# A Life Changing Event: First Births and Men's and Women's Attitudes to Gender Roles and Motherhood

Janeen Baxter School of Social Science and Institute for Social Science Research, The University of Queensland

> Sandra Buchler Chair of Sociology I, Otto-Friedrich-University of Bamberg

Mark Western
Institute for Social Science Research,
The University of Queensland

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#### Abstract

Previous research has shown that the transition to parenthood is a critical life course stage. Using three waves of data from the Households, Income and Labour Dynamics in Australia survey we investigate changes in men's and women's attitudes following the transition to parenthood. We focus our analyses on men and women aged 18-50 who experience a first birth and model change in their attitudes to gender roles and parenting. Results from fixed effect regression models show that both men and women prioritise motherhood as women's main role after the birth of their first child, but unlike men, women believe that motherhood can be prioritised while also pursuing paid employment outside the home. We conclude that parenthood leads both men and women to more strongly value mothering, a belief that for women is not incompatible with stronger beliefs about gender equality.

## Introduction

The transition to parenthood is a critical stage in the life course. Becoming a parent coincides with an increase in women's time on housework, a reduction in women's time in paid labor, a decline in women's earnings and an increase in men's paid work time and earnings (Budig and England, 2001; Baxter, Haynes and Hewitt 2008; Kaufman and Uhlenberg 2000; Singley and Hynes 2005). Parenthood also affects relationship quality and outcomes, including the likelihood of separation and divorce, and the subjective wellbeing and health of parents (Amato 2010). The effect of parenthood on some outcomes also varies with gender attitudes. For example, men with more egalitarian gender attitudes spend more time on parenting than men with more traditional attitudes, while women with egalitarian attitudes are less likely to withdraw from paid work and re-enter paid work sooner than women with more traditional attitudes (Kaufman and Uhlenberg 2000). However, as a significant life event that shapes personal identity (Weigert, Teitge and Teitge 1986: Phillips and Western 2006) and structural circumstances, parenthood also has the capacity to affect gender role attitudes and views about parenting practices. Our paper addresses this issue by using longitudinal data to assess the effect of parenthood of men's and women's attitudes to gender roles. In doing so, we add to growing knowledge of individual outcomes associated with the transition to parenthood, shed light on the causal processes underlying observed changes to the gender division of labor in paid and unpaid work in relation to parenthood, and provide insight into the ways in which attitudes are formed and changed over the life course.

## **Background**

Research on gender role attitudes consistently shows a number of key trends. First during the period from the 1960s to the 1990s increasing proportions of the population report egalitarian attitudes to work and family roles across the western world, after which there is evidence of a

slowdown (Brewster and Padavic 2000; Thornton and Young-DeMarco, 2001; Ingehart and Norris, 2003; Scott 2008; Braun and Scott 2009; Cotter, Hermsen and Vanneman 2011). Second, women hold more liberal gender attitudes than men (Davis and Robinson 1991; Kane and Sanchez 1994; Brewster and Padavic 2000; Ciabattari 2001; Scott 2008). Third certain key social characteristics relating to employment, family status and demographics are closely related to gender attitudes. For example, women tend to be more egalitarian in their views about gender roles than men, whilst employed women tend to hold more egalitarian views than women who are not in employment (Scott, Alwin and Braun, 1996). Younger, single, more highly educated people tend to hold more liberal attitudes than older, married and less educated people (Thornton, Alwin and Camburn 1983; David and Robinson 1991; Brewster and Padavic 2000).

Two main approaches have been proposed to explain changes in social attitudes. Cohort replacement theory argues that attitudes are formed during childhood in relation to the historical and cultural context at the time (Brewster and Padavic 2000; Brooks and Bolzendahl 2004). This approach suggests that attitudes tend to remain reasonably stable over the lifecourse and to shape subsequent beliefs, preferences and behaviour. Change in attitudes takes place when older generations are replaced by younger generations who differ in their beliefs and values because of their exposure to historically different contexts and periods during their childhood socialization (Brooks and Bolzendahl 2004).

