months ago) has your partner taken any leave from work to help with your baby?", and were provided with a list of leave types identical to Wave 1. At Wave 4, we asked mothers whether they had a new baby since the previous wave, or at any point in the last 12 months. We asked mothers if their partner

⁸ To meet the work test, fathers had to work at least 10 of the 13 months before the date the Dad and Partner Pay period starts, and work for no less than 330 hours in that 10 month period, with no more than an 8 week gap between 2 working days (DHS, 2016)

had access to the same leave-types as listed above for the birth of their new baby, and we additionally asked if their partner had access to the Government's DAPP, as well as how much leave fathers took of each type.

Mothers were also asked to indicate the sector and size of the workplace their partner is employed in, or whether they were self-employed. We combined these questions to create a single measure of size and sector, and include the categories: public sector; small private (<20 employees) or self-employed; medium private (20-199 employees); large private (200+ employees); not-for-profit; or other non-commercial and where the mother responded, "don't know but 20 or more employees". Finally, we look at fathers' length of leave by whether the reference baby is the first or subsequent baby.

3.1.1 Leave-taking patterns associated with the birth of an infant

At each wave, mothers were asked to indicate whether fathers had access to certain types of leave. Overall, 82 per cent of fathers in Wave 1 were reported having access to some form of leave (see Table 3.1).

Table 3.1 Fathers' access to leave at Wave 1

Leave type (Wave 1)	Fathers' access to leave	
	Number ^a	per cent ^b
Paid paternity or parental leave	1270	33
Paid holiday or annual leave	2313	61
Paid long service leave	448	12
Paid sick leave	1317	34
Unpaid paternity/parental leave	1067	28
Other leave without pay	861	23
Other paid leave	250	7
Total	3121	82

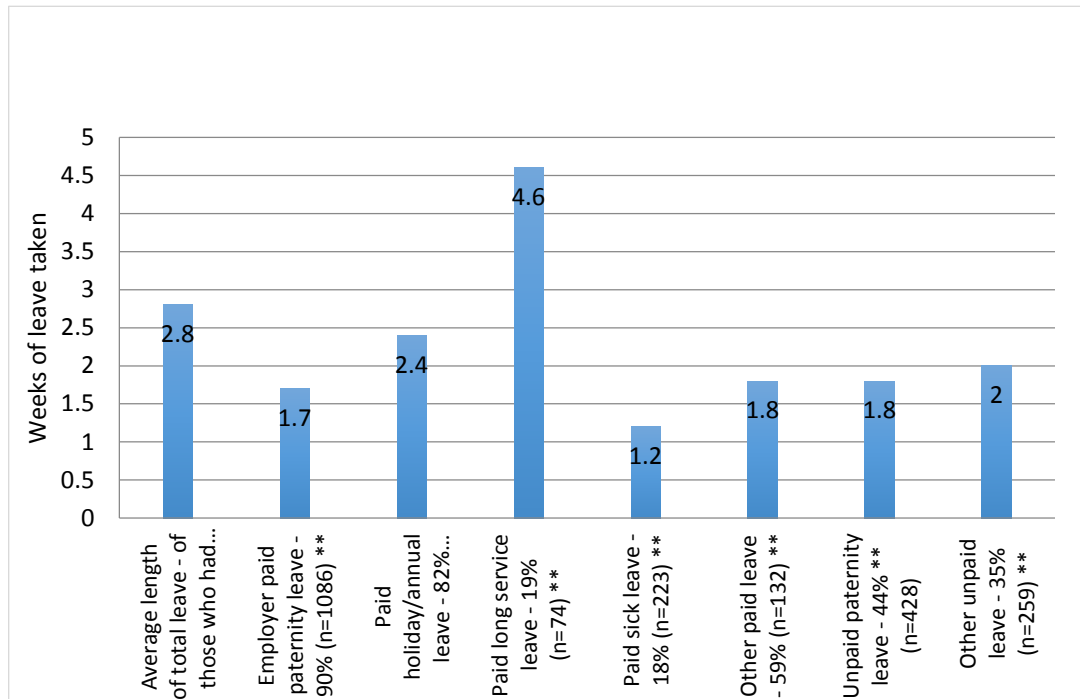
^a Among 3,826 fathers, 3,121 fathers (82 per cent) were reported having access to any type of leave at Wave 1.

^b Among 3,121 fathers who had access to any type of leave, 2,958 (95 per cent) fathers took some form of leave.

Note: data weighted by balanced-panel longitudinal weight

Of these fathers with access, 95 per cent took some form of paid or unpaid leave (or a combination of both) around the time of the birth of the reference child (Figure 3.1), and these fathers took on average 2.8 weeks of paid and unpaid leave combined. Fathers reported as having access to leave predominantly took paid paternity leave (90 per cent), with an average of 1.7 weeks, or paid annual leave (82 per cent), with an average of 2.4 weeks. Although the average length of paid long service leave that fathers took was comparatively long (4.6 weeks), only 19 per cent of fathers who were reported as having access to this leave type took this leave. Furthermore, 18 per cent of fathers with access to paid sick leave took an average of 1.2 weeks, and 59 per cent of fathers with access to other paid leave types took an average of 1.8 weeks' leave within the first six months of the birth of the reference baby.

Figure 3.1 Fathers' length of leave by type and weeks, Wave 1 (at 6 months)*, of those who had access to any type of leave**



* Average length of total leave that fathers took amongst those reported as having access to some form of leave around the time of the birth of the baby. We also provide the proportion (95 per cent) of fathers who took any type of leave (of those who had access to any type of leave)

** Average length of leave amongst fathers reported as having access to that leave. We also provide the proportion and number of those fathers who took that leave (of those with access to that leave type)

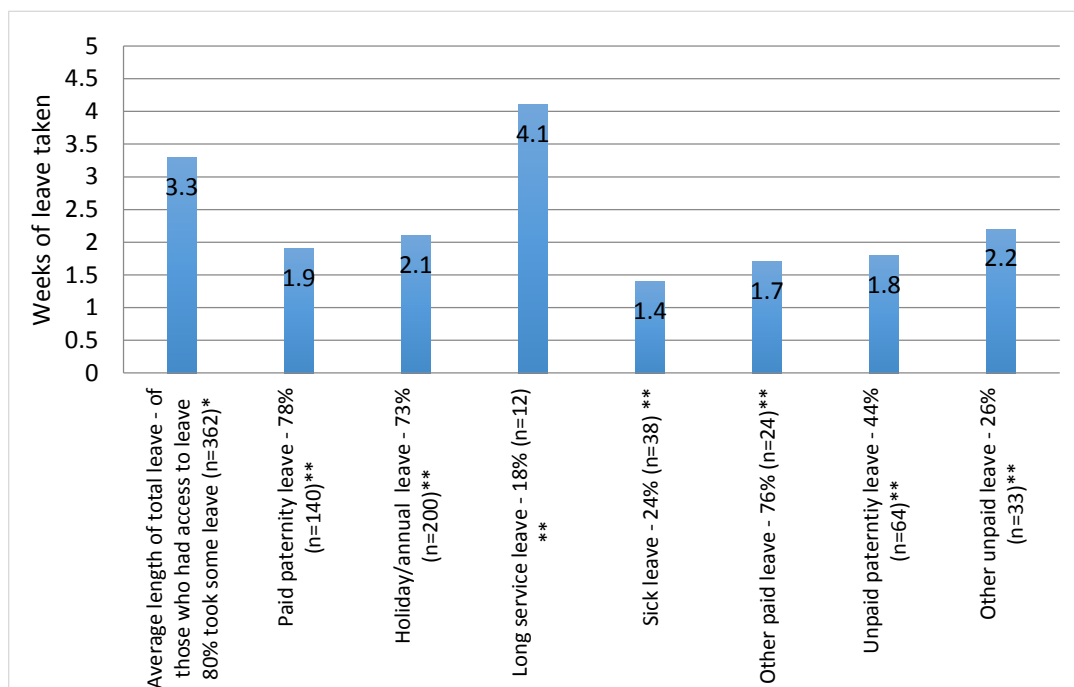
Note: data weighted by balanced-panel longitudinal weight

In relation to unpaid leave, a significant proportion of fathers reported having access to these types of leave took an average of 1.8 weeks of unpaid paternity leave (44 per cent) and two weeks of other forms of unpaid leave (35 per cent). The average duration of unpaid leave was approximately one week to ten days shorter than the overall average length of leave.

There is further evidence of similar leave-taking behaviour among fathers when we look at the leave fathers took for subsequent babies after the government's DAPP had been implemented at Wave 4 (Figure 3.2). Again, the majority of fathers who had access to and took various forms of leave, took either employer paid paternity leave (78 per cent) or paid holiday or annual leave (73 per cent), despite the introduction of DAPP. In relation to unpaid paternity leave, fathers took slightly more unpaid leave (2.2 weeks) in Wave 4 (after the introduction of DAPP) than in Wave 1. In addition, of those who were eligible for DAPP, only 26 per cent of fathers were reported to take this type of leave, although of those who took it, almost all took the full two weeks entitlement.

For both Wave 1 and 4, the average amount of leave taken for each leave type (with the exception of long service leave) is shorter than the overall average length of leave. This suggests that many fathers may use several leave types together to increase their time off work around the time of the birth of a new baby (see Martin, et al., 2014). However, one notable difference exists between Waves 1 and 4: of those who were reported as having access to any type of leave at Wave 4 took, on average, 0.5 weeks more leave for the birth of a baby than fathers at wave 1.

Figure 3.2 Fathers' length of leave by type, Wave 4*, for new baby born within previous 12 months of interview date**



* Average length of total leave that fathers took amongst those reported as having access to some form of leave around the time of the birth of the baby. We also provide the proportion (95 per cent) of fathers who took any type of leave (of those who had access to any type of leave)

** Average length of leave amongst fathers reported as having access to that leave. We also provide the proportion and number of those fathers who took that leave (of those with access to that leave type)

Note: data weighted by balanced-panel longitudinal weight

3.1.2 Leave-taking patterns between 6 and 12 months after the birth of a child

Flexibility in the scheduling of parental leave is increasingly a feature of policy design, with a variety of provisions seeking to enhance fathers' uptake of leave. In Sweden, for example, for children born after 1 January 2014, parental leave can be taken until a child reaches 12 years of age, with other flexibility measures including the ability to use leave on a part-time basis (down to as little as one-eighth of normal working hours) and the capacity to take up to three separate blocks of leave per year (or more if the employer approves) (Duvander, Haas & Hwang 2016).

Australian parental leave provisions allow some, albeit more limited, flexibility for fathers. The unpaid leave entitlement under the Fair Work Act must be taken in an unbroken period by primary carers, however a partner who is not the primary carer can take eight weeks leave concurrently with the primary carer, and this leave can be taken in separate periods of not less than two weeks (although that limitation can be waived if the employer agrees) and at any time during the first 12 months of the baby's life. The two weeks' pay provided by the DAPP scheme must be taken in one continuous block, but similarly can be taken at any time during the first 12 months. However fathers may also opt to take different forms of (non-parental) leave for family purposes.

Some indication of Australian fathers' propensity to take leave for parenting purposes beyond the immediate post-birth period (in particular in the 6-12 month period after the birth of a child) can be obtained from Wave 2 of the Millennium Mums survey, conducted when the reference children were around 12 months of age. Mothers who had reported that their partner had

access to leave for parenting purposes in Wave 1 were asked at Wave 2 if their partner had taken any additional leave to help with the baby since the Wave 1 interview, when the reference children had been around 6 months of age.

The data indicate that of the 3,121 fathers who were reported in Wave 1 as having access to any leave, 912 (29 per cent of those with access at Wave 1) took some additional leave when their infant was between the ages of six and 12 months. The types and duration of leave reported for fathers at Wave 2 are presented in Table 3.2, which shows, for each leave type, the number of fathers who were reported to have access to that leave type at Wave 1 *and* also to have taken some additional leave of any type at Wave 2. It indicates that of those who were reported as having access to paid paternity or parental leave at Wave 1 and taking some additional leave at Wave 2 (523 fathers), 64 per cent used some of this form of leave. The mean duration of paid paternity or parental leave was around 2.5 weeks over the year since the reference child's birth. The most frequently accessed form of leave in the 6-12 months period after the reference child's birth was paid holiday or annual leave: of those who were reported as having access to this form of leave at Wave 1 and as having taken some additional leave at Wave 2 (800 fathers), 78.5 per cent took some of this form of leave. The average duration of this type of leave was a little over three weeks over the year since the reference child's birth. The total average duration of leave taken over the first year by fathers who had used additional leave between Waves 1 and 2 was 4.4 weeks, compared with an average duration of leave over the first year of 2.65 weeks for fathers who did not take additional leave after Wave 1 (the average for all fathers at Wave 2 was 2.8 weeks).

Table 3.2 Fathers' leave usage at Wave 2 (reference child ~ 12 months)

Leave type	Number ^a	per cent ^b	Mean duration (weeks)
Paid paternity or parental leave	523	63.7	2.49
Unpaid paternity/parental leave	427	28.6	3.59
Other leave without pay	382	20.7	3.94
Paid holiday or annual leave	800	78.5	3.13
Paid long service leave	304	10.2	5.12
Paid sick leave	529	41.8	0.94
Other paid leave	259	38.2	1.29
Total	912	96.9	4.42

^a The number of fathers who were reported as having access to a particular type of leave at Wave 1 and also as taking more leave (of any type) at Wave 2.

^b The percentage of fathers who were reported as having access to a particular type of leave at Wave 1 and also as taking more leave (of any type) at Wave 2 who had taken some of the specified type of leave at Wave 2.

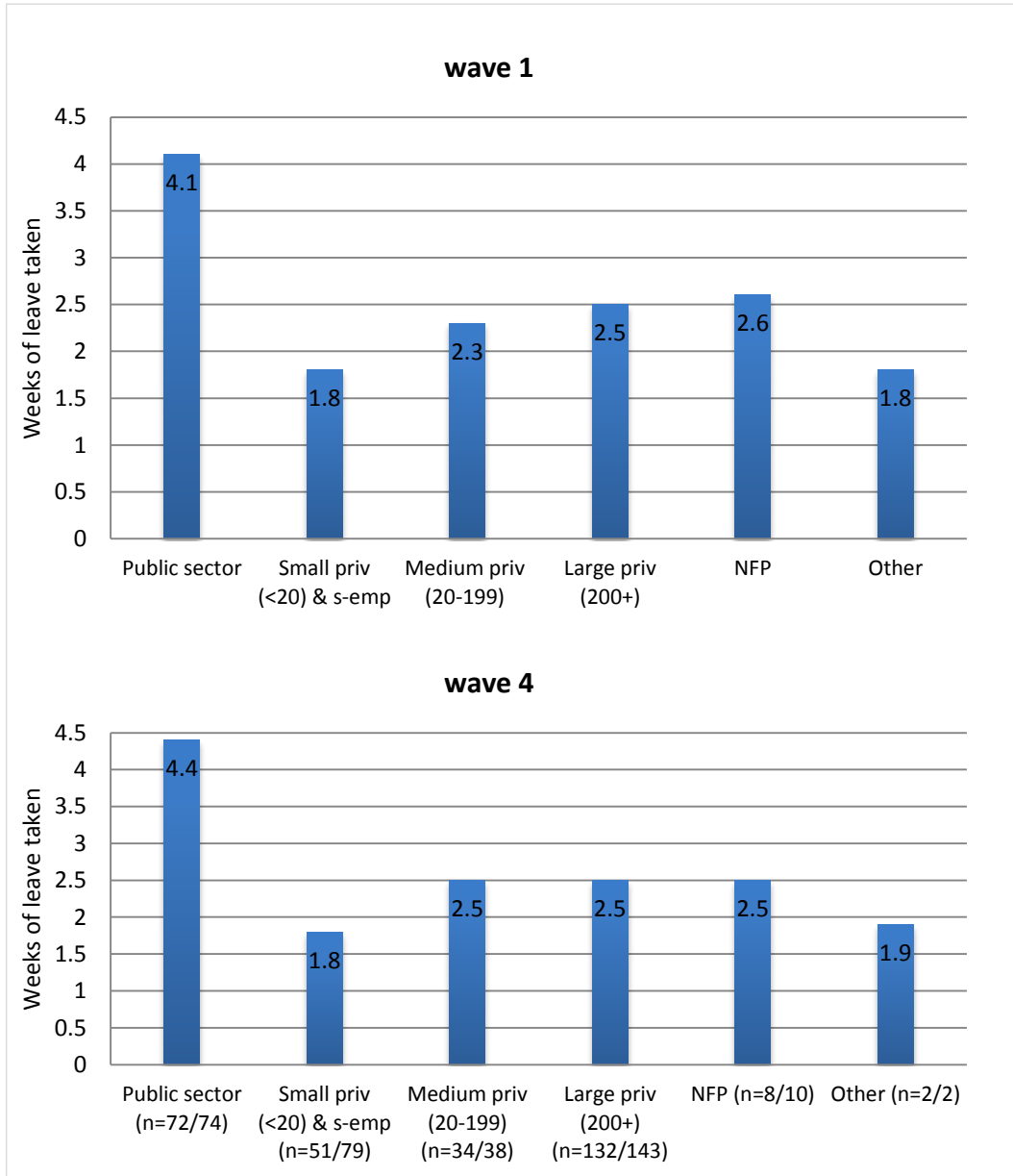
Note: data weighted by balanced-panel longitudinal weight

3.2 WORK-RELATED FACTORS ASSOCIATED WITH LEAVE-TAKING

Workplaces matter for fathers' leave-taking behaviour (Whitehouse, Diamond, and Baird, 2007; Martin et al., 2014). Figure 3.3 shows the average length of leave across workplace sector and size (amongst fathers who were reported as having access to leave), with the corresponding proportions of fathers who took leave. A smaller proportion of fathers working in a small company or business in the private sector took some form of leave than those in the public sector: 567 fathers out of 587 took leave in the public sector. Additionally, these fathers took less leave on average in Wave 1 (1.8 weeks) and Wave 4 (1.8 weeks) than those in other sectors and within larger workplaces, and less leave than the overall average amount of leave taken in Wave 1 (2.8 weeks) and Wave 4 (3.3 weeks). In contrast, fathers working in the public sector took the longest length of leave in both Waves 1 (4.1 weeks) and 4 (4.4 weeks), which is more than double the overall average amount of leave taken by fathers in

the private sector in both Waves. In addition, in Wave 4 a higher proportion of fathers in the public sector who were eligible for some form of leave took leave (72 took leave out of 74 fathers who were eligible) than in the other sectors. This pattern was not seen in Wave 1, where the proportions of those eligible for leave and who took leave were similar across all sizes and sectors.