On the other hand, theories of intracohort change suggest that individuals change their attitudes in response to changing locations or situations as a result of experiences at key life course stages. Under this approach social attitudes are expected to change as individuals experience different relationships, influences and events throughout their lifetime. For example, research has shown that individuals with higher levels of education hold more egalitarian gender attitudes than those with lower levels of education suggesting that the experience of participating in higher education may change individual attitudes (Kane 1995;

Cunningham, Beutel, Barber and Thornton 2005). Similarly, research shows that women's participation in the labour force is positively linked to women's gender egalitarianism (Cunningham 2008). This may be due to employed women's greater exposure to a wider range of social relationships and diverse views, or because employed women value their employment and develop views that support their situation (Bolzendahl and Myers 2004; Cunningham 2008). Finally, familial events such as the birth of a child, marriage or divorce may also change individuals' gender attitudes directly (Amato and Booth 1991; Morgan and Waite 1987; Kane and Sanchez 1994; Barber and Axinn 1998) and indirectly through effects on personal identity formation (Weigert, Teitge and Teitge 1986).

# Parenting and Gender Role Attitudes

There is considerable evidence that attitudes about appropriate parenting practices have changed over time (Coltrane 1996). There is increasing recognition that fathers play a vital role in children's wellbeing and outcomes (Lamb, 2004). No longer perceived solely in terms of the provision of economic support, fatherhood in western societies increasingly includes the social, emotional, and physical care of children (Yeung, Sandberg, Davis-Kean, & Hofferth, 2001). Views about appropriate mothering also involve women spending increasing amounts of time with children and at least, in middle class households, providing physical and emotional care, as well as overseeing appropriate scheduling and attendance at various extra- curriculum activities (Lareau 2003). In support of these trends, time use studies show that, on average, both men and women are spending increasing amounts of time on childcare (Bianchi, Robinson and Milkie 2006; Craig 2007). Thus in contrast to what we might have expected given falling fertility rates in many developed countries and the increasing labor force involvement of mothers, the amount of time women spend on childcare has increased in many countries (Gauthier, Smeeding and Furstenburg, 2004).

These trends suggest parenting is being prioritised over other roles, particularly by women, who spend roughly the same amount of time on childcare regardless of their involvement in paid work (Bianchi, Robinson and Milkie 2006; Craig 2007). In Australia, one of the main ways women have been able to prioritise both mothering and paid employment is through part time employment. Australia is, in fact, internationally distinctive amongst developed countries in the number of women who work part-time. In 2005, women held just over 70 per cent of all part-time jobs in Australia (ABS 2006, p. 115) and 52 per cent of women with a child aged 0–4 were employed, but most were in part-time jobs (ABS 2006, p. 114). Most men, on the other hand, work full-time for almost all of their working lives.

We also know that parenthood has important implications for gender equity within households and is often associated with the emergence of more traditional housework arrangements. First births, in particular, result in dramatic shifts in the gender division of labor (Baxter, Hewitt and Haynes 2008). Women's housework hours increase while men's remain quite stable. A common explanation for these shifts is that institutional and political contexts in many societies define children as a private good, the costs of which should be borne entirely by those individuals who choose to have them (Folbre 1994). Parents typically manage the extra workload of parenthood by having one parent, usually the mother, take on a greater share of unpaid work, while men concentrate on a breadwinner role. Thus the reality of combining parenting with other activities may lead to a re-prioritising of how best to divide parenting tasks, particularly in societies with little employer or institutional support for combining paid and unpaid work.

These changes may come about because the emotional ties and bonds between parents and children challenge previously held views about parenting. For example, the experience of becoming a parent may lead women, who might otherwise have eschewed a caregiver role, to prefer to spend time at home with children as a maternal identity becomes pre-eminent

(Weigert et al 1986). At the same time, becoming a parent may encourage men to more strongly support gender specialisation in response to their partners increased caregiving role. It is thus conceivable that parenthood leads to a reprioritising of roles and a related shift in women's and men's attitudes to parenting practices and gender roles.

Research on the effect of birth of a child on attitudes to gender roles and parenting is scarce, and what does exist is limited in various ways. Some is cross sectional and therefore unable to disentangle whether attitudes change as a result of parenthood, or whether observed differences across parents and non-parents are due to previously held beliefs or other unobserved characteristics (Warner, 1991; Warner and Steele, 1999). An early longitudinal study found that parents are more traditional in their attitudes to gender roles than non parents, but partly because they were more traditional prior to having children (Morgan and Waite 1987). But this research is based on only 2 waves of cohort data from a 1972 US survey of High School students with analyses that examine mean differences in gender role attitudes between those who became parents and those who did not by 1976.

More recent research using longer panel studies and more sophisticated statistical approaches report inconsistent results. Cunningham, Beutel, Barber and Thornton (2005) using data from the Intergenerational Panel Study of Parents and Children covering 1962 to 1993 find little evidence that parenthood influences attitudes about gender during early adulthood. On the other hand, Corrigall and Konrad (2007) using data from the Monitoring the Future study, a nationwide sample of approximately 18,000 US high school leavers followed over a 14 year period report a negative effect of children on men's and women's egalitarianism.

One possibility for these inconsistencies is variations across studies in the items used to measure gender role attitudes, as well as the use of indexes that conflate measures about different aspects of gender roles. Attitudes to gender equity and attitudes to parenting are not the same. It is conceivable, particularly given trends in parenting time and divisions of labor

noted above, to simultaneously hold egalitarian views about gender equity, as measured by women's equality of access to education and employment, and traditional views about parenting roles, as measured by who best to care for young children. There is some evidence of this, with research finding that men and women are more likely to support women's access to education and employment than changes to mothering responsibilities (Kane and Sanchez 1994; Van Egmond, Baxter, Buchler and Western 2010). Women's dominance of part time employment in Australia, combined with time use studies showing women in employment spend as much time with children as women who are not employed (Craig 2007), suggests that women do not see these roles as incompatible and in fact, have devised ways to juggle both responsibilities.

Another possibility for variations in previous results is sample characteristics, with some studies focusing on young adults in the early stages of the life course and others focusing only on women. Parenthood may affect men's and women's attitudes differently. The evidence is clear that parenthood has stronger effects on women's employment patterns and housework hours than for men (Baxter, Hewitt and Haynes 2008). Correspondingly, we might also expect parenthood to have larger effects on women's attitudes than men's, perhaps leading some women to rethink their views about how best to manage the care of young children and whether motherhood is compatible with employment responsibilities.

There are also gender differences in specific gender attitudes. For example, Warner and Steele (1999) report that men's attitudes vary more in relation to gender equity policies regarding women's access to education and employment than in relation to attitudes about policies aimed at the reorganisation of gender roles in the care of young children, such as policies relating to the provision of maternity leave or day care. In addition, men with daughters are more likely to adjust their attitudes to gender equality than men with sons (Warner and Steele, 1999). Warner and Steele (1999) argue that men with daughters may see

gender equity as a more personal and pertinent issue when it has the potential to affect outcomes for their daughters.

Our paper adds to current knowledge in the following ways. First we assess whether men and women change their attitudes to parenting and gender equity after the birth of their first child. Unlike previous research we focus on first birth as we are concerned with the experience of becoming a parent, rather than the experience of having a child. Further, first birth is when parents make most adjustments to the reality of parenthood and thus are likely to experience the most marked changes in attitudes. Second we investigate attitude shifts by gender arguing that the impact of a first birth is likely to affect men and women differently. Third we assess a range of attitude items designed to measure views about gender equity, gender roles and parenting, particularly mothering. Fourth, we use panel data from a nationally representative survey enabling estimation of fixed effects models that control for unobserved heterogeneity between individuals.