Figure 3.3 Fathers' length of leave* by occupation sector and size (Waves 1 and 4)



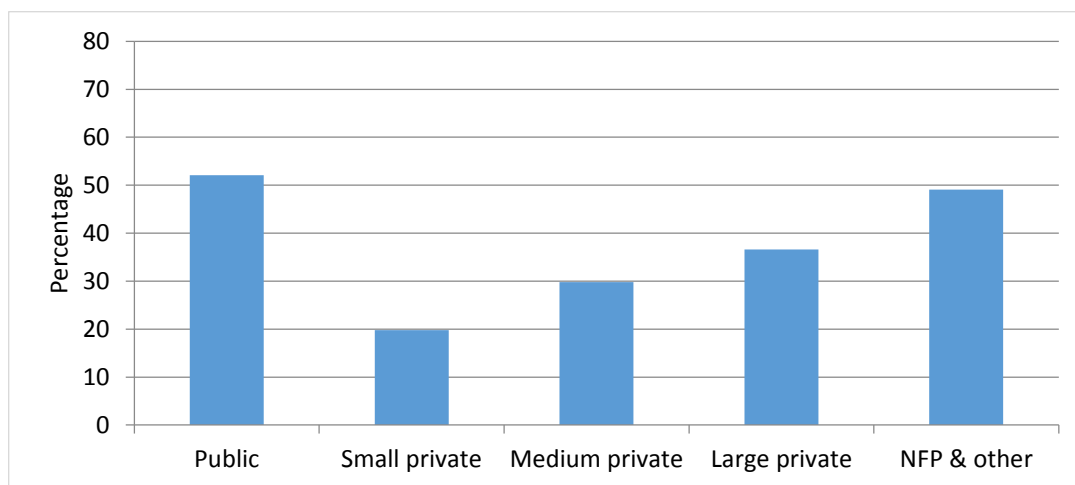
* Average length of total leave that fathers took amongst those reported as having access to some form of leave around the time of the birth of the baby.

Note: data weighted by balanced-panel longitudinal weight

The workplace was also associated with the proportion of fathers who took additional leave between six and 12 months after the birth of the reference child. There was no significant difference in fathers' propensity to take additional leave depending on the birth order of the reference child. Regardless of whether the reference child was a first, second or higher order birth, a similar proportion of mothers (around one-third) had a partner who took additional leave. However, significant differences were apparent between fathers who were employed in the public sector and those employed in small private firms, with over 50 per cent of the

former, but only around 20 per cent of the latter, taking additional leave at Wave 2 (see Figure 3.4).

Figure 3.4 Percentage of fathers who took additional leave by size and sector*, Wave 2**



* This figure is based on size and sector of employment as reported at Wave 1; fathers who changed jobs since the birth of the reference child are excluded from the analysis.

** Data are weighted by balanced-panel longitudinal weight

Note: data weighted by balanced-panel longitudinal weight

This shows that fathers' use of leave may be restricted by workplaces, and that support for leave arrangements may be limited in small private firms.

3.3 FATHERS' WORK HOURS AND USE OF FLEXIBLE WORK PRACTICES

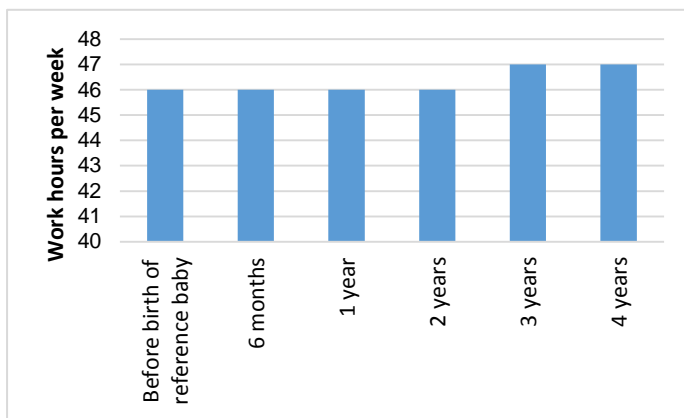
In the final section of this chapter we examine other ways fathers manage the dual demands of work and child care. We look at fathers' work hours and how the birth of an infant may be associated with changes to work hours. We also look at fathers' use of flexibility and whether or not fathers use a formal employer-provided flexibility provision, or whether fathers use flexibility without a formal provision, as well as whether flexibility usage is associated with the birth of an infant. We present data from Wave 4 of the Millennium Mums survey. From Wave 4 onwards, respondents were asked two sets of questions regarding their partner's use of formal or informal workplace flexibility provisions. Mothers were asked whether their partner used arrangements or provisions that allowed them flexibility in the hours they work, or where they work. Flexible work hours are outlined in the survey as including (but not limited to) permanent part-time arrangement, shorter hours for an agreed period, or flexible hours provisions. Flexible workplace arrangements are also outlined in the survey as including (but not limited to) working from home on a regular basis, working from home occasionally, or some other arrangement.

3.3.1 Fathers' work hours

Taking leave from work is not the only way fathers might manage the requirements of work and care around the time of the birth of a new baby, they may also adjust their work hours. The results of existing research are mixed and inconclusive about changes in fathers' work hours around the birth of a child (for example, comparing results from Hosking, Whitehouse, and Baxter, 2010 with Nepomnyaschy and Waldfoegel, 2007).

In this next section we examine fathers' overall work hours, and whether their work hours vary depending on the number of children in the household before the birth of the reference child.

Figure 3.5 Trends in fathers' work hours, Waves 1-5



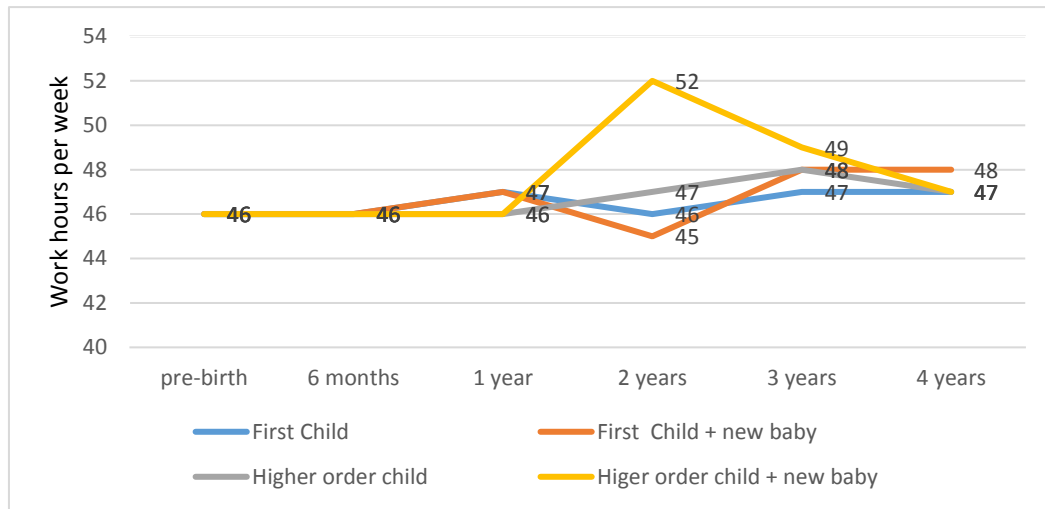
The first thing to note about Figure 3.5 is that according to mothers' reports, fathers' average work hours of 46 – 47 hours per week are well above the standard work week of 38 hours (Fair Work Ombudsman, 2016). As shown in Figure 3.5, fathers' average work hours increase slightly over the 5 Waves of data from around 46 hours when the babies are six

months old to around 47 hours when they are four years old, but these differences were not significant.

While overall there was not a significant change in fathers' work hours over time, we further examined whether fathers work hours varied depending on whether the reference child was their first child or not and whether they had another child during the panel. According to mothers' reports, fathers' average work hours were similar before and after the birth of the reference child (see Figure 3.6). Work hours begin to diverge for fathers with the birth of additional children during the panel. Fathers who already had children in the household when the reference child was born, and subsequently have another baby during the panel have the highest average work hours when the reference child is aged two, but their weekly work hours decline by about five hours a week to 47 hours by the time the reference child is aged four. Fathers, where the reference child is their first and only child born during the panel, experience little change in their work hours. Similarly, fathers for whom the reference child is not their first child, but have no other children during the panel also do not experience much change in their work hours. The work hours for these fathers are also about one hour a week higher than those of fathers who only have the reference child during the panel. Finally, fathers for whom the reference child is their first, but then go on to have another baby during the panel experience an increase in their work hours from around 45 to 48 hours each week.

Together this suggests that the birth of another child during the panel appears to have a small impact on fathers work hours, although this also varies depending on the birth order. Fathers who had a third or higher order child, have the highest work hours when the reference child is aged two, but fathers having their second child had the lowest work hours when the reference child turns two. By the time the reference child is four years old most fathers were working on average 47 or 48 hours a week.

Figure 3.6 Change in fathers' work hours around birth by parity, Waves 3 – 5



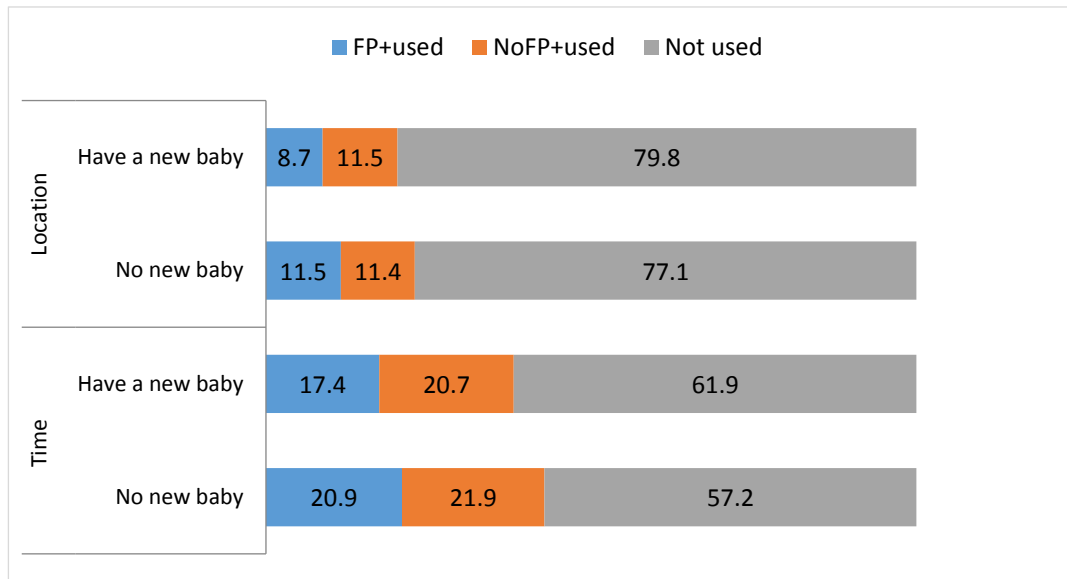
Note: data weighted by balanced-panel longitudinal weight

3.3.2 Flexible work practices: flexibility in time and place

Workplaces may offer employees the option to use flexible work hours (Noonan, Estes, and Glass, 2007) or flexible work location – such as working from home – (Bygren & Duvander, 2006; Lappegård, 2012; Noonan, Estes, and Glass, 2007) to help facilitate the competing demands of work and care. Workplaces may offer employees flexibility by way of formal or informal provision. Formal provision is defined in the Millennium Mums survey as an arrangement that is part of a flexible employment policy or contract provision of their employer. Because the post-partum period arguably requires parents to provide more intensive child care than when children are older, we would expect that fathers of young infants may use flexibility arrangements more than fathers of older children in order to manage the intense demands of work and caring for a young infant. Even though some workplaces offer formal flexibility provisions, previous qualitative research with fathers of infants shows that uptake of formal flexibility provisions is not as prevalent as we would expect, and many fathers who do use flexible work location or flexible work time do not use formal provisions (Martin, et al., 2014). However, we have little knowledge about the proportions of fathers who use different types of formal and informal flexible work arrangements.

Questions regarding fathers' use of flexibility were included in Waves 4 and 5 of the Millennium Mums survey. Analyses were conducted for both Waves, and results and patterns were similar across these two Waves, suggesting that patterns do not change significantly over a one-year period. Throughout this section, we therefore present results from Wave 4. Firstly, we identify the proportions of fathers who used flexible work hours and flexible workplace provisions, by whether they had a new baby. Overall, a greater proportion of fathers used flexible work time (40 per cent) than flexible work location (19 per cent). We also identified differences of usage relating to the types of flexibility used. Amongst those who used flexible work hours, slightly more fathers used *formal* flexible work hours (55 per cent) and *formal* flexible workplace provisions (56 per cent) than fathers who used *informal* flexible work arrangements. Finally, there was little difference relating to flexibility usage between fathers who had an infant in the 12 months prior to the survey and fathers who did not have a new baby (see Figure 3.7).

Figure 3.7 Formal provision and usage* of flexible arrangements⁺, partner with and without a new baby at Wave 4**



* FP+used = Flexible provision at workplace and father used this provision
 NoFP+used = No formal provision at workplace, father used this arrangement informally
 Not used = No flexible arrangement was used

** A new baby born within 12 months prior to Wave 4 surveys

+ “Time” = use of flexible time; “Location” = use of flexible work location/workplace

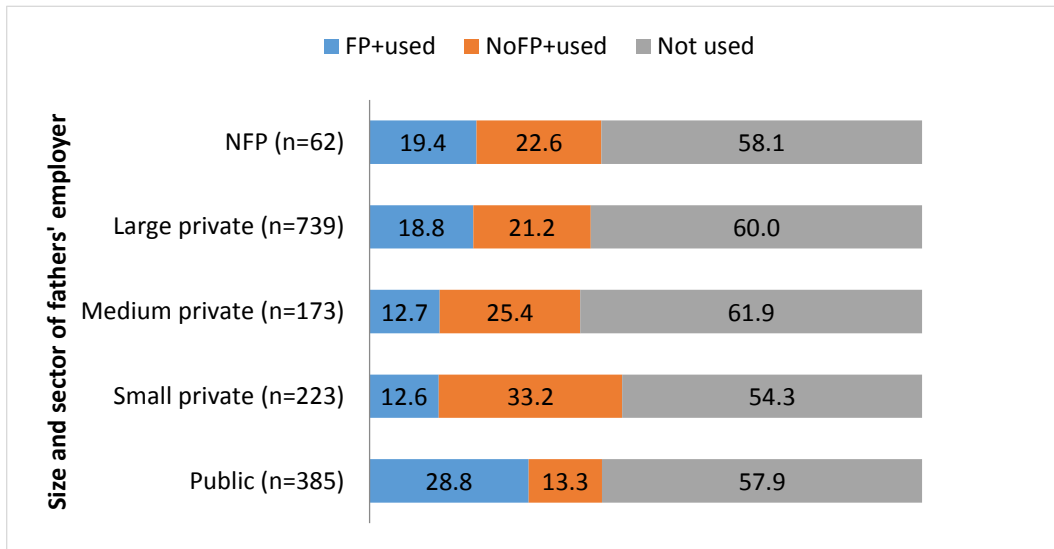
Note: data weighted by balanced-panel longitudinal weight

3.3.2.1 Use of flexibility by workplace size and sector

We also looked at whether fathers’ use of flexibility differs according to the size and sector of the workplace, and the type of flexibility used. As with the section above, we ran analyses for Waves 4 and 5, and results were similar across the two waves. We therefore present results from Wave 4. As we see in Figure 3.8, there are clear differences between the amount of time flexibility that fathers use, and whether fathers use formal or informal provisions. Overall, fathers who work in a small business in the private sector have the highest uptake of flexible work time (formal and informal combined), with nearly half (46 per cent) of fathers in these workplaces using some form of flexible work time in Wave 4. Only slightly fewer fathers (42 per cent) who work in the public sector and in a not-for-profit organisation use some form of flexible work time provision. This is followed by those who work for an employer in a large company in the private sector (40 per cent uptake), and those in a medium company in the private sector (36 per cent uptake).

Fathers who work in a small business have the highest percentage across both waves of use of *informal* flexible work time. In contrast, those in the public sector have the highest *formal* flexible work time usage. This reflects both the structure and the culture of these workplaces. The public sector often has well-established flexible work time arrangements and policies. On the other hand fathers who work in the private sector, and in particular in small and medium size businesses, may be more reliant on direct line managers and ad-hoc arrangements to facilitate requests for flexible work time (Cooper and Baird, 2015).

Figure 3.8 Fathers' flexible work hours provision and usage* by size and sector of employer at Wave 4

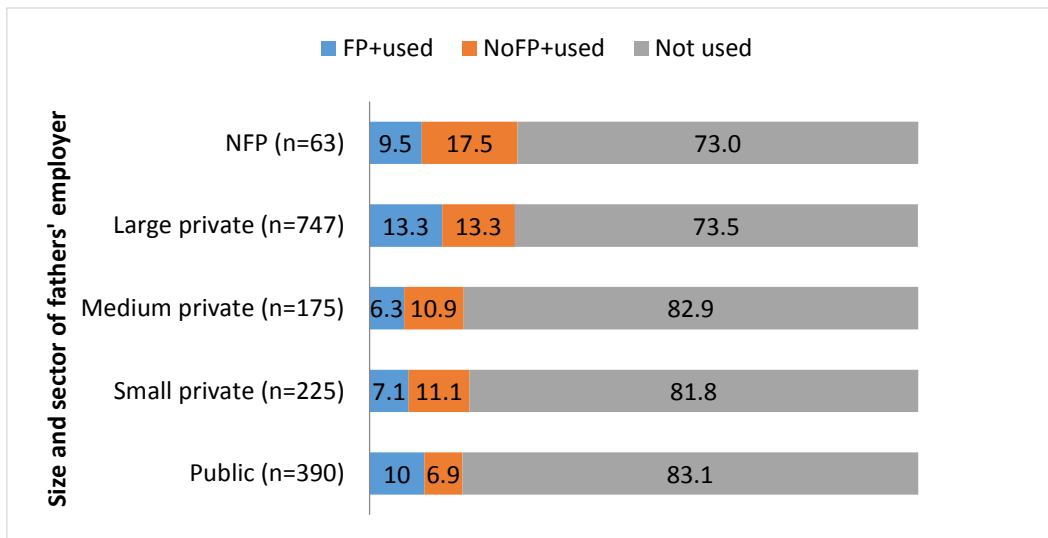


* FP+used = Flexible provision at workplace and father used this provision
 NoFP+used = No formal provision at workplace, father used this arrangement informally
 Not used = No flexible arrangement was used

Note: data weighted by balanced-panel longitudinal weight

In relation to flexible work location, fathers who work in a not-for-profit or a large company in the private sector are the most likely to use either formal or informal flexible work location provisions. Although the not-for-profit sector has a similar proportion of fathers reported to be using formal flexible workplace provision to the public sector, fathers in the not-for-profit sector were reported as having the highest uptake of informal flexible workplace usage from all five workplace size and occupation sector types. In contrast, the public sector had the lowest proportion of fathers reported as using informal flexible workplace arrangements.