#### Data

The data used in this paper come from Waves 1, 5 and 8 of the Households, Income and Labour Dynamics in Australia (HILDA) survey. HILDA is an ongoing household panel survey with data collected annually on all members of the household aged 15 years and over. Households were selected using a multi-stage sampling approach and a 66 per cent response rate was achieved (Watson and Wooden 2002). The first wave was collected in 2001 from 7,682 households representing 13,969 individuals. Information was collected via face-to-face interviews and self-completed questionnaires, with a 92 per cent within household response rate (Watson and Wooden 2002). Wave 1 is largely representative of Australian households<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> Some characteristics of the HILDA sample are not exactly representative of the Australian population. Women and married people are over-represented, while people who live in Sydney and people from non-English-speaking backgrounds are under-represented. These discrepancies, however, not considered to be large enough to discredit the data {Watson, 2002 #224}.

(Goode & Watson, 2007). The attrition rates for Waves 2 - 8 range from 5.1 per cent to 13.2 per cent.

We restrict our analyses to respondents aged between 18 and 50 years inclusive.<sup>2</sup> Most first births will occur to men and women within this age range, while those occurring outside this range may be associated with unusual life course timing and events. Respondents who provided infeasible responses in regard to first births are excluded (0.21 per cent). This comprised 43 observations where a respondent reported 'having had a child' in one wave, and 'never having had a child' in a later wave<sup>3</sup>. Our final sample comprised 7,743 respondents in wave 1, 6,574 in wave 5 and 6,177 in wave 8.

#### **Variables**

HILDA includes a range of standard attitude questions designed to assess respondent views about gender roles. The items are included in a self complete instrument in waves 1, 5 and 8. We focus on items examining attitudes to gender roles and motherhood. We do not combine the items into a single index as we are interested in how attitudes vary in relation to specific issues relating to gender equity and parenting roles. These items may be viewed as examining two main issues - the importance of motherhood as women's main role (items 1, 3, 4 and 7), and the gender division of housework and care (items 2, 5 and 6). The items are measured on a 7 point likert scale ranging from strongly agree (1) to strongly disagree (7). All responses were coded so that a response of 1 represents an egalitarian view and a response of 7 represents a traditional view. See Table 1 for details.<sup>4</sup>

(TABLE 1 ABOUT HERE)

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<sup>&</sup>lt;sup>2</sup> Our analyses omit respondents who are under 18 or over 50 in any given wave. For example, if a respondent has reached age 50 by wave 2 they are dropped from the sample.

<sup>&</sup>lt;sup>3</sup> These cases comprised 16 in wave 1,13 in wave 5 and 14 in wave 8.

<sup>&</sup>lt;sup>4</sup> HILDA also contains a range of similar items measuring attitudes to fatherhood. We have conducted identical analyses on these items but do not report them here. The results show some significant effects but the meaning of some of the items is less clear than those presented here. For example, items measuring whether motherhood can be successfully combined with employment provide more meaningful insight into views on gender and parenting than similarly worded items for fatherhood.

Our primary independent variable measures whether the respondent has experienced a first birth between waves 1 and 8 of HILDA. This variable, referred to as parenthood, is derived from a question asking: "How many children in total have you ever had? That is, ever (fathered/given birth to) or adopted? This includes natural and adopted children, but not step or foster children." Responses are 0 = never had a child and 1 = had a child. Table 2 reports the number of men and women who transition from never having had a child to having had a child within the life of the panel survey, by number of years since the transition.

## (TABLE 2 ABOUT HERE)

For our multivariate analyses we also construct a variable measuring the number of years since the birth in order to control for variation in length of time since the birth. Since the gender attitude items are only asked in waves 1, 5 and 8, and a birth could potentially occur during any of the years between wave 1 and 8, this variable controls for differences in length of time since the transition to parenthood and the wave in which the change in gender attitude is modelled (either wave 5 or wave 8). The range is from a minimum of 0 years (a birth that occurred in wave 5 or wave 8), to a maximum of 4 years since the birth transition<sup>5</sup>. Note that this variable measures time between the birth of a child and the next survey wave in which the birth is recorded. It does not measure duration between first birth and each subsequent survey period. Our models thus assume that parenthood leads to a "step-function" change resulting in a new stable attitude that persists over the lifecourse.

As we expect that there may be differences by gender in the effect of parenthood on attitudes to gender roles and motherhood, we include a measure of respondent's gender coded female = 1 and male = 0. As discussed below, we estimate gender by parenthood interactions

<sup>&</sup>lt;sup>5</sup> As the gap between wave 1 and 5 is greater than the gap between wave 5 and 8, there are fewer controls for transitions that occurred 4 years ago (see Table 2)

in our models to test whether the influence of a birth on gender attitudes varies for men and women.

#### Control Variables

We include a number of independent variables in the regression models that previous research has found to be associated with gender attitudes, in addition to relevant sociodemographic controls.

Marital status is divided into four categories. Married is the reference category, and the remaining categories are cohabiting, separated, divorced/widowed, and single/never married.

Employment status is divided into four categories – employed full-time is the reference category and is compared to those employed part-time, defined as 34 hours of paid work or less per week, those who are unemployed and those who are not in the labour force.

Household income per week is logged to normalize the distribution and pull in large outliers, and because we do not expect constant shifts in attitudes for a given dollar of income across the income distribution.

Education is divided into four categories differentiating those with varying levels of educational qualifications: Respondents who have completed high school but have no further qualifications are the reference category and are compared to those with a tertiary degree, including postgraduate qualifications, those with a trade qualification or certificate, and those who did not complete high school. This classification captures the socially significant achievement levels in the Australian education system

Information on religiosity is collected in waves 1, 4 and 7 by a question that asks "How important is religion in your life." Responses are collected on an 11 point likert scale ranging from 0 "One of the least important things in my life" to 10 "The most important thing

in my life." The responses from each wave are carried over until religiosity is collected again. Religiosity is treated as a continuous variable in the models.

Age is also included in the models as a continuous variable.

Table 3 provides descriptive statistics for each of the independent variables.

(TABLE 3 ABOUT HERE)

# **Analytic Approach**

To estimate change in attitudes we estimate models in which each of the 7 attitude items is the dependent variable. Given that we have repeated observations on individuals over time, the structure of our data violates the assumption of independent observations and ordinary least squares regression would not be appropriate. Instead we estimate a linear fixed-effects model to account for clustering of observations by individual and to control for between individual variation (Singer and Willett 2003). This approach is also appropriate for unbalanced panels. The fixed-effects model controls for unobserved heterogeneity because it produces estimates that are net of all observed and unobserved differences between individuals that are time-invariant.

Each of the models includes our measure of whether the respondent has experienced a transition to parenthood, as well as all of the controls discussed above. Each model also includes gender as a control variable (female = 1) and a gender by parenthood interaction term. The main effect coefficient for parenthood is the within individual change in an attitude variable associated with parenthood for men. The within-effect for women is the sum of the parenthood main effect and the parenthood by gender interaction coefficient. We report the

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<sup>&</sup>lt;sup>6</sup> Religiosity is included in the Person Questionnaire (PQ) in wave 1, while in waves 4 and 7 it is included in the Self Complete Questionnaire (SCQ). As the response rate was lower for the SCQ than for the PQ, there is more missing data in waves 4 and 7 than in wave 1 (Wave 1 less than 0.1%, wave 5: 14.8%, wave 8: 14.5%). To counter this, we have coded the missing responses '0' and included a flag variable in the models.

significance of this sum of coefficients as well by testing the statistical significance of the linear combination of regression coefficients.

The statistical model underlying the fixed effects estimator is:

$$y_{it} = \beta_1 x_{it1} + \beta_2 x_{it2} + ... + \beta_k x_{itk} + a_i + u_{it}, \quad t = 1, 5, 8.,$$

where  $y_{it}$  is the gender attitude of individual i at time t,  $\beta_1$  to  $\beta_k$  are the regression coefficients for the main effects and the gender by parenthood interaction,  $x_{itk}$  are the individual and time-specific values on the covariates including the parenthood by gender interaction variable,  $a_i$  is an individual's time-invariant fixed effect, and  $u_{it}$  is an individual and time-varying residual, assumed to have a zero mean over time. Because this is an unbalanced panel drawn from three waves, t varies from 1 to 5 to 8, but takes specific values for individuals corresponding to waves observed in the data. Because we use fixed effects to estimate this model, the regression coefficients capture the within-person variation in gender attitudes associated with within-person changes in the values of the explanatory variables.