Figure 3.9 Fathers' flexible work location arrangement provision and usage* by size and sector of employer at Wave 4



* FP+used = Flexible provision at workplace and father used this provision
 NoFP+used = No formal provision at workplace, father used this arrangement informally
 Not used = No flexible arrangement was used

Note: data weighted by balanced-panel longitudinal weight

3.4 SUMMARY

This chapter examined fathers' leave-taking in connection with the birth of a new baby (Wave 1) and fathers' leave-taking for the birth of subsequent children (Wave 4). Overall, we find that:

- Patterns of leave-taking were similar across waves. At Wave 1, fathers who were reported as having access to some type of leave took an average of:
 - 1.7 weeks of employer paid paternity leave
 - 2.4 weeks of paid holiday/annual leave
 - 4.6 weeks of paid long service leave
 - 1.2 weeks of paid sick leave
 - 1.8 weeks of *other paid* leave
 - 1.8 weeks of *unpaid* paternity leave
 - 2 weeks of other *unpaid* leave
- Nearly all (95 per cent) fathers who were reported as having access to leave, took some form of leave in connection with the birth of a baby.
- Fathers are more likely to take paid paternity leave or paid annual or holiday leave than unpaid leave
 - Less than half of fathers with access to unpaid leave use this leave option.
 - When fathers do take unpaid leave, the amount of leave they take is similar to the amount of paid paternity leave or paid holiday or annual leave.
 - Fathers who took long service leave took nearly twice as much leave as the average length of paid and unpaid leave fathers took.
 - After the implementation of DAPP, fathers took slightly longer unpaid leave than in Wave 1.
 - Results suggest that fathers may use multiple types of leave in order to increase their time off work in connection with the birth of a new baby.

This chapter also focussed on the leave taken by fathers when children were between the ages of six and 12 months. Overall, our results show that:

- Of the fathers who had access to and taken leave at Wave 1, an additional 29 per cent took additional leave when their infant was between six and 12 months old.
- The most frequently accessed and used type of leave between six and 12 months post-birth was paid holiday or annual leave.

Our results also show that the length of leave fathers take around the time of the birth of a baby is related to workplace characteristics. Overall, we find that:

- Fathers working in a small business in the private sector not only took the least amount of leave on average, but also had the smallest proportion of fathers with access to leave who took leave, across all waves.
- In Wave 4, a greater proportion of fathers in the public sector who had access to some form of leave took leave than fathers in other workplaces. However, this was not the same for fathers in Wave 1.

We were also interested in understanding whether fathers alter their work in other ways after the birth of a baby, by altering their work hours or by using flexible work arrangements, such as flexible work hours and flexible workplace. In terms of fathers work hours, we found that:

- Fathers work an average of 46-47 hours, that is, they spend at least eight hours longer each week at work than the 'standard' full-time work week of 38 hours.
- The birth of subsequent children was associated with fathers working slightly longer hours, although weekly work hours did not change very much.
- A greater proportion of fathers used flexible work time than fathers who used flexible work location provision.
- There is little difference between fathers who had an infant in the 12 months prior to the survey and fathers who did not have a new baby, in terms of whether or not they used either type of flexibility.
- Fathers who work in a small business in the private sector have the highest uptake of flexible work time (formal and informal combined).
 - Fathers who work in this sector also have the highest percentage of fathers across both waves who use informal time flexibility.
- Fathers in the public sector have the highest use of formal flexible work time.
- Fathers who work in a not-for-profit or a large company in the private sector are the most likely use formal or informal flexible work location provisions.
- Fathers in the not-for-profit sector had the highest usage of informal flexible work place from all five workplace size and occupation sector types.
 - The public sector had the lowest proportion of fathers who used informal flexible workplace arrangements.

4 GENDER EQUITY

Janeen Baxter and Ning Xiang

Much progress has been made in Australia, and elsewhere, toward greater gender equity. Gains are particularly evident over the last 60 years in women's access to tertiary education, employment, equal pay and political party representation (England, Gornick, & Shafer, 2012; OECD, 2012). Nevertheless barriers remain with several indicators showing the continued existence of gender inequity in areas such as rates of pay, gender segregation of employment, glass ceilings in some management hierarchies, representation on boards, and domestic and sexual violence (England, 2010). Most importantly for the current chapter, there is strong evidence from many studies in Australia and internationally, that women continue to undertake a very large share of unpaid care work (OECD, 2014). This not only signals gender inequity in households, but also has implications for women's access to, and full involvement in, employment. Importantly, many of the stubborn gender equity barriers noted above, may have their roots in continuing gender divisions of care work within households.

Previous studies on gender divisions of care have focused on three key overlapping issues. First gender identity, sometimes framed in terms of "doing gender", which supports definitions of unpaid care work as women's work and encourages men and women to follow traditional gender roles in the allocation of paid and unpaid work (Bittman, England, Sayer, Folbre, & Matheson, 2003). Second, power differentials, usually operationalised as relative earnings or resources contributed to the household, which usually favour men, enabling them to avoid or refuse to participate equally in unpaid care work (Bianchi, Milkie, Sayer, & Robinson, 2000; Bianchi, Sayer, Milkie, & Robinson, 2012; Coltrane, 1996; Craig & Mullan, 2011; Sayer, 2005). Third, institutional or policy frameworks that support women's care work in the home. This might include taxation policies, cultural frameworks, labour market structures and child care policies that privilege male breadwinner or one and a half earner households and limit the opportunities for mothers to reduce their care responsibilities.

We have seen some changes over time in the allocation of men's and women's time to unpaid care work, with men doing more and women doing less, but the changes are neither rapid nor consistent. In fact, some research suggests that men's participation in unpaid care work has changed very little over the last thirty years, and that any reductions in gender care gaps have been driven by women reducing the amount of time they spend on child care and housework (Baxter, 2002). Further, research also suggests that we have seen a slowing or stalling of trends toward more egalitarian views about gender roles and the allocation of unpaid care work, with both men and women increasingly less likely to support gender equal divisions of unpaid care work (van Egmond, Baxter, Buchler, & Western, 2010).

From a life course perspective, the birth of the first child is a major life course turning point with many women leaving or reducing their employment to take up full-time care work, while men continue to work full-time in the labour market (Baxter, Hewitt, & Haynes, 2008; Chesters, Baxter, & Western, 2009). There is a considerable body of literature investigating the effects of entry to parenthood on men's and women's work roles, care roles, time pressure, mental health, wellbeing, life satisfaction, relationship satisfaction, perceptions of fairness, household conflict, divorce and fertility. In most cases, the evidence shows that parenthood triggers increased gender inequity on many of these indicators (Charlesworth, Strazdins, O'Brien, & Sims, 2011; Craig & Baxter, 2016; Craig, Perales, Vidal, & Baxter, 2016; Ruppner, 2008).

The introduction of PPL in 2011 was potentially an important turning point in addressing some of the gender inequity associated with entry to parenthood. The stated goals of the PPL legislation included an explicit aim to “encourage gender equity and improve the balance of family and work life in Australian families” (Martin et al., 2012). Potentially, one way this might occur is through access to PPL leading to greater sharing of household and child care tasks between men and women. How might it do this? One possibility is through changes in the allocation of, and time spent on, child care and household tasks brought about by women’s continued attachment to the labour market. But contrary to these expectations, the PPL evaluation showed that women’s access to PPL had no visible impact on the allocation of child care or housework tasks between mothers and their partners, or on the time spent by mothers and fathers on these activities (Martin et al., 2015).

The data collected in the Millennium Mums surveys enable a longer term assessment of potential changes in gender equity in households following the birth of a child. As children grow older, it is possible that household arrangements may continue to shift in ways that support the development of more equal care arrangements. For example, research has shown that men are more involved in child care with older children relative to men of younger children, but also that children require less hands-on care from parents as they get older, particularly as they enter child care and preschool, which may reduce the burdens on parents, and especially women. Additionally, women may increasingly return to work and increase their hours of work as children age which may encourage the reallocation of some domestic and care responsibilities.

This chapter investigates the gender division of housework and child care focusing on variations according to employment status and leave taking arrangements. In addition to measures of the division of tasks in the home, the Millennium Mums surveys also included questions about subjective assessment of the fairness of the gender division of housework and child care, measures of gender role attitudes and relationship satisfaction. Consideration of subjective views about gender divisions and relationship quality provides additional insight into the factors shaping household divisions of labour, as well as adding another dimension to our understanding of the importance of gender equity for women’s wellbeing.

4.1 DATA

The Wave 1 Millennium Mums sample included 4,201 mothers, of which 42.2 per cent (n=1773) completed all five waves of the surveys. Given that the focus of this chapter is on gender equity within the home, mothers who were not in a relationship (n=209) or not living with their partners (n=31) are excluded from the analysis. A further three observations are excluded due to missing data on the outcome variables. Our final sample comprises 3,958 mothers at Wave 1, 3,311 mothers at Wave 2, 2,662 mothers at Wave 3, 2,146 mothers at Wave 4 and 1,877 mothers at Wave 5.

We develop five indicators of the gender division of labour based on the survey items:

1. *Mother’s housework time*: “Next I’d like you to tell me approximately how much time per week you spend in total on housework including preparing meals, doing the dishes, shopping for food, doing the laundry, vacuuming and cleaning?” Responses were coded in hours per week.
2. *Partner’s housework time*: “Now I’d like you to tell me approximately how much time per week your (husband/partner) spends in total on housework including preparing meals, doing the dishes, shopping for food, doing the laundry vacuuming and cleaning?” Responses were coded in hours per week.

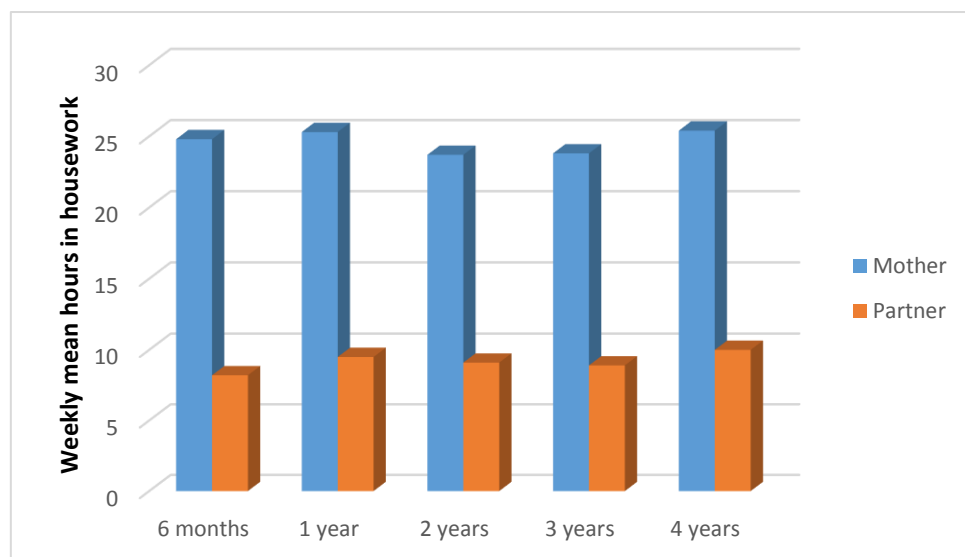
3. **Mother's child care time:** "About how many hours per week do you spend in total looking after your (child/children) including taking them to activities, reading or playing with them or bathing, dressing, feeding or putting them to bed?" Responses were coded in hours per week. Note that mothers who indicated that they spend more than 150 hours per week looking after their children were asked to exclude time when children were sleeping and in the care of others.
4. **Partner's child care time:** "And about how many hours per week does your (husband/partner) spend in total looking after your (child/children) including taking them to activities, reading or playing with them or bathing, dressing, feeding or putting them to bed?" Responses were coded in hours per week.
5. **Total time on all work per week** was calculated by summing housework time, child care time and employment hours per week for mothers and partners respectively. This measure provides an overall assessment of workloads that combines paid and unpaid work responsibilities.

4.2 HOUSEHOLD DIVISIONS OF LABOUR

4.2.1 Housework time

Our results show a clear gender division of labour in housework and child care tasks with women spending, on average, more than twice the amount of time as men on these activities each week. As shown in Figure 4.1, mothers spent an average of 25 hours on housework per week when the study child was aged six months (Wave 1) compared to an average of eight hours per week for men. By Wave 5 when the study child is aged four years, women's hours have increased slightly to 25.4 hours per week while men have increased to 10 hours per week on average. Thus despite some convergence, women still spend over twice the amount of time on housework compared to men with very little evidence of change over the waves of data collection.

Figure 4.1 Mother and partner's mean hours in housework



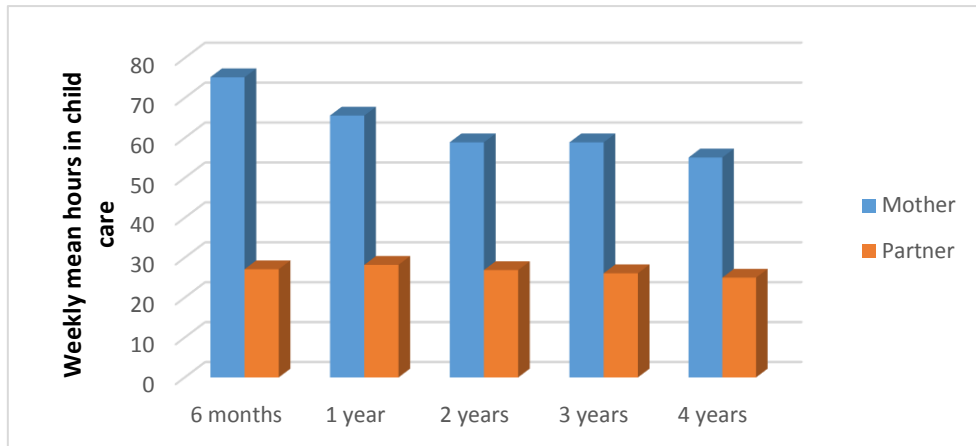
Note: data weighted by balanced-panel longitudinal weight

4.2.2 Child care time

A similar pattern is evident for child care time with women carrying the bulk of the load as indicated in Figure 4.2. Note here however that we observe a steady decline in women's time

on child care as children age, from 76 hours per week to 55 hours at Wave 5. Men’s average time on child care also declines from 27 to 25 hours per week.

Figure 4.2 Mother and partner’s mean hours in child care

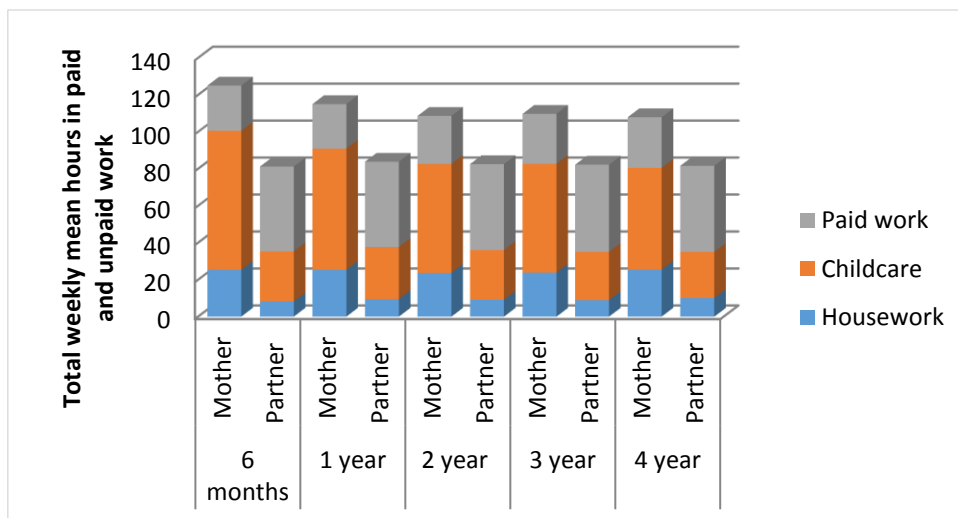


Note: data weighted by balanced-panel longitudinal weight

4.2.3 Total working hours

If we consider total hours of work that combines average paid work hours, average housework hours and average child care hours, women still fare worse than men, as shown in Figure 4.3. When children are aged six months, mothers spend an average of 125 hours per week on total work compared to 81 hours for men. Some of this work may be concurrent. For example, women and men may do more than one activity at a time, such as shopping or cleaning, whilst also doing child care. Nevertheless it is clear that women with young children have a very long working week. The gender gap narrows over time and by Wave 5, when children are aged four years, women are spending an average of 108 hours compared to men’s 82 hours. Note however, that the results indicate a shift in the relative time women allocate to different types of work over time, while men’s proportionate allocation across areas of work remains very stable over time.

Figure 4.3 Mother and partner’s total weekly hours in paid and unpaid work

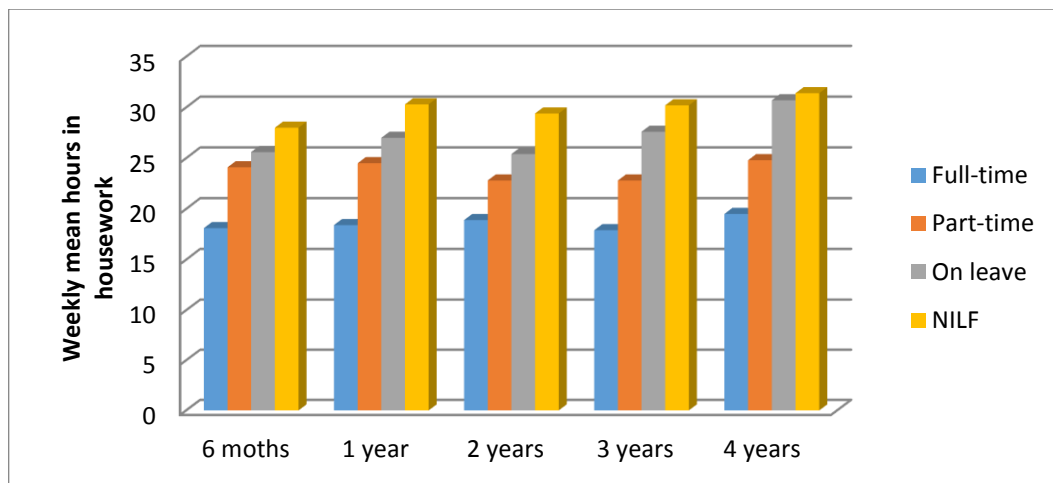


Note: data weighted by balanced-panel longitudinal weight

4.2.4 Employment Hours and Gender Equity at Home

The next set of results examines how housework and child care time varies in relation to employment hours. If we see that women who are employed spend less time on housework and child care than women who are not employed, this suggests that one way to address gender inequity in household work is to encourage women to spend more time in the labour market. As Figure 4.4 shows, mothers working full-time spent fewer hours on housework than all other groups with women not in the labour force devoting the most time to housework each week. This pattern is consistent across all five waves. Tests of statistical significance for these differences indicate that mothers not in the labour force spent significantly more hours on housework than mothers in full and part-time employment, but there are no significant differences between those not in the labour force and those on leave.