# **Results**

Our main results are presented in Table 4. In this discussion we focus on the key variables of interest concerning the effect of a transition to parenthood on men and women's attitudes.

The models show that experiencing a first birth changes men's and women's attitudes to a number of the issues examined here. Note that some items have been reverse coded so that a positive coefficient implies an attitude becoming more traditional, while a negative coefficient implies an attitude becoming less traditional.

For item 1 we see that a first birth has no effect on men's attitudes to whether working women care more about success at work than meeting the needs of their children. But women who have experienced a first birth show a significant change in their attitudes on this disagreeing more strongly with the statement after birth than before it. Thus having a first

child is associated with women more strongly opposing the view that working mothers tend to prioritise their employment over their children.

At the same time, having a first child is associated with both men and women more strongly prioritising motherhood over other roles. On items 3 and 4, measuring the importance of mothering for women over careers or paid employment, experiencing a first birth leads both men and women to more strongly agree that motherhood should take priority for women. The gender differences for these items are not statistically significant, but the point estimates for each dependent variable suggest that the size of the attitude shift is larger for women than men. Taken together results for items 1, 3 and 4 suggest that experiencing a birth leads to a prioritisation of motherhood for both men and women. But women's attitudes towards working mothers change after birth in a way that men's do not, with women becoming less likely than they did previously to believe that employed mothers prioritise work over their children's needs.

The results for item 7 also suggest that having a child is associated with men becoming less sympathetic to the idea that working women can be just as good at mothering as women not in employment. After a first birth, men disagree more strongly with the view that a working mother can establish just as good a relationship with their children as a mother who does not work for pay than they did before the birth The gender interaction term is significant indicating that the results for men and women are significantly different, and the coefficient for women shows that the change in women's attitudes is in the opposite direction, although it does not reach statistical significance.

The remaining items (2, 5 and 6) show changes in attitudes toward more general issues about the gender division of labor and placing young children in childcare. For item 2, men's and women's attitudes to equal sharing after experiencing a first birth change in different directions with women's attitudes becoming more favorable towards equal sharing. But although the interaction term is significant, the coefficients measuring the change in men

and women's attitudes after a first birth do not reach statistical significance. Item 5, which asks about women and men taking responsibilities for childcare and employment which contradict traditional gendered roles show no significant changes following a first birth. For item 6 women's attitudes change after a first birth to become more opposed to putting young children in childcare. There is no evidence that men who experience a birth change their views on this issue.

Note that we estimated all of these models with additional controls for time spent on various household activities (errands, indoor and outdoor work) as well as time spent on childcare. The results (not shown but available on request) are similar to those reported here.

#### **Discussion**

This paper examines changes in attitudes to gender roles and parenthood after experiencing a first birth using data from a large national household panel survey. Our analyses are based on fixed effect models that control for unobserved heterogeneity between individuals and enable an unbiased estimate of change in attitudes following a first birth. Our results are instructive for understanding how major life course events, in this case the transition to parenthood, change attitudes as well as providing insight into gender differences in the effects of first births on subjective outcomes. Overall our results, in combination with previous studies on the effects of parenthood transitions on gender divisions of labor, add considerable weight to the argument that the transition to parenthood is a major life event and an important life course marker.

In reflecting on the results it is important to remember that the findings here compare men's and women's attitudes before and after the birth of the first child. Thus the results highlight the impact of the transition to parenthood on men and women's attitudes. There are three key findings. First, becoming a parent leads both men and women to more strongly prioritise the motherhood role. This is not surprising. It is likely that the identity, emotional,

lifestyle and workload changes that follow the arrival of a first child will lead both men and women to prioritise the importance of motherhood as a key role for women. Second, a first birth leads women to more strongly support the view that motherhood can be successfully combined with paid work or a career. Not only does the transition to parenthood lead women to prioritise motherhood, it also leads to a view that motherhood is not incompatible with paid employment. This effect was not observed for men. Third, there is some evidence that a first birth leads women to more strongly support an equal gender division of labor in the home, but less likely to support placing young children in care.