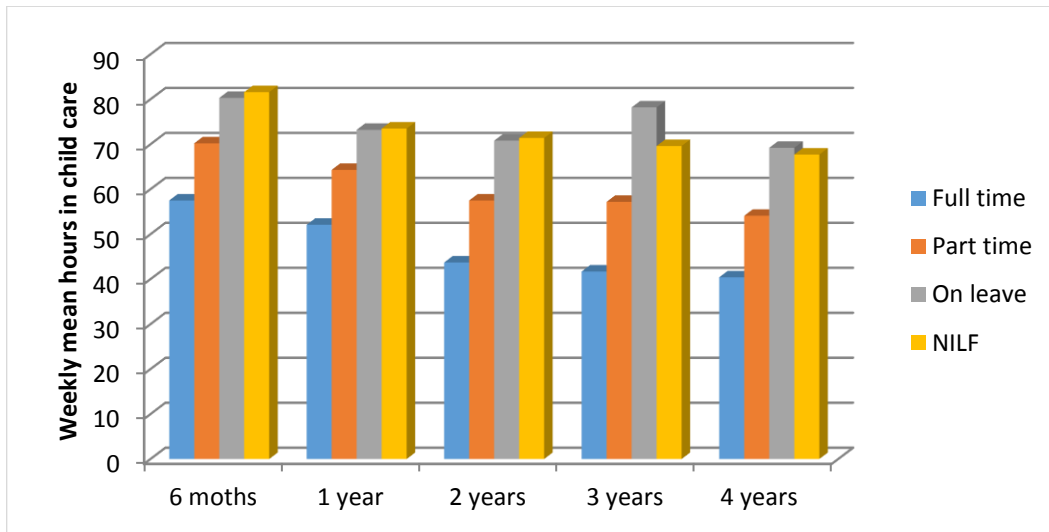
Figure 4.4 Mean hours for women on housework per week by labour force status (full-time, part-time, on leave, and not in the labour force)



Note: data weighted by balanced-panel longitudinal weight

The same general pattern is evident for mother’s time on child care by employment status as shown in Figure 4.5. Mothers employed full-time spent fewer hours on child care than all the other groups and the pattern is consistent across the five waves. There is also evidence that part-time employment is associated with fewer hours of child care. Further, with the exception of Wave 4, there is no gap in hours spent on child care between mothers on leave and those not in employment. At Wave 4, mothers spent significantly more time on child care than mothers not in the labour force, possibly due to the birth of an additional child.

Figure 4.5 Mean hours for women on child care per week by labour force status (full-time, part-time, on leave, and not in the labour force)

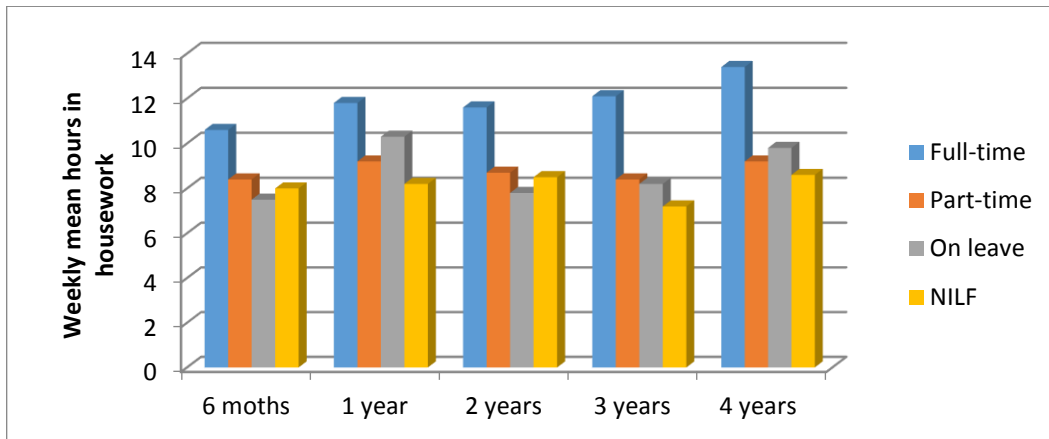


Note: data weighted by balanced-panel longitudinal weight

If women employed full-time are spending less time on housework and child care, this raises the question of who is picking up this additional work. Housework may be an activity that can be adjusted to suit the time available and households where women employed full-time may be more untidy than those where women are not employed. Or someone else may undertake this work, such as partners, older children or in some cases paid help. Child care however, is a qualitatively different kind of activity. Children cannot be left unsupervised, hungry or unclothed. Moreover, many parents will value their time on child care differently in comparison to time on housework, taking steps to ensure that employment does not impinge too heavily on time spent with children. As children grow older of course, time spent on physical care and routine activities such as bathing and feeding will decline, and children will require increasingly less hands-on supervision and monitoring. But in the early years, child care time will not be as flexible as housework time.

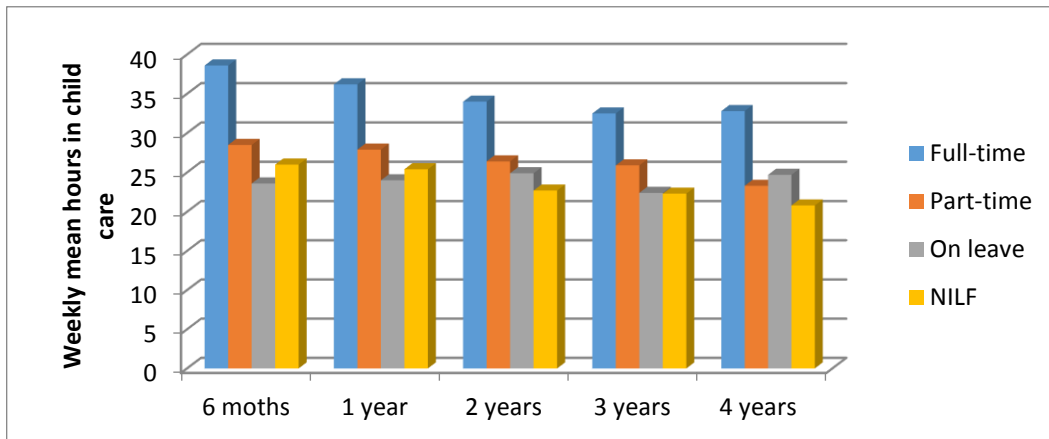
We examine how men’s time on housework and child care varies in relation to their partner’s employment status to see to what extent men adjust their involvement in domestic and care work when their partners are in employment. Figures 4.6 and 4.7 show the results for housework and child care. Partners of mothers employed full-time spent significantly more hours on housework and child care than partners of women in part-time employment, on leave and not in the labour force. Interestingly the gap is largest in Wave 5 with men partnered with women employed full-time spending the longest time on housework across all waves. Furthermore there are no significant differences amongst the other three groups across all waves. In other words, men partnered with women employed part-time spent no more time on housework than men partnered with women who are not employed. This fits with the results shown in the earlier graphs indicating that women employed part-time spend almost as much time on housework and child care as women who are not employed or on leave.

Figure 4.6 Mean hours for men on housework per week by their partners' (the mother's) labour force status (full-time, part-time, on leave, and not in the labour force)



Note: data weighted by balanced-panel longitudinal weight

Figure 4.7 Mean hours for men on child care per week by mothers' labour force status (full-time, part-time, on leave, and not in the labour force)



Note: data weighted by balanced-panel longitudinal weight

4.2.5 Parental Leave and Gender Equity at Home

The introduction of PPL potentially impacts gender equity at home via several mechanisms or pathways. First it may encourage women to maintain an attachment to the labour force as evidenced by return to work rates or whether women return to work full-time or part-time. As noted above, women employed full-time spend less time on housework and child care than other women and their partners spend more time on housework and child care than other men. Second, parental leave by fathers may support a closer relationship of fathers to their newborn child, and potentially their other children, which in turn may encourage more involvement by fathers in domestic and child care tasks. On the other hand, paid parental leave may act against gender equity at home by supporting women to spend more time at home around the time of the birth than might otherwise have been possible if financial support was not available. During this time women may take on a greater share of the care, which may then be more difficult to rearrange after return to work.

To investigate the association between leave taking and time spent on housework and child care we created several variables distinguishing mothers who took no leave, and mothers who took varying amounts of leave (18 weeks, 24 weeks and 52 weeks). The group defined as not taking leave (n=792) is quite diverse and includes women who resigned from work

(n=254), women who were made redundant (n=30) and women who did something else (n=107), such as contractors with employment contracts that ended before the birth or self-employed mothers who stopped working or sold their business. Note that 592 of those who did not take leave indicated that they did not have access to any type of leave before the birth and 200 mothers said they had access, but took no leave. It is noteworthy that income levels for those that did not take leave was significantly lower than those who took leave. This was the case when we examined mother and father’s income, as well as household income.

We examined the bivariate relationship between these variables and time spent by mothers on housework and child care, as well as estimating a number of multivariate models predicting time on housework and child care, controlling for maternal age, education, employment status, gender role attitudes, current marital status, partner’s age, education and current working hours, total number of all the children living in the household, and whether started formal child care.

Table 4.1 shows results for the leave variables from the random effect models. These show that mothers who took less than 52 weeks of total leave spent significantly fewer hours on housework than both mothers who took more than 52 weeks and who took no leave, after controlling for all covariates. A similar pattern emerged for mothers’ child care hours except that mothers who took less than 52 weeks of total leave spent significantly fewer hours on child care than mothers taking no leave, but not significantly different to mothers who took more than 52 weeks of leave.

In addition, mothers’ and their partners’ social demographic characteristics, employment status and mothers’ gender role attitudes are significantly associated with mothers’ weekly hours on housework and child care (results not shown). Mothers who are older, have bachelor or above degree, have only one child, work full-time, start formal child care, indicate more egalitarian gender role attitudes, and whose partner works less than 34 hours per week spend fewer hours on housework and child care.

Table 4.1 Coefficients of mothers’ leave taken for mothers’ hours on housework and child care

Mother’s total paid leave (Ref: <=52weeks)	Housework hours per week β	Child care hours per week β
>52 weeks	1.60**	1.28
No leave	0.13	3.62***
N	8,199	8,141

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: MM survey, Wave 2-5

List of the covariates: maternal age, education, employment status and gender role attitudes, current marital status, partner’s age, education, current working hours and duration of total paid and unpaid leave, total number of all the children living in the household, and whether started formal child care.

We repeated the same process examining the relationship between partner’s leave and their time on housework and child care. These results showed that whilst partners’ total unpaid leave has no significant association with partners’ time on housework, partners’ total paid leave is significantly related to their housework and child care hours. Partners who took more than 2 weeks of paid leave within the first year after the birth spend more hours on housework ($\beta = 1.75$, $p < .001$) and child care ($\beta = 2.23$, $p < .01$) than those who either had no access to or

took no paid leave in subsequent years. In addition, partners who are aged above 45 years, have a bachelor or higher degree, have more than one child, work less than 34 hours per week, and whose wife/partner works full-time spend more hours on housework and child care.

Table 4.2 Coefficients of partners' leave taken for partners' hours on housework and child care

Partners' leave	Housework hours per week β	Child care hours per week β
Partners' total paid leave (No paid leave)		
Up to 1 week leave	1.24**	1.55
<1-2 weeks leave	0.58	-0.44
>2 weeks leave	1.75***	2.23**
Partners' total unpaid leave	0.03	0.25
N	8,158	8,121

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: MM survey, Wave 2-5

List of the covariates: maternal age, education, employment status, paid leave duration and gender role attitudes, current marital status, partner's age, education and current working hours, total number of all the children living in the household, and whether formal child care started.

4.3 PERCEPTIONS OF EQUITY AND WELLBEING

4.3.1 Gender attitudes

In addition to investigating gender divisions of time on housework and child care tasks, the Millennium Mums surveys also included measures of attitudes to gender roles. These provide insight into women's views about how domestic and care work should be organised, whether it should be shared equally with partners and whether "good" mothering is compatible with paid employment. Previous studies have shown gender role attitudes to be a strong predictor of how tasks are divided in the home and provide insight into the role of housework and child care in constructing gender identities.

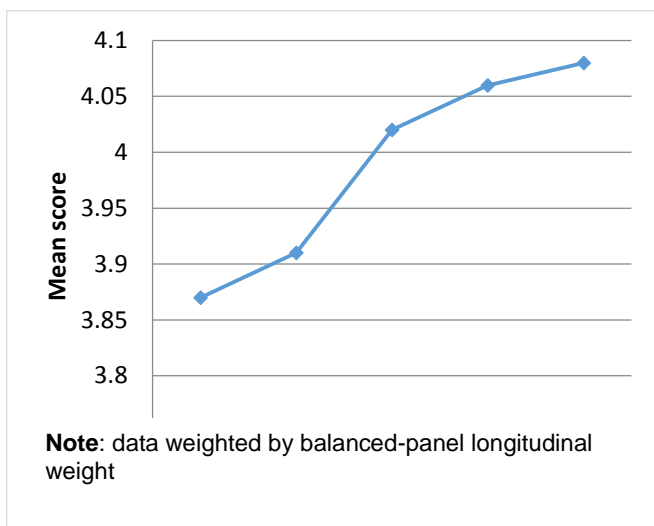
The surveys include six items measuring mothers' gender role attitudes. These are:

1. As long as the care is good, it is fine for children under three years of age to be placed in child care all day for five days a week.
2. A working mother can establish just as good a relationship with her children as a mother who does not work for pay.
3. It is better for the family if the husband is the principal breadwinner outside the home and the wife has primary responsibility for the home and children.
4. There should be satisfactory child care facilities so that women can take jobs outside the home.
5. If both partners in a couple work, they should share equally in the housework and care of children.
6. Ideally, there should be as many women as men in important positions in government and business.

Participants rated their attitudes on Likert-type scales ranging from 1 (*Strongly agree*) to 5 (*Strongly disagree*). Principal components factor analysis shows that all items load on the first

factor with an eigenvalue of 1.36 indicating that the items may be combined to form an index. As such these six items were averaged to form a composite measure with higher scores indicating more egalitarian attitude ($\alpha = .61$). As Figure 4.8 shows, mothers' gender role attitudes becomes significantly more egalitarian over the five waves. Random effects modelling of the trend over time indicated that the increase is statistically significant ($p < .001$).

Figure 4.8 Mothers' gender attitude (mean score) across 5 waves



Logistic regression analyses of the odds of taking leave shows that egalitarian gender role attitudes are significantly related to mothers' leave (OR=1.31, $p < .01$) after controlling for maternal age, education, employment status, occupation and size sector before the birth, partner's age, education and leave taken, marital status, and number of children. Note however, that gender role attitudes are measured at Wave 1 when the reference child was six month old, that is, after mothers have already taken leave around birth. We are thus assuming that mothers' attitudes remain unchanged around the birth and as such attitudes at six months can serve as a proxy to

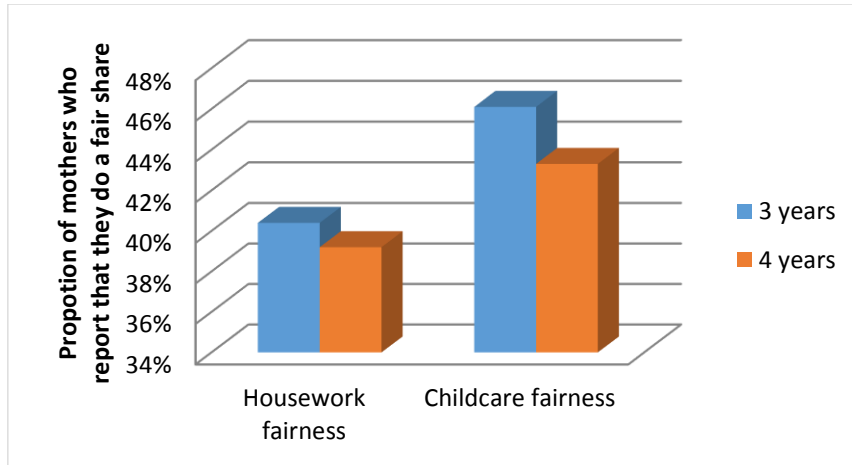
their attitudes before the birth. This assumption is contradictory to recent findings on gender attitudes changes around the birth (Baxter, Buchler, Perales, & Western, 2015).

4.3.2 Perceptions of Fairness

Mother's perception of the fairness of housework and child care arrangements at home was captured by two questions, which were only asked at Waves 4 and 5. One question is about housework asking "Do you think you do your fair share around the house?" and the other is about child care, asking "And do you think you do your fair share of looking after the children?" Participants rated their perceived fairness with these items on Likert-type scales ranging from 1 (*I do much more than my fair share*) to 5 (*I do much less than my fair share*). The responses were re-categorised into two groups, 0=not fair and 1=fair. There are 29 missing cases across two waves.

As Figure 4.9 shows around 40 per cent of mothers report that they do a fair share of housework and child care. The trend over time suggests that mothers perceive arrangements to be less fair in Wave 5 than in Wave 4, but this difference is not statistically significant.

Figure 4.9 Mothers' fairness perception with housework and child care at Waves 4 & 5



Note: data weighted by balanced-panel longitudinal weight

Logistic regression was used to examine the factors related to mothers’ perceived fairness of housework and child care at Wave 5 (Table 4.3). The results showed that duration of mothers’ and partner’s total paid and unpaid leave was not significantly associated with mother’s perceived fairness of housework and child care after controlling for covariates. Among other predictors, only maternal employment status and mother’s share of housework and child care are significantly related to perceived fairness. Specifically, mothers who are not in the labour force are most likely to indicate that they are doing a fair share than full-time working mothers followed by short part-time working mothers, whilst there are no significant differences between full-time and long part-time working mothers. In addition, the lower a mother’s share of housework the more likely she perceived she is doing fair share.

Table 4.3 Adjusted Odds Ratios (ORs) for mothers’ perceived housework and child care fairness at Wave 5

	Perceived housework fairness OR	Perceived child care fairness OR
Mother’s total paid leave	1.00	1.00
Mother’s total unpaid leave	1.00	1.00
Partner’s total paid leave	1.00	0.97
Partner’s total unpaid leave	1.02	1.06
N	1,776	1,776

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

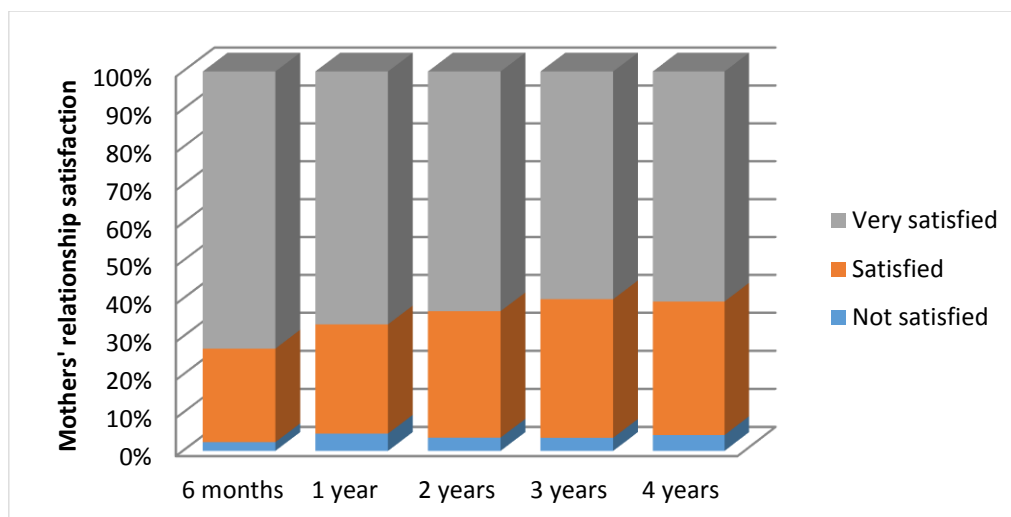
List of covariates: maternal age, education, employment status and gender role attitudes, current marital status, partner’s age, education, current working hours and total weekly work hours, total number of all the children living in the household, whether started formal child care, and mothers’ total weekly work hours and share of housework, child care and total weekly work hours.