Our results provide further understanding of the trends highlighted in time use studies showing increasing amounts of time spent by men and women on childcare. Moreover they also underscore previous findings that women in paid employment spend as much time on childcare as women who are not in employment (Bianchi, Robinson and Milkie 2006; Craig 2007). Our findings suggest that the priority placed on mothering after the transition to parenting is likely to lead to increased time investments on childcare by mothers. But not at the expense of a commitment to paid work. This has obvious work-life balance implications.

Further our research shows that attitudes change as a result of life course events and thus indicate that intracohort change may explain some of the observed trends in attitudes over time. Previous research has identified two main explanations for changes over time in social attitudes, cohort change and intracohort change. This research shows that life course events can lead to changes in attitudes.

Finally our research has implications for understanding attitudes to gender equity.

Some second wave feminist theorists tended to argue that motherhood was a major barrier to gender equity (Firestone 1970). While these arguments continue to be debated, there is no doubt that motherhood has important consequences for women's access to employment, their earnings, their time on domestic labor, their access to leisure and their work-life balance.

Institutional support for combining mothering with paid employment is also very variable

across countries. Nevertheless women continue to have children and clearly prioritise mothering as an important role. The challenge for further progress in gender equity may be to convince men that motherhood is not incompatible with other pursuits, and to develop programs and policies that support this view and make it a reality for all women in all contexts.

Table 1: Means and Standard Deviations for Attitude Items, HILDA, 2001, 2005 and 2008.

Item	Overtion	Mean (SD)			
	Question	Wave 1 2001	Wave 5 2005	Wave 8 2008	
1	Many working mothers seem to care more about being successful at work than meeting the needs of their children.	3.5 (1.8)	3.3 (1.6)	3.2 (1.5)	
2#	If both partners in a couple work, they should share equally in the housework and care of children.	1.9 (1.3)	2.0 (1.2)	2.1 (1.2)	
3	Whatever career a woman may have, her most important role in life is still that of being a mother.	5.5 (1.8)	5.2 (1.8)	5.1 (1.7)	
4	Mothers who don't really need the money shouldn't work	3.6 (2.0)	3.3 (1.8)	3.3 (1.8)	
5#	Children do just as well if the mother earns the money and the father cares for the home and the children.	2.7 (1.6)	2.6 (1.5)	2.6 (1.4)	
6#	As long as the care is good, it is fine for children under 3 years of age to be placed in child care all day for 5 days a week.	5.1 (1.8)	4.9 (1.7)	4.8 (1.7)	
7#	A working mother can establish just as good a relationship with her children as a mother who does not work for pay.	3.7 (1.9)	3.6 (1.8)	3.5 (1.7)	
	N	7,743	6,574	6,177	

Response categories: (1) Strongly disagree - (7) Strongly agree. 
# Reverse coded

Table 2: Respondents who have a First Birth by Gender, HILDA,  $2001,\,2005$  and 2008

Years Since Birth	Men N (%)	Women N (%)	Total N (%)
0	109 (53.2)	96 (46.8)	205 (100)
1	103 (45.8)	122 (54.2)	225 (100)
2	104 (45.6)	124 (54.4)	228 (100)
3	39 (42.9)	52 (57.1)	91 (100)
Total	355 (47.4)	394 (52.6)	749 (100)

Table 3 : Descriptive Statistics for Independent Variables for Men and Women, HILDA,  $2001,\,2005$  and 2008