Note: data weighted by balanced-panel longitudinal weight

4.3.3 Relationship satisfaction

Mother’s relationship satisfaction was measured by asking: “In general, all things considered how satisfied are you with your relationship with your partner?” Participants rated their satisfaction on Likert-type scales ranging from 1 (*Very dissatisfied*) to 5 (*Very satisfied*).

Figure 4.10 Mothers’ relationship satisfaction across 5 waves



Note: data weighted by balanced-panel longitudinal weight

As shown in Figure 4.10, the results show that in general, the majority of mothers indicated that they are very satisfied or satisfied with their relationships and this pattern is consistent across waves. However, a chi square test shows that the proportion of mothers who said they were very satisfied with their relationships dropped significantly over time ($p < .001$). The responses were re-categorised into 1=Very satisfied compared to 0=All other responses for further logistic regression analysis. There are 72 missing observations across five waves.

Table 4.4 Adjusted Odds Ratios (ORs) for mothers' relationship satisfaction, Wave 5

	Relationship satisfaction OR
Mother's total paid leave	1.00
Mother's total unpaid leave	1.00
Partner's total paid leave	1.04
Partner's total unpaid leave	0.95
N	1,774

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

List of the covariates: maternal age, education, employment status and gender role attitudes, current marital status, partner's age, education, current working hours and total weekly work hours, total number of all the children living in the household, whether started formal child care, mothers' perceived housework and child care fairness, and mothers' total weekly work hours and share of housework, child care and total weekly work hours.

Note: data weighted by balanced-panel longitudinal weight

The results show that mothers' and partners' total paid and unpaid leave was not significantly related to mothers' relationship satisfaction after controlling for a range of covariates. The variables that significantly affect relationship satisfaction are maternal employment status, partner's age and working hours, mothers' gender role attitudes, mothers' share of hours on child care and perceived child care fairness. Specifically, mothers are more likely to be highly satisfied with their relationship if they are more egalitarian, work fewer hours or are not in labour force, their partner works longer hours, they do a lower share of child care hours, and perceive higher levels of child care fairness.

4.4 SUMMARY

This chapter examined gender equity in households in relation to women's employment and leave taking arrangements. In relation to gender equity within households we find:

- Substantial gender inequity in households in relation to housework, child care and total work with women reporting much longer time spent on unpaid work than men.
- Time spent on child care outweighs time spent on housework for both men and women, but the gender gaps remain with women devoting much more time to child care than men.
- The gender gap remains in men's favour even when we add employment hours to create a measure of total work hours. In other words, although men spend more time in paid work than women, these additional hours do not outweigh the hours women devote to unpaid housework and child care activities.
- Women report much longer total work weeks than men across all five waves.
- Women who are employed full-time spend much less time on child care and housework than women who are employed part-time or not at all. This implies that returning to work part-time is not a solution to gender inequity at home as women employed part-time spend almost as much time on child care and housework as women who are not employed.
- Men with partners who are employed full-time spend more time on child care and housework than men with partners who are employed part-time or not in employment.

Taken together these results imply that dual full-time earner households have the most egalitarian housework and child care patterns. Such households however are quite rare comprising only about 19 per cent of the Australian population of couple households with dependent children aged 0-4 years old (ABS, 2012) and 20.5 per cent of the Millennium Mums sample at Wave 5 when the reference child was four years old. Australian households have embraced the one and a half earner model. Although this model may have some advantages, such as enabling women to maintain an attachment to the labour market and to provide additional financial resources to the household, it does little to challenge long standing patterns of gender inequity in the domestic division of labour. It also goes some way toward explaining why women's increased participation in paid labour has not challenged gender divisions of labour in households. If most women are moving into part-time employment when they have children, these data indicate that we can expect to see little movement in patterns of gender equity in households. Furthermore it suggests that paid parental leave will only be effective in leading to gender equity in households insofar as it encourages women to return to employment on a full-time basis.

Our investigations into whether taking parental leave is associated with gender equity in household arrangements indicated that:

- Taking less than 1 year of total leave is associated with fewer hours of housework and child care for women.
- Men who take longer paid leave spend more hours on child care and housework.

These results are preliminary and more analyses are needed to tease out more carefully how variations in length and type of leave are associated with housework and child care time, as well as to unpack the variations in the group of women who take no leave. There are also important gender differences here suggesting that men should be encouraged and supported to take more paid leave, and women encouraged to limit their leave to less than a year. Broadly though, these results support our earlier findings about the importance of women's involvement in paid employment for reducing their time on

housework and child care. In other words, the evidence suggests that women's return to employment is critical for reducing the amount of time they spend on unpaid work.

Examination of subjective views about gender equity revealed that:

- Women with more egalitarian attitudes are more likely to take parental leave.
- Women become progressively more liberal in their views over time.
- Taking leave does not appear to be related to perceptions of fairness of household arrangements or variations in relationship satisfaction.
- Despite the unequal gender arrangements observed here, a large percentage of women report that arrangements are fair and most women report high levels of relationship satisfaction. This accords with previous research (Baxter, Haynes, Western, & Hewitt, 2013).

5 MOTHERS' HEALTH

Belinda Hewitt, Lyndall Strazdins, and Mara Yerkes

In this chapter we examine mother's health and wellbeing during the reference child's pre-school years. Much existing research concentrates on mother's health and wellbeing post-partum – assuming that is the most physically and mentally demanding time of childrearing with less attention paid to what happens after this time. Although rates of distress can spike in the first three to 12 months after the birth, there is evidence that mental health problems among mothers are often recurrent and persistent (Goodman, 2007). Parenthood poses challenges to mothers, placing demands on family resources (income, time, energy) and these can shape mental health (depression, anxiety, distress) and physical health (especially fatigue, energy, muscle pain).

As well as health status and history before the birth, mothers' health in the early years of childrearing is shaped by interacting personal, family and social characteristics, and by their employment. Australian mothers are increasingly returning to work after childbirth (Baxter 2008), particularly after children turn one. The availability of child care, partner's work and their own employment all become major drivers of family time, care and income resources. One might expect that as children age, mothers would recover from the postpartum physical and mental toll of childbirth (Brockington, 2004; Cheng & Li, 2008) and the intensive childrearing (Craig, 2007) and sleepless nights associated with infancy would decline (Abhayaratna, Andrews, Nuch, & Podbury, 2008; Scher, 2012), leading to improvements in mother's mental and physical health. On the other hand, mothers with young children often experience higher role overload and work-family interference than at other stages of the life course (Higgins, Duxbury, & Lee, 1994). Some families may find this period of transition particularly hard, such as dual-earner families, due to the burden of juggling work and caregiving responsibilities. Thus, the demands on mothers may in fact increase after the post-partum period and over the pre-school years, rather than decline, raising questions about how this reconciliation of work and care may be influencing mothers' health.

Child factors, such as children's sleeping habits and problems (Sinai & Tikotzky, 2012), occurrence and frequency of illnesses also influence mother's health and wellbeing. Mothers, more so than fathers, are likely to sleep less and have lower quality sleep (i.e. more fragmented) as a consequence of caring for children both physically and emotionally (Maume et al., 2010; Venn et al., 2008). In particular, sentient activity among mothers, "that is hearing, noticing and being attuned to the needs of their children continued during the night" often leads to disrupted sleep among mothers, which can affect their health and wellbeing (Venn et al., 2008: 87). Mother's employment can, in turn, impact children's health. Mothers return to work often requires children to be put into long hours of day care (Hansen, Joshi, & Verropoulou, 2006) increasing their exposure to illness (Chen, 2013). There is evidence that mothers employment and job characteristics strongly influence children's development and wellbeing, where long hours of employment and high levels of work-family stress can negatively impact on children's well-being and behaviour (see for example, Strazdins, O'Brien, Lucas, & Rodgers, 2013).

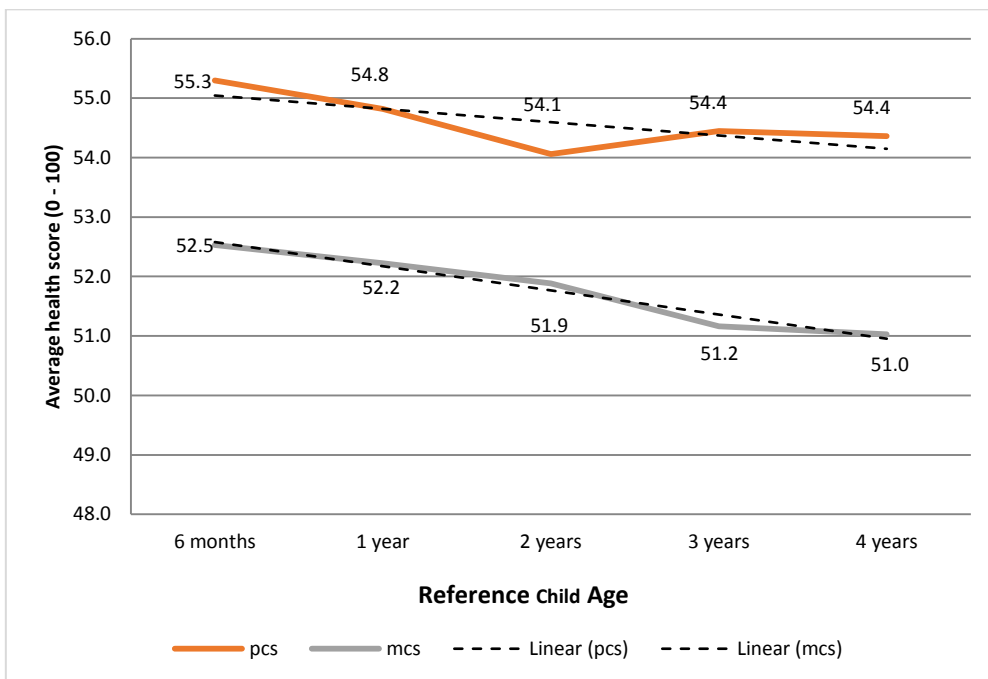
This chapter examines some of these issues. Using three different indicators of health and wellbeing, we examine mother's health trajectories over time and whether those trajectories vary depending on employment status and children's sleep patterns. In the final section of the chapter we examine some health outcomes for children and whether they vary depending on mother's employment. For all analyses we use the weighted panel data to account for attrition.

5.1 MOTHERS' HEALTH AND WELLBEING IN THE PRESCHOOL YEARS

In the first analyses we examined whether mothers mental and physical health changed over time. Two questions were central here. First, does mothers' health and wellbeing change over time? Second, if it changes, does it improve or get worse? To do this we use three measures of health and wellbeing. The first two measures of mental health and physical health were derived from the Short-Form 12 (SF-12). The SF-12 is a self-completion measure of health status comprising 12 items that measure eight dimensions of functional health and well-being that collapse down into two component scores of physical and mental health (Ware, Snow, Kosinski, & Gandek, 2000; Windsor, Rodgers, Butterworth, Anstey, & Jorm, 2006). Component scores ranged from 0 to 100, with a lower score indicating poorer outcomes and a higher score indicating better outcomes. Our third measure is of life satisfaction, which is considered to be a global measure of subjective well-being (Diener, Kahneman, & Helliwell, 2010). This measure was derived from a question asking: "All things considered how satisfied are you with your life?" Respondents were asked to give a score between 0 (not at all satisfied) and 10 (completely satisfied).

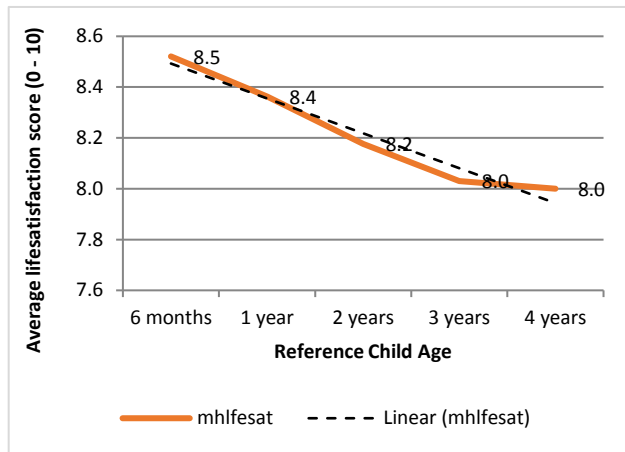
In Figure 5.1 we show the trends in mental and physical health over the five waves. Overall, mothers' mental and physical health is lower when their children are aged four than at six months. Mothers' self-reported mental health declines clearly and significantly across time, as the observed values (Linear mcs) are closely aligned with a linear decline in mental health. Their physical health also declines on average, but as indicated by the linear trend line for the physical component score (Linear pcs) the change over time is less consistent for physical health than it is for mental health.

Figure 5.1 Trends in mothers' physical and mental health



Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5.

Figure 5.2 Trends in life satisfaction, Waves 1 – 5



Mothers' wellbeing can also be expressed in terms of their overall life satisfaction. Similar to mental health, life satisfaction also declines across time. Mothers report significantly lower life satisfaction when the reference child is aged four compared to when they are aged six months (Figure 5.2).

Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5

In sum, our results indicate that overall, mothers' mental and physical health and life satisfaction declines over time. These declines in mothers' health and wellbeing may be related to changes other than children ageing that mothers experience during their child's pre-school years. For example, just under 75 per cent of mothers had returned to work at some point in the first year after birth. By Wave 5, 94 per cent of mothers had returned to work at some point during their children's pre-school years. Combining work and early childrearing can place a lot of strain on mothers and families. We now look at the influence of mothers' employment status on their health and wellbeing.

5.2 MOTHERS' HEALTH, WELLBEING AND EMPLOYMENT STATUS

Mothers' employment can play a key role in shaping their health and wellbeing outcomes (Cooklin, et al. 2011). Maternal employment following childbirth is quite diverse. Both the stage at which mothers return (i.e. within 6 months, 12 months or longer), and the hours which mothers work, varies (see Chapter 1, 'Mothers' Return to Work'). At each wave of data collection, we differentiate between mothers working part-time (<30 hours week), long part-time (30-35 hours week) and full-time (36+ hours week) as well as mothers who are on leave or those not in the labour force (NILF). Looking at mothers' employment trajectories over time in Table 5.1, the figures suggest that the majority of mothers we followed were working when their children were aged one, and the proportion of mothers who were working increased as children got older. During their child's preschool years, most mothers who returned to work worked long part-time hours of between 30 and 35 hours per week. However, the percentage of mothers working long part-time hours increased from 13 per cent when their babies were six months, to 33 per cent by the time children were aged four. A smaller proportion of mothers worked full-time, and increased from 11 per cent when children were six months, to 21 per cent when children were aged four. The overall figures were similar for mothers working part-time of less than 30 hours per week, with the exception that a higher proportion of mothers were working part-time when their children were aged one (22 per cent than when their children were aged four (18 per cent). Interestingly, between one-quarter and one-fifth of mothers were outside the labour force during their child's pre-school years.

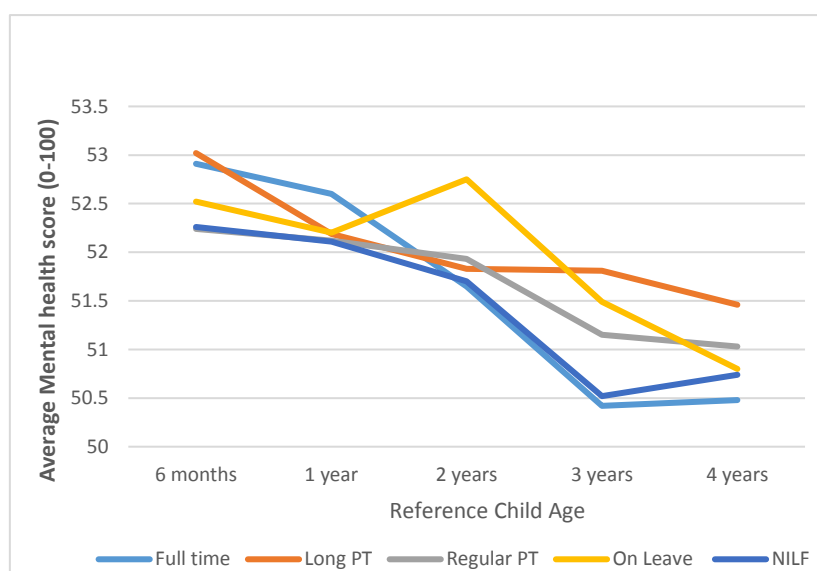
Table 5.1 Percentage of mothers in each employment status group over the 5 Waves

	FT per cent	Long PT per cent	PT per cent	On leave per cent	NILF per cent
6 months	11	13	13	35	26
1 year	14	25	22	10	26
2 years	18	29	19	8	24
3 years	20	30	18	9	20
4 years	21	33	18	7	20

Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 3, Wave 4 and Wave 5.

In the next section we examined how mothers' employment status was related to their health and wellbeing. The trends for mental health are presented in Figure 5.3. In relation to mental health, mothers working full-time had amongst the highest levels of mental health when babies were six months of age, but when children were aged four mothers working full-time reported the lowest mental health overall. In contrast, mothers working long part-time had amongst the lowest levels of mental health when babies were six months, but had the highest at four years. Overall, the trend towards lower mental health over time was much less pronounced for mothers working long part-time or regular part-time hours. Of note, mothers on leave had the most dramatic changes in their mental health over time. Whereas mothers on leave for another child when the reference child was two years old reported high levels of mental health, mothers on leave for another child when the reference child was three or four years old reported *lower* levels of mental health.

Figure 5.3 Trends in mothers' mental health by employment status, Waves 1-5

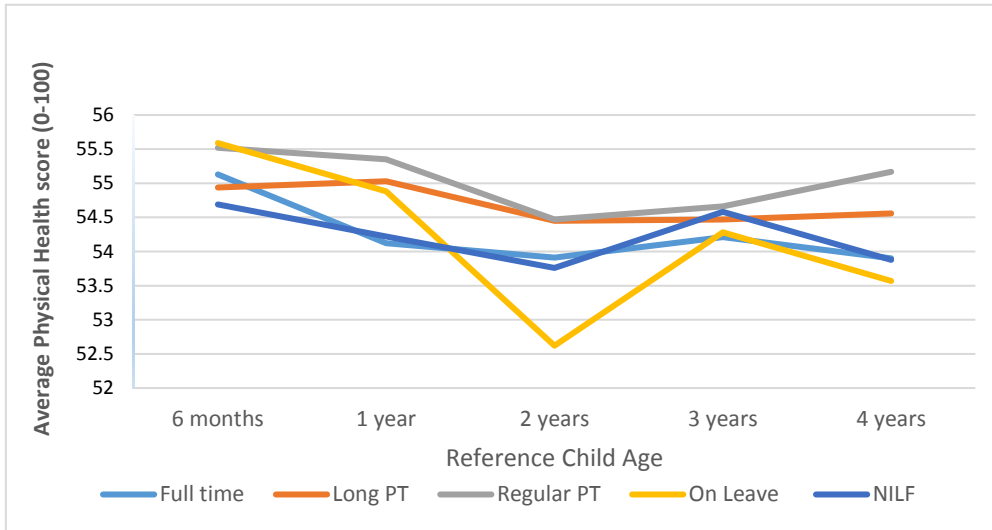


Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5.

The trends for physical health are presented in Figure 5.4. The trends by employment status were different for physical health than for mental health. Mothers who were working regular part-time hours (<30 hours per week) tended to have the best overall physical health across all ages of children. Mothers working long part-time hours also had relatively high levels of physical health across all waves. In contrast, mothers working full-time had relatively high levels of physical health when babies were six months, but had lower scores when their

children were aged four. Mothers not in the labour force had relatively low levels of physical health across all waves. Mothers on leave had relatively high physical health scores when their babies were six months of age, but had the poorest physical health scores when children were aged two through four. In the later waves, all mothers who were on leave had gone on to have more children during the panel, suggesting that family size and child spacing may have implications for physical health.

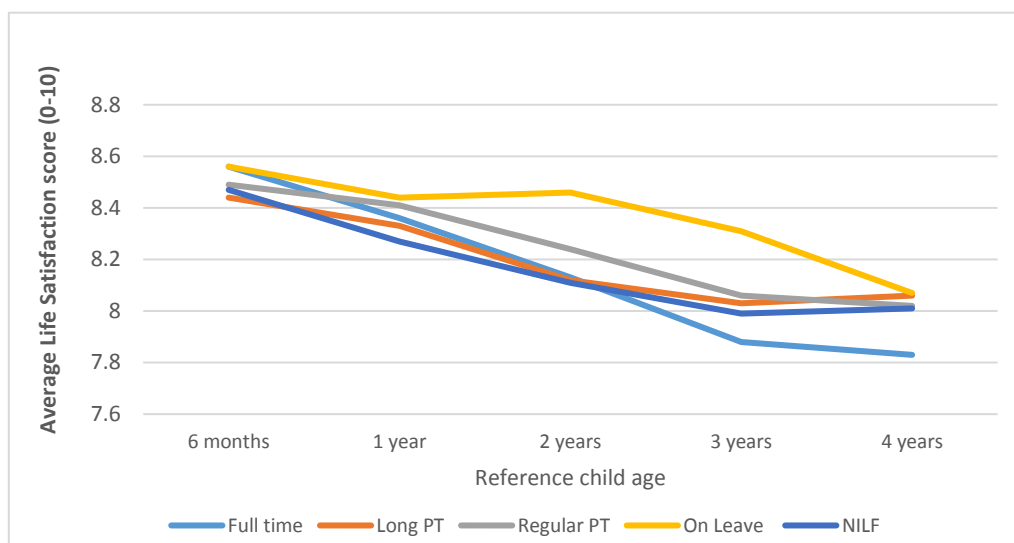
Figure 5.4 Trends in mothers' physical health by employment status



Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5.

In Figure 5.5 we show the trends for employment status and life satisfaction. While mothers still on leave had the poorest overall physical health, they tended to report the highest levels of life satisfaction over time. Mothers employed full-time had relatively high levels of life satisfaction when their children were aged six months, but when children were aged four they had the lowest levels of life satisfaction. Mothers working long and regular part-time and mothers not in the labour force had similar patterns. Life satisfaction was highest when children were six months of age, declined until children were three years and then stabilised.

Figure 5.5 Trends in mothers' life satisfaction by employment status



Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave2, Wave 3, Wave 4 and Wave 5.

In summary, employment status did influence mothers' health and wellbeing over time, but this varied somewhat depending on the outcome being examined. Generally mothers working full-time tended to have poorer health and wellbeing when their children were older, compared to when children were aged six months, and often the differences were more pronounced. Mothers working part-time had more moderate differences in health and wellbeing as children aged. Mothers who had other children and were on leave for those children at each time point had relatively poor physical health, but relatively high levels of life satisfaction. These mothers also had quite distinct trend patterns in mental health, where their mental health scores were relatively high when the reference child was under two and then declined quite dramatically to be relatively low when the reference child was aged four and they were on leave for another baby.

5.3 MOTHERS' HEALTH, WELLBEING AND SLEEP, WITH BABIES' AGE

In the next section on mothers' health we look at the relationship between mothers' health, wellbeing and children's sleep problems over the five waves. While anecdotal evidence largely supports the idea of hassled, sleep-deprived mothers, surprisingly little research explicitly looks at the relationship between children's sleep patterns and mother's health and wellbeing. With the data from the Millennium Mums project we are able to assess for Australian mothers whether children's sleep matters for mothers' health and wellbeing and whether this relationship changes as children get older.

We look at four common sleep problems amongst pre-school children. From the age of 12 months we asked mothers about sleeping problems children sometimes have. These questions were asked from the age of 12 months onwards because this is the age at which sleep should begin to stabilise for children (Scher, 2012). They were asked whether the reference child had any of the following problems on four or more nights a week, that is, more than half the time: difficulty getting off to sleep at night (labelled night), not happy to sleep alone (alone), wakes during the night (wake) or has restless sleep (restless). Table 5.2 shows the percentage of mothers who reported each of these sleep problems at each wave of data. At least 13 per cent of mothers have children who at some point have difficulty getting off to sleep at night four nights or more each week and up to 20 per cent of mothers report having a

child who is not happy to sleep alone or has restless sleep. Some 43 per cent of mothers report having a child who wakes during the night when the child is one year old, but this percentage declines to around 9 per cent for children aged four.

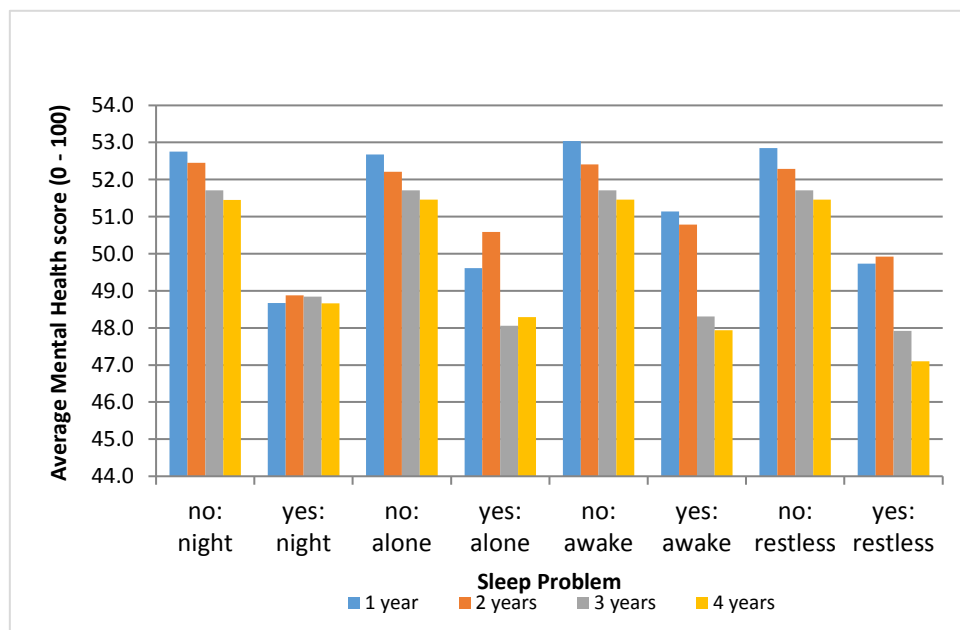
Table 5.2 Percentage of babies experiencing sleep problems, Waves 1-5

	Difficulty getting off to sleep at night (per cent "Yes")	Is not happy to sleep alone (per cent "Yes")	Wakes during the night (per cent "Yes")	Has restless sleep (per cent "Yes")	Number
1 year	12.9	14.9	43.0	20.1	3,467
2 years	15.9	20.0	32.7	16.3	2,801
3 years	19.5	11.0	12.7	9.8	2,070
4 years	15.3	10.2	8.9	7.1	1,830

Note: data weighted by balanced-panel longitudinal weight

Looking at each of these sleep problems in turn over the four years we see that children’s sleep problems are associated with mothers’ health and wellbeing, although this differs based on which health or wellbeing indicator is considered. First we look at mental health. The results in Figure 5.6 are presented in columns, with the sleep problem and whether the child does (“yes”) or does not (“no”) experience that problem, grouped by the age of the child (ranging from one to four years). Overall, we find that mothers whose children experience each of the sleep problems identified have poorer mental health on average than mothers whose children who do not. The extent of this varies depending on the sleep problem. Mothers whose children have trouble going to sleep at night have consistently poorer mental health irrespective of the age of their child. In contrast, the problems of not being happy to sleep alone, waking during the night and restless sleep appear to have a larger negative impact on mothers’ mental health when the children were aged three and four.

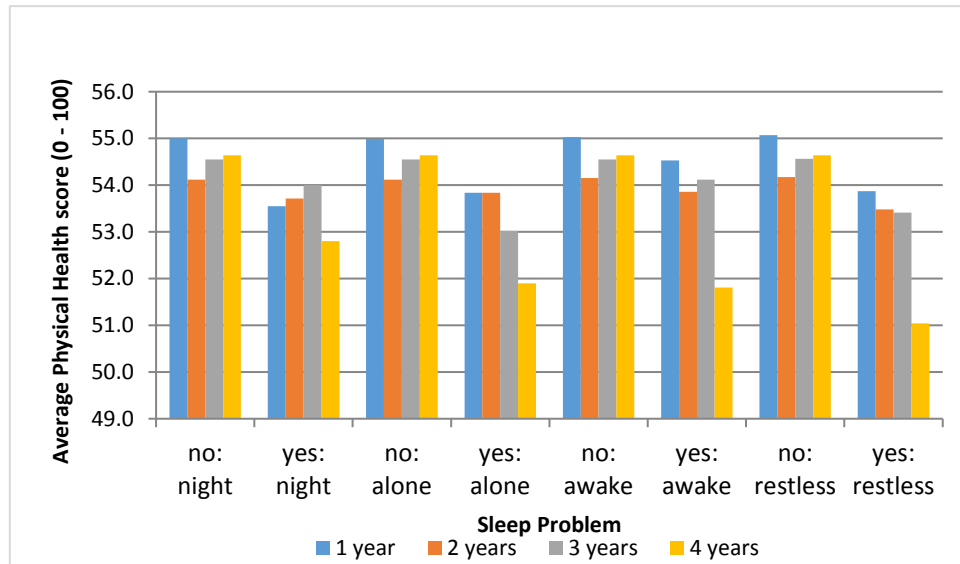
Figure 5.6 Child sleep problems and mothers' mental health



Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5.

Next we look at physical health in Figure 5.7. For physical health, the differences between mothers whose children experience each of the sleep problems and their physical health are not as pronounced as they are for mental health. We note that mothers whose children are experiencing any of the surveyed sleep problems when they are aged four have much lower levels of physical health than when their children are younger.

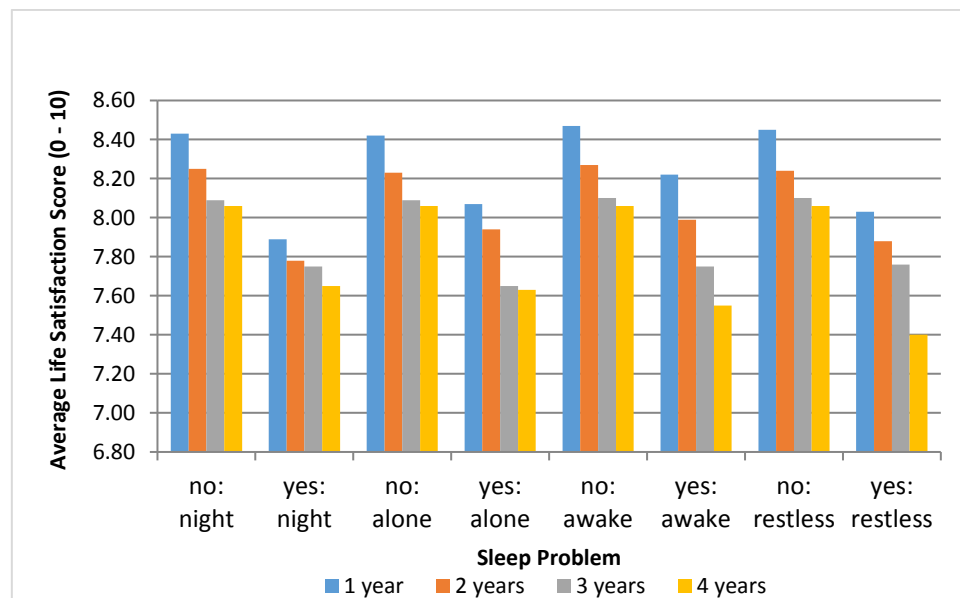
Figure 5.7 Child sleep problems and mothers' physical health



Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave2, Wave 3, Wave 4 and Wave 5.

With regard to life satisfaction as shown in Figure 5.8, overall mothers whose children are experiencing any of the sleep problems have lower levels of life satisfaction at each age time point. But life satisfaction is much lower for mothers whose children are aged four and are still experiencing sleep problems.

Figure 5.8 Child sleep problems and mothers' life satisfaction



Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5.

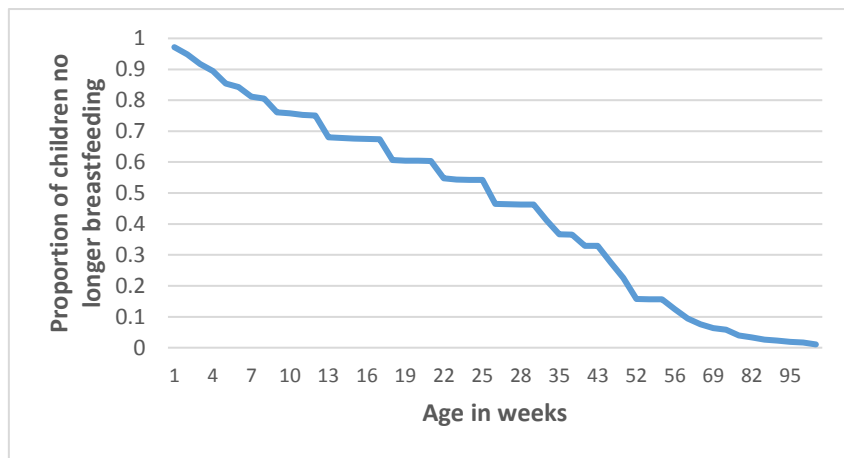
In summary, mothers whose children are experiencing sleep problems have poorer mental health, physical health and life satisfaction. The impact of children’s sleep problems on mothers’ health and wellbeing also changes across time. Overall, the findings suggest that even though smaller proportions of mothers are experiencing sleep problems with their children as they get older, the mothers who report that their child had sleep problems at ages three or four tended to have even poorer health and wellbeing.

5.4 CHILDREN’S HEALTH AND WELLBEING

In this final section of the chapter, we look at a number of indicators for children’s health and wellbeing. In particular, we are interested in the relationship between mothers, mothers’ employment and children’s health and wellbeing. We focus on three indicators for children’s health: breastfeeding, immunisations and the occurrence and frequency of illnesses among children, particularly in relation to formal child care attendance.

Breastfeeding is considered integral to mother-infant bonding and overall childhood development (Allen and Hector, 2005) as well as children’s health (Martin et al., 2014). Over 95 per cent of mothers initiated breastfeeding in our sample. The graph shows the percentage of mothers still breastfeeding up to 175 weeks after birth. While around half of our mothers were still breastfeeding at 25 weeks, this proportion dropped to 25 per cent before children turned one year of age. By the time the children were 18 months of age, less than five per cent of mothers were still breastfeeding, and after 172 weeks of observation (not shown), there were no mothers left in our sample who were still breastfeeding the reference child.

Figure 5.9 Breastfeeding duration



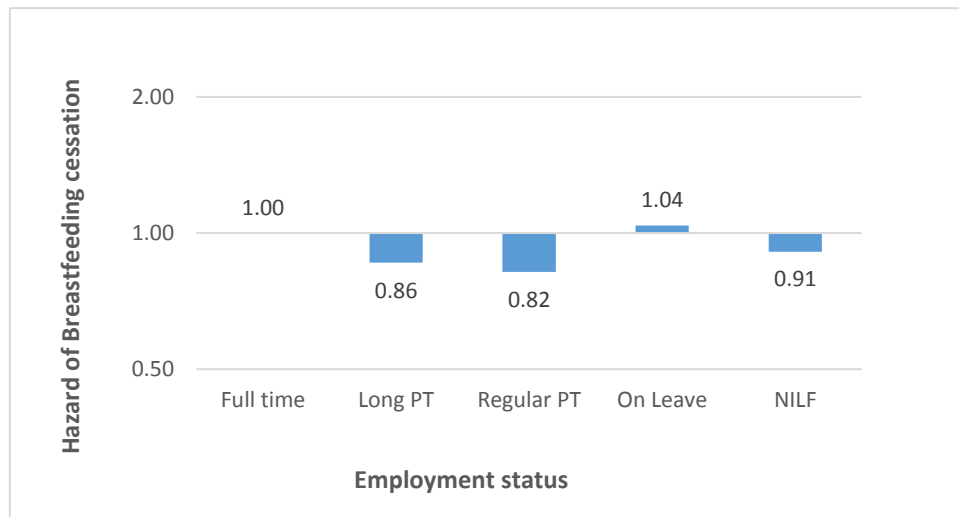
Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5.

Breastfeeding duration is affected by maternal employment, particularly if mothers return to work at an early stage (Martin et al., 2014). We investigated this issue in our sample, by examining the probability that mothers stopped breastfeeding based on their employment status⁹. The results in Figure 5.9 report the hazards of breastfeeding cessation compared to women working full-time (1.00), where a score greater than one means the hazard is higher,

⁹ We use Cox Proportional Hazards models to estimate the risk of a mother stopping breastfeeding as a function of an underlying baseline hazard and their individual characteristics (Yamaguchi, 1991). The hazard is an unobserved variable that controls both the timing and occurrence of an event. In our study, the hazard is made up of a continuous measure of the duration of breastfeeding in weeks, and a dichotomous variable valued 1 if the respondent has stopped breastfeeding the reference child, and valued 0 if they are still breastfeeding.

while a score of less than one means that the hazard is lower than mothers employed full-time. The results show that compared to mothers working full-time, mothers who were working part-time hours (either long or regular), or mothers not in the labour force were less likely to stop breastfeeding and therefore tended to breastfeed for longer. Many mothers on leave had another child and may have been breastfeeding that new child.

Figure 5.10 Hazard of breastfeeding cessation by mothers' employment status

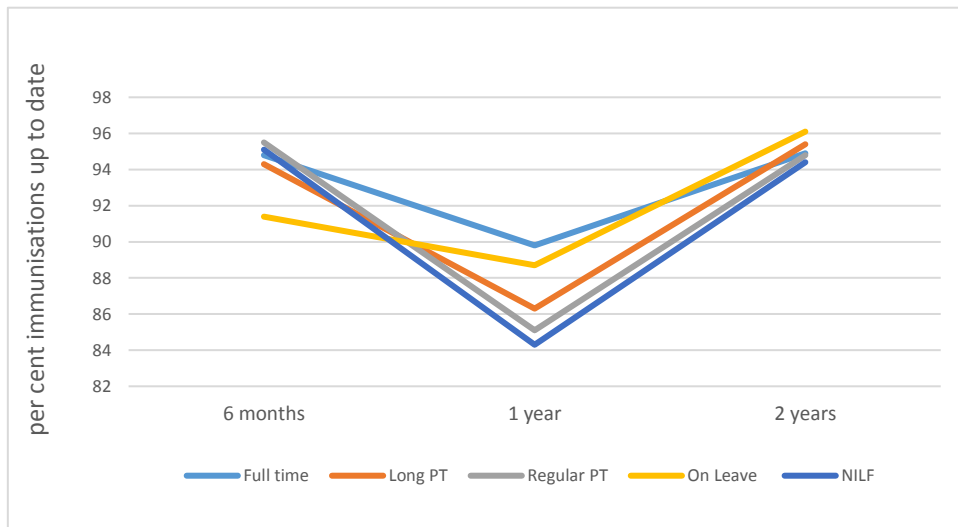


Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 2, Wave 3, Wave 4 and Wave 5

Another indicator of children's health is immunisation during the first two years of a child's life. Immunisations form an important part of children's development in the first two years. The immunisation schedule for Australia is Birth, 2 months, 4 months, 6 months, 12 months, 18 months and 4 years. Previous research has suggested that working mothers can struggle to keep their children up to date with their immunisations (Berger et al., 2005). We investigate whether this is the case for our mothers and also whether this differs over time.

The results from our sample are mixed. Immunisations are related to employment status but this relationship changes across time. For example, our findings suggest that at six months, the mothers not up to date with immunisations were those still on leave. In fact, mothers who work full-time are consistently more likely to be up to date with their child's immunisations than mothers who work part-time, are on leave or are not in the labour force. We do find, however, that while mothers on leave were least likely to be up to date with immunisations at six months and 12 months, they were most likely to be up to date with immunisations at two years. Overall the data suggest that all employment status groups had lower proportions of mothers up to date with immunisations when their babies were one, compared to when babies were six months and two years.

Figure 5.11 Immunisations and mothers' employment status



Note: data weighted by balanced-panel longitudinal weight
Source: MM survey Wave 1, Wave 2, Wave 3

Our final indicator of children’s health is looking at the occurrence and frequency of children’s significant illnesses. We asked mothers whether their child has had an illness that lasted a week or more as well as the average number of times their child has had an illness that lasted a week or more in the past 12 months. Some 31 per cent of mothers reported their child having an illness that lasted a week or more when the child was six months old, and this increased to 42 per cent when children were one and two years of age, before declining to 36 per cent and 34 per cent when children are three and four years of age respectively. Similar to the percentage of children who have had an illness for a week or more, the average number of times a child was ill in the past 12 months first increased until children turned three and then declined slightly.

Table 5.3 Children who had an illness that lasted a week or more, Waves 1-5

Child’s age	Percentage of children who had an illness that lasted a week or more	Average number of times child had an illness that lasted a week or more
6 months	31	1.44
1 year	42	1.87
2 years	42	2.19
3 years	36	2.33
4 years	34	2.17

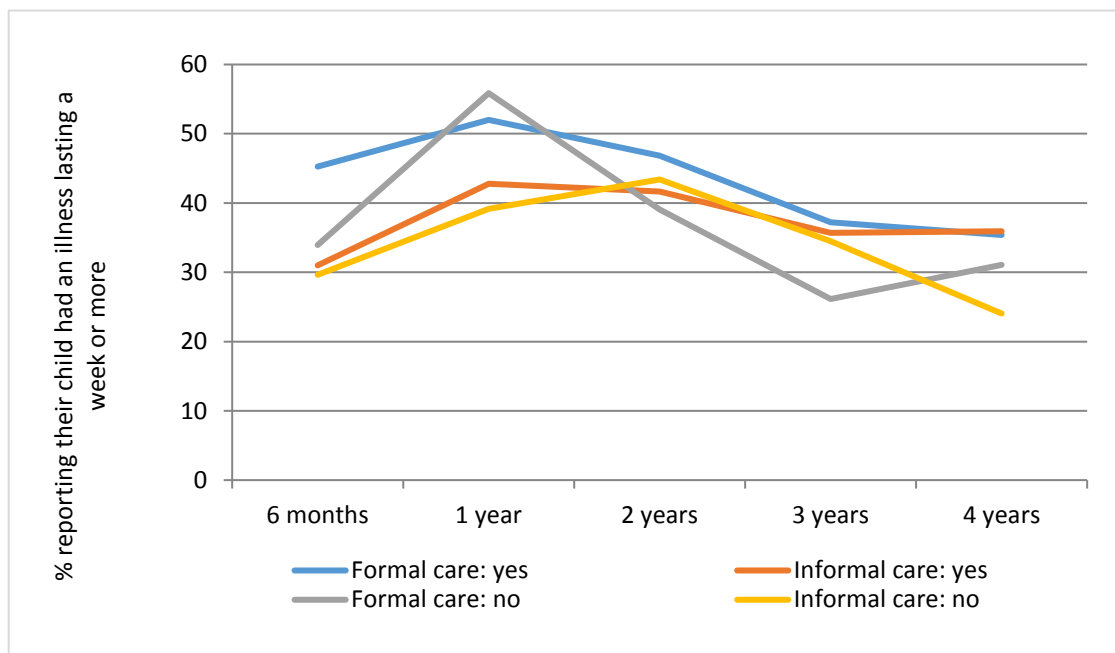
Note: data weighted by balanced-panel longitudinal weight

One possible factor influencing the occurrence and frequency of children’s illnesses is the commencement and attendance at child care. Child care attendance is one of the biggest changes that occur for children and their health. Commencement and attendance at child care – both formal and informal – is directly related to mothers’ employment. We therefore investigated whether the proportion of children who had a significant illness (lasting a week or more), and the number of occasions they had a significant illness varied depending on whether they were currently attending formal or informal child care.

For all groups, whether or not children were in formal or informal child care, the proportion of children who had experienced a significant illness declined over time. The results are not

consistent over time, however, and do not show a clear pattern whereby a higher proportion of children attending formal child care are more likely to have a significant illness compared to those who are not. At six months, two, three and four years, a larger proportion of children who were attending formal child care had a significant illness in the previous six months. However, at age one there was not much difference between those attending and not attending formal child care, and those not attending formal care had a slightly higher proportion reporting an illness. For informal care, the lines are relatively well matched until the children reach four years of age, where a higher proportion of those attending informal care had a significant illness compared to those not attending. Overall, a lower proportion of children attending informal child care had a significant illness until aged three. From age three to four, similar proportions of children in both formal and informal care are reported as having had a significant illness. At age four only about 25 per cent of children not in formal or informal care experienced a significant illness.

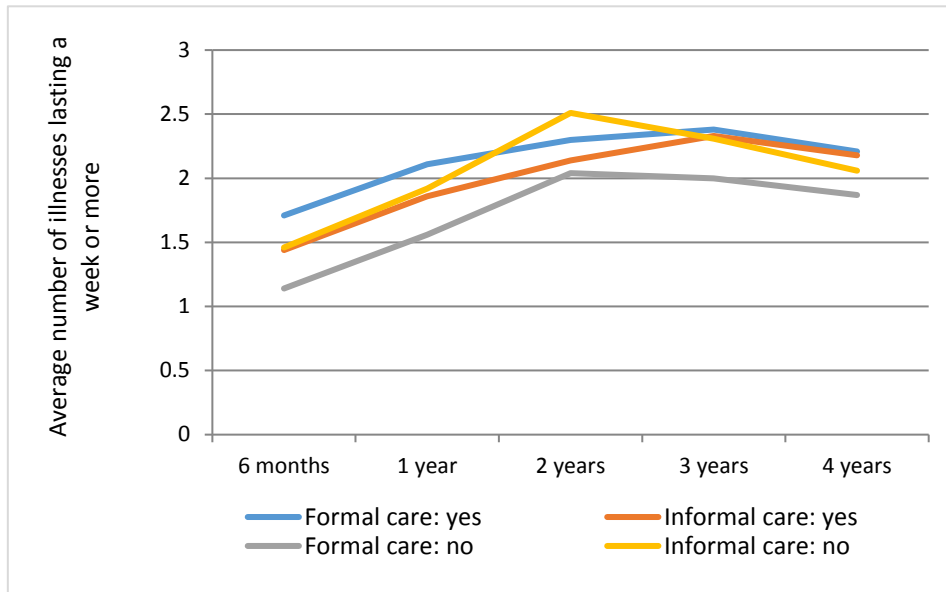
Figure 5.12 Child care attendance and illness lasting a week or more



Note: data weighted by balanced-panel longitudinal weight

If we look closer at children who experienced a significant illness or not (in the last 12 months), we can investigate whether children who attend formal care are getting sick more often than those who do not attend formal care or those who attend informal care.

Figure 5.13 Child care attendance and average number of illnesses lasting a week or more



Note: data weighted by balanced-panel longitudinal weight

As Figure 5.11 shows, children who are attending formal care had a higher average number of illnesses lasting a week or more up until the age of two. Children who do not attend any formal care at all over the four waves had consistently fewer significant illnesses than children in all other child care groups, including those children who were not using informal care. In other words, while children attending formal care are not necessarily more likely to experience a significant illness, for children who do have a significant illness, those in formal care are more likely to be sick a greater number of times within a 12 month period.

5.5 SUMMARY

This chapter looked at mothers' health and wellbeing over time, particularly in relation to mothers' employment status and children's sleep problems. Overall, we find that:

- Mothers' health and wellbeing declined over time across all three indicators of physical health, mental health and life satisfaction.
- Mothers' health and wellbeing was shaped by their employment status.
- Mothers who worked full-time have the lowest mental health and life satisfaction overall, whereas mothers not in the labour force had the highest levels of mental health and life satisfaction.
- The best physical health was reported by mothers who work regular part-time hours (<30 hours per week).
- Mothers' health and wellbeing was shaped by children's sleep problems.
- If children were experiencing sleep problems at age four, mothers tended to report much lower levels of health and wellbeing.
- Mothers whose children had trouble going to sleep at night had consistently poorer mental health irrespective of the age of their child.

In addition to mothers' health and wellbeing, we examined a number of children's health indicators, including breastfeeding (initiation and duration), immunisation, and occurrence and frequency of children's illnesses. In relation to children's health we found that:

- Nearly all mothers in our sample (over 95 per cent) initiated breastfeeding.
- Almost half of all mothers continued to breastfeed until the child reached six months of age.
- Three-fourths of mothers had ceased breastfeeding by the time babies reached 12 months of age.
- Of the mothers who returned to work, those working full-time had a greater likelihood of breastfeeding cessation than those working part-time or mothers not in the labour market.

We found that keeping up to date with children's immunisations varied by mother's employment status. We note that these data were collected from mothers before the recent legislative changes effective from 1 January 2016 stipulating that a child cannot attend child care unless the child is up to date with their immunisation or has a medical exemption.

- When babies were six months of age, mothers who work full time are consistently more likely to be up to date with their child's immunisations than mothers who work part time, are on leave or are not in the labour force.
- When babies were one year old, all mothers, irrespective of their employment status, were less likely to be up to date with immunisations.
- When babies were two years of age, mothers on leave were most likely to be up to date with immunisations.

Lastly, we looked at the occurrence and frequency of children's illnesses, particularly in relation to formal and informal child care. The findings suggest that:

- Nearly one-third (31 per cent) of mothers reported their child having an illness that lasted a week or more when the child was six months old.
- The occurrence of illness (that lasted a week or more) increases to 42 per cent when children are one and two years of age, and subsequently declines to 36 per cent (three years old) and 34 per cent (four years old).
- The frequency of significant illnesses follows a similar pattern to the occurrence of illness, initially increasing as children age before declining when children turn 4 years of age.
- We find no clear pattern that children attending child care are necessarily more likely to have a significant illness compared to those who do not attend formal care.
- Children in formal care were more likely to be sick a greater number of times in a 12 month period than children not in formal care.

REFERENCES

- Abhayaratna, J., Andrews, L., Nuch, H., & Podbury, T. (2008). Part-time employment: The Australian experience. Productivity Commission Staff Working Paper. Canberra, Productivity Commission.
- ABS. (2000). Labour force status and other characteristics of families. Cat No. 6224.0, Canberra: Australian Bureau of Statistics.
- ABS. (2008). Australian Social Trends, 2008. Cat No. 4102.0, Canberra: Australian Bureau of Statistics.
- ABS. (2012). Labour Force, Australia: Labour Force Status and Other Characteristics of Families, Jun 2012. Cat No. 6224.0.55.001, Canberra: Australian Bureau of Statistics.
- ABS. (2013). Australian Social Trends, Nov 2013. Cat No. 4102.0, Canberra: Australian Bureau of Statistics.
- Adema, W. (2012). Setting the scene: The mix of family policy objectives and packages across the OECD. *Children and Youth Services Review*, 34, 487-498.
- Allen, J., & Hector, D. (2005). Benefits of breastfeeding. *NSW Public Health Bulletin*, 16(3-4), 42-46.
- Australian Government: Productivity Commission. (2014). *Childcare and Early Childhood Learning: Productivity Commission Inquiry Report, Volume 1 (No. 73)*. Canberra, Australia: Australian Government.
- Baker, M. & Milligan, K. (2008). Maternal employment, breastfeeding and health: Evidence from maternity leave mandates. *Journal of Health Economics*, 27, 871-887.
- Baxter, J. (2002). Patterns of change and stability in the gender division of household labour in Australia, 1986-1997. *Journal of Sociology*, 38(4), 399-424.
- Baxter, J. (2008). Timing of mothers' return to work after childbearing: Variations by job characteristics and leave use, Research Paper No. 42. Melbourne: Australian Institute of Family Studies.
- Baxter, J. (2013). Child care participation and maternal employment trends in Australia, Research report No. 26. Melbourne: Australian Institute of Family Studies
- Baxter, J. (2013). Parents Working out Work, Australian Family Trends No. 1. Melbourne: Australian Institute of Family Studies.
- Baxter, J., & Smart, D. (2010). Australian Institute of Family Studies Occasional Paper No. 37: *Fathering in Australia among couple families with young children: Australian Government: Department of Families, Housing, Community Service and Indigenous Affairs.*
- Baxter, J., Buchler, S., Perales, F., & Western, M. (2015). A Life-Changing Event: First Births and Men's and Women's Attitudes to Mothering and Gender Divisions of Labor. *Social Forces*, 93(3), 989-1014.
- Baxter, J., Gray, A. M., Alexander, M., Strazdins, L., & Bittman, M. (2007). Mothers and fathers with young children: Paid employment, caring and wellbeing (Vol. 30): Department of Families, Community Services and Indigenous Affairs.

- Baxter, J., Haynes, M., Western, M., & Hewitt, B. (2013). Gender, justice and domestic work: life course transitions and perceptions of fairness. *Longitudinal and Life Course Studies*, 4(1), 78-85.
- Baxter, J., Hewitt, B., & Haynes, M. (2008). Life Course Transitions and Housework: Marriage, Parenthood, and Time on Housework. *Journal of Marriage and Family*, 70(2), 141-160.
- Berger, L. M., Hill, J., & Waldfogel, J. (2005). Maternity leave, early maternal employment and child health and development in the US. *The Economic Journal*, 115(501), F29–F47.
- Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, 79(1), 191-228.
- Bianchi, S. M., Sayer, L. C., Milkie, M. A., & Robinson, J. P. (2012). Housework: Who did, does or will do it, and how much does it matter? *Social Forces*, 91(1), 55-63.
- Bittman, M., England, P., Sayer, L., Folbre, N., & Matheson, G. (2003). When Does Gender Trump Money? Bargaining and Time in Household Work¹. *American journal of sociology*, 109(1), 186-214.
- Brady, M., & Perales, F. (2016). Hours of paid work among single and partnered mothers in Australia The role of child care packages. *Journal of Family Issues*, 37(3), 321-343. doi:10.1177/0192513X14531416.
- Brandth, B., & Kvande, E. (2009). Gendered or Gender-Neutral Care Politics for Fathers? *The ANNALS of the American Academy of Political and Social Science*, 624(1), 177-189.
- Brockington, I. (2004). Postpartum psychiatric disorders. *The Lancet*, 363, 303-310.
- Brooks-Gunn, J., Han, W. & Waldfogel, J. (2010). First year maternal employment and child development in the first seven years. *Monographs of the Society for Research in Child Development*, 75(2), 1-142.
- Browne, R., & Ireland, J. (2015). Childcare – the big problem of little people. *Sydney Morning Herald*.
- Bulanda, R. E. (2004). Paternal Involvement with Children: The Influence of Gender Ideologies. *Journal of Marriage and Family*, 66(1), 40-45.
- Bygren, M., & Duvander, A. (2006). Parents' Workplace Situation and Fathers' Parental Leave Use. *Journal of Marriage and Family*, 68(2), 363-372.
- Charlesworth, S., Strazdins, L., O'Brien, L., & Sims, S. (2011). Parents' jobs in Australia: Work hours polarisation and the consequences for job quality and gender equality. *Australian Journal of Labour Economics*, 14(1), 35-57.
- Chatterji, P., Markowitz, S. & Brooks-Gunn, J. (2013). Effects of early maternal employment on maternal health and well-being. *Journal of Population Economics*, 26, 285-30.
- Chen, J.-H. (2013). Multiple child care arrangements and health outcomes in early childhood. *Maternal and Child Health Journal*, 17(3), 448-455.

- Cheng, C.-Y., & Li, Q. (2008). Integrative review of research on general health status and prevalence of common physical health conditions of women after childbirth. *Women's Health Issues* 18, 267-280.
- Chesters, J. H., Baxter, J., & Western, M. (2009). Paid and unpaid work in Australian households: Trends in the gender division of labour 1986-2005. *Australian Journal of Labour Law*, 21(2), 116 -136.
- Coltrane, S. (1996). *Family man: fatherhood, housework, and gender equity*. New York: Oxford University Press.
- Cooklin, A.R, Canterford, L, Strazdins, L. & Nicholson, J.M. (2011). Employment conditions and maternal postpartum mental health: results from the Longitudinal Study of Australian Children. *Archives of Women's Mental Health*, 14(3), 217-225.
- Cooper, R., & Baird, M. (2015). Bringing the "right to request" flexible working arrangements to life: from policies to practices. *Employee Relations*, 37(5), 568-58.
- Craig, L. (2007). How Employed Mothers in Australia Find Time for Both Market Work and Child care. *Journal of Family and Economic Issues*, 28(1), 69-87.
- Craig, L., & Baxter, J. (2016). Domestic Outsourcing, Housework Shares and Subjective Time Pressure: Gender Differences in the Correlates of Hiring Help. *Social Indicators Research*, 125(1), 271-288.
- Craig, L., & Mullan, K. (2011). How Mothers and Fathers Share Child care. *American Sociological Review*, 76(6), 834-861. doi:10.1177/0003122411427673.
- Craig, L., Perales, F., Vidal, S., & Baxter, J. (2016). Domestic Outsourcing, Housework Time, and Subjective Time Pressure: New Insights From Longitudinal Data. *Journal of Marriage and Family*.
- den Dulk, L. & Yerkes, M. A. (2016, forthcoming). "Capabilities to combine work and family in the Netherlands: challenging or reinforcing the one-and-a-half earner model?" *Japanese Journal of Family Sociology*.
- den Dulk, L., Yerkes, M. A. & Peper, B. (2017, forthcoming). Family Policies within the Workplace. In *Handbook of Child and Family Policy*, Gu_n_ Björk Eydal and Tine Rostgaard (Eds.). Edward Elgar Publishing.
- DHS (Department of Human Services) (2016). Eligibility for Dad and Partner Pay. Australian Government, Department of Human Services. Accessed on 4 October 2016 at <https://www.humanservices.gov.au/customer/enablers/eligibility-dad-and-partner-pay>.
- Diener, E., Kahneman, D., & Helliwell, J. (2010). *International differences in wellbeing*. Oxford: Oxford University Press.
- Duvander, A.-Z., Haas, L., and Hwang, P. (2016). Sweden country note, in: Koslowski A., Blum S. and Moss P. (eds.) *International Review of Leave Policies and Research 2016*. Available at: http://www.leavenetwork.org/lp_and_r_reports/.
- England, P. (2010). The gender revolution uneven and stalled. *Gender & Society*, 24(2), 149-166.

- England, P., Gornick, J., & Shafer, E. F. (2012). Women's employment, education, and the gender gap in 17 countries. *Monthly Lab. Rev.*, 135, 3.
- Evertsson, M. & Grunow, D. (2012). Women's Work Interruptions and Career Prospects in Germany and Sweden. *International Journal of Sociology and Social Policy*, 32, 561-575.
- Fair Work Ombudsman (2016). Introduction to the National Employment Standards. Accessed on 10 October 2016, at: <https://www.fairwork.gov.au/how-we-will-help/templates-and-guides/fact-sheets/minimum-workplace-entitlements/introduction-to-the-national-employment-standards>.
- Gangl, M. & Ziefle, A. (2009). Motherhood, labor force behavior, and women's careers: an empirical assessment of the wage penalty for motherhood in Britain, Germany, and the United States. *Demography*, 46(2), 341-369.
- Goodman, S. H. (2007). Depression in mothers. *Annual Review of Clinical Psychology*, 3, 107-135.
- Gornick, J. & Myers, M. (2003) *Families that Work: Policies for Reconciling Parenthood and Employment*. New York: Russell Sage Foundation.
- Gregory, A., & Milner, S. (2009). Editorial: Work–life Balance: A Matter of Choice? *Gender, Work & Organization*, 16(1), 1-13.
- Hansen, K., Joshi, H., & Verropoulou, G. (2006). Child care and mothers' employment: Approaching the millennium. *National institute economic review*, 195(1), 84-102.
- Higgins, C., Duxbury, L., & Lee, C. (1994). Impact of life-cycle stage and gender on the ability to balance work and family responsibilities. *Family Relations*, 43(2), 144-150.
- Hosking, A., Whitehouse, G., & Baxter, J. (2010). Duration of Leave and Resident Fathers' Involvement in Infant Care in Australia. *Journal of Marriage and Family*, 72(5), 1301-1316.
- Joshi, H., Cooksey, E., & Verropoulou, G. (2009). Combining childrearing with work: do maternal employment experiences compromise child development? Centre for Longitudinal Studies (CLS) Working Paper 2009/1. London: CLS.
- Koslowski, A., Bloom, S., & Moss, P. (Eds., 2016). 12th international review of leave policies and related research 2016: International Network on Leave Policies and Research. Accessed on 10 October 2016 at: http://www.leavenetwork.org/fileadmin/Leavenetwork/Annual_reviews/2016_Full_draft_20_July.pdf.
- Lappegård, T. (2012). Couples' Parental Leave Practices: The Role of the Workplace Situation. *Journal of Family and Economic Issues*, 33(3), 298-305.
- Mandel, H. (2012). Winners and Losers: The Consequences of Welfare State Policies for Gender Inequality. *European Sociological Review*, 28(2), 241-262.
- Martin, B., Baird, M., Brady, M., Broadway, B., Hewitt, B., Kalb, G., Strazdins, L., Tomaszewski, W., Zadoroznyj, M., Baxter, J., Chen, R., Foley, M., McVicar, D., Whitehouse, G., & Xiang, N. (2014). PPL Evaluation: Final Report: Institute for Social

- Science Research. Accessed on 4 October 2016 at https://www.dss.gov.au/sites/default/files/documents/03_2015/finalphase4_report_6_march_2015_0.pdf.
- Martin, B., Hewitt, B., Baird, M., Baxter, J., Heron, A., Whitehouse, G., Zadoroznyj, M., Xiang, N., Broom, D., Connelly, L., Jones, A., Kalb, G., McVicar, D., Strazdins, L., Walter, M., Western, M., & Wooden, M. (2012). "Paid Parental Leave evaluation: Phase 1 Report". Occasional Paper No. 44, Australian Government, Department of Families, Housing, Community Services and Indigenous Affairs.
- Maume, D. J., & Sebastian, R. A. (2010). Gender, work-family responsibilities, and sleep. *Gender & Society*, 24(6), 746–768.
- McNamara, J., Cassells, R., & Lloyd, R. (2005). Persistence of problems with child care: evidence from the HILDA survey. Paper presented at the HILDA Survey Research Conference, Melbourne.
- Nepomnyaschy, L., & Waldfogel, J. (2007). Paternity leave and fathers' involvement with their young children. *Community, Work & Family*, 10(4), 427-453.
- Noonan, M. C., Estes, S. B., & Glass, J. L. (2007). Do Workplace Flexibility Policies Influence Time Spent in Domestic Labor? *Journal of Family Issues*, 28(2), 263-288.
- OECD (Organisation for Economic Cooperation and Development) (2013). Family Database, LMF1.2: Maternal Employment Rates (pdf). Accessed on 9 May 2016 at <http://www.oecd.org/els/family/database.htm>.
- OECD (Organisation for Economic Cooperation and Development) (2012), Closing the Gender Gap: Act Now, OECD Publishing. Accessed on 18 January 2016 at <http://dx.doi.org/10.1787/9789264179370-5-en>.
- OECD (2014). Gender, Institutions and Development Database 2014 (GID-DB). Retrieved from: <https://stats.oecd.org/Index.aspx?DataSetCode=GIDDB2014>.
- Pettit, B. & Hook, J. (2009) Gendered Tradeoffs: Family, Social Policy and Economic Inequality in Twenty-One Countries. New York: Russell Sage Foundation.
- Rehel, E. M. (2013). When Dad Stays Home Too: Paternity Leave, Gender, and Parenting. *Gender & Society*, published online 26 September 2013.
- Rose, J., Brady, M., Yerkes, M., & Coles, L. (2015). 'Sometimes they just want to cry for their mum': couples' negotiations and rationalisations of gendered divisions in infant care. *Journal of Family Studies*, 1-19.
- Ruppanner, L. (2008). Fairness and housework: A cross-national comparison. *Journal of Comparative Family Studies*, 509-526.
- Sayer, L. C. (2005). Gender, time and inequality: Trends in women's and men's paid work, unpaid work and free time. *Social Forces*, 84(1), 285-303.
- Scher, A. (2012). Continuity and change in infants' sleep from 8 to 14 months: A longitudinal actigraphy study. *Infant Behavior and Development*, 35, 870- 875.

- Sinai, D., & Tikotzky, L. (2012). Infant sleep, parental sleep and parenting stress in families of mothers on maternity leave and in families of working mothers. *Infant Behavior and Development*, 35(2), 179-186. doi:10.1016/j.infbeh.2012.01.006.
- Strazdins, L., O'Brien, L. V., Lucas, N., & Rodgers, B. (2013). Combining work and family: Rewards or risks for children's mental health? *Social Science & Medicine*, 87, 99-107.
- van Egmond, M., Baxter, J., Buchler, S., & Western, M. (2010). A stalled revolution? Gender role attitudes in Australia, 1986-2005. *Journal of Population Research*, 27(3), 147-168.
- Venn, S., Arber, S., Meadows, R., & Hislop, J. (2008). The Fourth Shift: Exploring the gendered nature of sleep disruption among couples with children. *British Journal of Sociology*, 59(1), 79-98.
- Waldfogel, J. (1997). The Effect of Children on Women's Wages. *American Sociological Review*, 62(2), 209-217.
- Ware, J. E., Snow, K. K., Kosinski, M., & Gandek, B. (2000). *SF-36 Health Survey: manual and interpretation guide*. Lincoln, RI: Quality Metric Incorporated.
- Whitehouse, G., Diamond, C., & Baird, M. (2007). Fathers' use of leave in Australia. *Community, Work & Family*, 10(4), 387-407.
- Williams, J., Blair-Loy, M. and Berdahl, J. (2013) Cultural Schemas, Social Class and the Flexibility Stigma. *Journal of Social Issues*, 69(2): 209-234.
- Williamson, S., Cooper, R. and Baird, M. (2015) 'Job-sharing among teachers: Positive, negative (and unintended) consequences', *Economic and Labour Relations Review*, vol.26:3, pp. 448-64.
- Windsor, T. D., Rodgers, B., Butterworth, P., Anstey, K. J., & Jorm, A. F. (2006). Measuring physical and mental health using the SF-12: implications for community surveys of mental health. *Australian and New Zealand Journal of Psychiatry*, 40(9), 797-80.
- Yamaguchi, K. (1991). *Event history analysis*. Newbury Park, CA: SAGE Publications.

APPENDIX I: TECHNICAL APPENDIX

PROJECT DESIGN

The overarching aims of the MM project were to:

- document mother's workforce participation before birth and until their child turns four;
- understand the factors that influence mothers' decisions about whether or not to work after birth and when they return to work before their child turns four;
- assess how different types of child care arrangements, and mothers' use of them, affects their workforce engagement during their child's preschool years;
- assess which current Australian workplace flexibility arrangements and employer-provided leave provisions enhance mothers' workforce engagement;
- assess how the quality of jobs, job characteristics and employment relationships (for jobs held before and after the birth) affect mothers' workforce engagement; and
- provide information to the government agencies responsible for the development and implementation of work and family policy.

To achieve this end, the project was designed to follow a cohort of women who were amongst the first in Australia with access to government-funded PPL scheme. The project built closely on work previously undertaken by the investigators for a government funded evaluation of the outcomes of the introduction of PPL in Australia in 2011 (Martin, et al., 2014). The earlier evaluation involved collection and analyses of two waves of longitudinal data from a cohort of mothers (n=4,201) who gave birth in October or November 2011 and were eligible for the PPL scheme. These mothers were first surveyed early in 2012 when their babies were about six months of age and then again later the same year when their babies were about 12 months of age. The current project extended these data collections with three additional collections of survey data from the same sample of mothers. These additional surveys were undertaken when the reference child was aged two years (2013), three years (2014) and four years of age (2015).

SAMPLE RECRUITMENT

The sampling frame included administrative records of all mothers who had babies in October and November 2011, received either PPL or the Baby Bonus (BB) and who had not opted out of being contacted for social research and evaluation purposes. Three data bases were provided the Department of Social Services (DSS): PPL 'Current' (mothers who had applied for and not completed their PPL entitlement), PPL 'Non-current' (mothers who had successfully applied for and finished using their PPL entitlement, or who had applied for but not yet received their PPL entitlement), and mothers who were eligible for PPL but chose to take BB.

A total of 5,000 BB, 5,605 PPL 'Current' and 1,681 PPL 'Non-current' records, representative of the proportion of sample available by state, were randomly selected from the administrative databases. Due to lower than expected response rates and eligibility rates for mothers who took the BB rather than PPL, an additional random sample of 1,567 BB records were randomly selected. The final completed sample for Wave 1 comprised a total of 4,201 mothers: 2,694 current PPL, 807 non-current PPL and 700 BB mothers. The interviews with

mothers across all waves were conducted by The Social Research Centre (SRC) as computer-assisted telephone interview (CATI) surveys.

RESPONSE RATES

All efforts have been made to maximise response rate and sample retention. Table 1 presents key statistics for the project across five waves. It provides the number of respondent interviews obtained from each of the sample databases (PPL 'Current', PPL 'Non-current' and BB), the response rates for Wave 1 and the retention rates for Waves 2-4.

Table 1: Key project statistics for all Waves

Component	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5
Completed PPL interviews	3501	2936	2392	1943	1589
Completed Baby Bonus interviews	700	551	423	346	267
Total Completed interviews	4201	3487	2815	2289	2008
Response rate (per cent)	55.5				
Retention rate (per cent)*		83	78.4	77.4	80.7
Retention - per cent of Wave 1 respondents interviewed		83	67	54.5	48
Start date	1-May-12	29-Oct-12	11-Nov-13	23-Sep-14	1-Sep-15
Finish date	13-Jul-12	19-Dec-12	28-Feb-14	1-Feb-15	7-Dec-15
Average interview length (minutes)	31.8	22	25.7	35.6	32.8

*These wave-on-wave retention rate calculations do not include additional respondents that were non-respondent in the previous wave, but had agreed to be re-contacted in an earlier wave. A small group of such participants responded in Waves 3-5. For Wave 3, the total of additional cases was 82, in Wave 4 it was 109 and in Wave 5 it was 161.

INTERVIEW SCHEDULES

While the questions included in each survey varied, a core set of questions were asked in each wave. However, some questions only needed to be asked once, or became irrelevant as children aged or mothers work participation changed, and as such were not asked in each wave. Table 2 provides questionnaire components across five waves.

Table 2: Topics covered across 5 waves

Topics Covered	Waves Collected
Household composition	1 – 5
Infants health and wellbeing	1 – 5
Mothers health and wellbeing	1 – 5
Gender equity and relationship quality	1 – 5
Child care	1 – 5, expanded 3 – 5
Receipt of PPL/BB	1, 2
Other forms of employer provided leave	1, 2
Mothers labour market status before birth	1
Return to work	1 – 5, expanded 3 – 5
Use of flexibility provision	3 – 5
Partner employment and leave taking	1 – 5, expanded 3 – 5
Demographics	1 – 5
Receipt of PPL/BB for new babies	3 – 5
Other forms of employer provided leave for ne babies	3 – 5

SAMPLE SIZE AND DEMOGRAPHICS

The final completed sample for Wave 1 comprised a total of 4,201 mothers: 3,501 PPL and 700 BB mothers. The participants aged about 32 years old on average, and more than half of them (54.4 per cent) were first-time mothers. Table 3 presents the demographic characteristics of the participants at Wave 1.

Table 3: sample demographics at Wave 1

Demographics of mothers	Wave 1
Age (mean)	31.6
Highest education obtained	
Not completed high school	6.5%
Completed high school	13.0%
TAFE or certificate	26.2%
University or above	54.3%
Relationship status at the birth	
Married	73.4%
Cohabiting	21.4%
Living apart together	1.3%
Not in a relationship	3.9%
Employment status before the birth	
Permanent or ongoing	76.0%
Fixed-term contract	6.3%
Casual basis	10.9%
Self-employed	6.8%
Maternal working hours before the birth (mean)	34.2 hours
First birth	54.4%
Total n	4201

ATTRITION BIAS

Attrition bias should be treated with caution when it is non-random, that is, when the characteristics of participants who left the survey are systematically different from those who remain in the panel. Table 4 shows attrition rates for Waves 2-5 of the MM survey across a number of Wave 1 sample characteristics. Attrition rates at each wave were not random for many characteristics. Across each wave, wave-on-wave attrition was highest amongst respondent mothers with the following characteristics:

- Recipient of the Baby Bonus
- Between 17-19 years of age, and to a lesser extent those between 20-25 years of age
- Single mothers
- Education level of year 11 or below
- Have only one child including the reference child
- Worked casually or self-employed prior to the birth of the reference child

Table 4: Attrition Bias by Waves 2-4

Characteristic	Non-respondent at Wave 2 (%)	Non-respondent at Wave 3 (%)	Non-respondent at Wave 4 (%)	Non-respondent at Wave 5 (%)
Sample type (Received Baby bonus or PPL)				
Baby bonus	21.3	39.6	50.6	59.1
PPL	16.1	31.7	44.5	50.8
Age				
17-19	32.3	67.8	80.7	87.1
20-25	29.1	50.4	63.1	69.8
26-30	18	35.4	48.3	55
31-35	14.4	27	41.3	47.3
36-40	13.8	28.6	38.7	47.1
41-47	12.4	30	41.9	46.5
Marital status				
Married	15	29.8	41.8	48.3
de facto	20.2	38.5	52.9	59.6
Living apart together	22.6	38.7	61.3	71
Single	31.6	56	66	76.1
Education				
Year 11 or below	29.7	51.6	68.9	70.6
Year 12	21.1	43.2	56.4	63.1
Certificate or diploma	18.6	37	49	57
Degree or higher	12.1	23.4	34.9	42.1
Number of children include reference child				

One	18.2	35.4	47.9	54.6
Two	15.4	28.7	41.9	47.6
Three and more	15.9	33.9	44.6	53.9
<u>Pre-birth job characteristics</u>				
Contract type				
Permanent/ongoing	16.6	32.4	45.2	51.6
Fixed term contract	15.9	30.7	39.8	45.5
Casual basis	19.4	36.7	51.8	59.8
Self-employed / Other	22.7	50	54.6	68.2
Work hours				
<=19 hours/week	15.2	28.1	41.4	47.3
20 – 34 hours/week	16.6	33.4	46.2	52.9
>=35 hours/week	17.5	33.8	46.1	52.9

WEIGHTING

In order for the MM sample to more accurately represent the population of Australian mothers who gave birth in October and November 2011 and were eligible for the PPL scheme, the collected sample can be weighted to account for differences from the original population distribution that may have arisen during the sampling process. More importantly, the weights also allow more robust inferences about the sample. In addition, balanced panel weights are also provided to address attrition bias as described above.

The weighting procedures applied to the MM data are as follows:

1. **Baseline weight (or sample weight):** reflects the original sample design, and ensures that the sample matches the population distribution from which the original sample was drawn. It enables the distribution across groups of various demographic, social economic, geographical, family and sample type characteristics to match those of the original population.
2. **Longitudinal weights (or attrition weights):** enable the distributions of sample at each following wave to match those of the first wave. They were calculated by running logistic regression models. The response variable of whether or not a respondent replied to the survey in a given wave was regressed against a series of factors that were expected to contribute to non-response, such as interview dates, interview duration, state/territory, participants' age, country of birth, ATIS status, education, relationship status, employment status before the birth, whether reference child is first born, whether in remote areas and participants' health condition. The inverse of the predicted probability of responding forms the attrition weights.
3. **Balanced panel weights:** is created by multiplying baseline weight by longitudinal weights to get the distributions in each wave match those obtained in the original population. Given that balanced panel weights have included longitudinal weights, only baseline weight and balanced panel weights are provided in the final panel data and have been used in this report.