	Percentage				
Variable	All	Men	Women		
Marital Status					
Married	49.4	48.3	50.4		
De Facto	16.4	16.4	16.4		
Separated, Divorced or Widowed	7.8	5.8	9.3		
Single	26.5	29.5	23.8		
Employment Status					
Full-time	57.2	78.4	39.1		
Part-time	23.4	10.2	34.9		
Unemployed	4.0	4.4	3.5		
Not in the Labour Force	15.4	7.0	22.4		
Education					
Degree or Postgraduate	24.9	22.7	27.2		
Trade or Certificate	31.4	38.1	25.5		
Secondary	19.6	18.3	20.9		
Incomplete Secondary	24.2	21.1	26.4		
Household Income [Logged household income]	1373 (1089) [6.3 (2.3)]	1408 (1087) [6.4 (2.2)]	1343 (1090) [6.2 (2.4)]		
Mean Religiosity (SD) (0-10 with 10 = religion important)	3.6 (3.5)	3.1 (3.3)	4.0 (3.5)		
Missing on Religiosity^	9.1	9.7	8.8		
Mean Age (SD)	34.7 (9.4)	34.7 (9.4)	34.7 (9.4)		
Total N	10,987	5203	5784		
Person Years	20,492	9501	10991		

<sup>^</sup> Wave 1 < 0.1%, wave 5 = 14.8%, wave 8 = 14.5%

Table 4: Fixed Effects Regression Models Predicting Gender Role Attitudes, HILDA, 2001, 2005 and 2008

Gender Attitude Item	(1)	(2#)	(3)	(4)	(5#)	(6 <sup>#</sup> )	(7*)
	Many working	If both	Whatever	Mothers who	Children do	As long as the	A working
	mothers seem	partners in a	career a	don't really	just as well if	care is good, it	mother can
Question	to care more	couple work,	woman may	need the	the mother	is fine for	establish just
	about being	they should	have, her most	money	earns the	children under	as good a
	successful	share	important	shouldn't	money and	3 years of	relationship
	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.	Coeff.
Parenthood	0.12	0.11	0.54***	0.28*	-0.07	0.06	0.24*
Parenthood*Female	-0.35**	-0.20*	0.13	0.06	0.09	0.19	-0.40**
De facto (ref: Married)	-0.11	-0.04	-0.07	-0.03	0.09	-0.01	0.07
Separated, Divorced, Widowed	-0.05	-0.08	-0.07	-0.08	0.17*	-0.21*	-0.15
Single	-0.04	0.02	-0.14	-0.03	0.14*	-0.07	-0.03
Part-time (ref: Full-time)	0.04	0.04	0.09	-0.02	-0.05	0.17***	0.01
Unemployed	0.05	-0.09	0.11	0.07	-0.09	0.02	0.15
Not in Labour Force	0.27***	-0.04	0.04	0.10	-0.03	0.12	0.25***
Household Income (logged)	0.001	0.01	-0.01	-0.01	0.01	-0.01	-0.01
Degree or Postgraduate (ref:	0.13	-0.22**	0.04	0.09	-0.11	-0.05	0.08
Completed secondary)							
Trade Certificate	0.07	-0.11	-0.16	0.05	0.002	0.04	0.12
Not Completed Secondary	-0.03	0.063	-0.17	0.01	-0.03	-0.06	-0.15
Religiosity	0.003	0.001	0.02*	0.02**	0.01	0.01	-0.001
Religiosity Missing Flag	-0.01	-0.03	0.05	0.02	0.07	-0.05	-0.01
Age	-0.02***	0.04***	-0.04***	-0.03***	0.01	-0.03***	-0.03***
Years Since Birth	-0.04	0.04	-0.02	-0.08*	0.01	-0.03	-0.02
Constant	4.02***	0.62***	6.47***	4.05***	2.35***	5.81***	4.69***
Person Years	20,492	20,492	20,492	20,492	20,492	20,492	20,492
R-squared- Within	0.007	0.020	0.018	0.007	0.002	0.009	0.010
R-squared- Between	0.001	0.000	0.012	0.000	0.003	0.001	0.001
R-squared- Overall	0.001	0.001	0.019	0.001	0.004	0.002	0.001
N	10,987	10,987	10,987	10,987	10,987	10,987	10,987
Significant difference (lincom)	-0.23*	-0.09	0.67***	0.33**	0.02	0.25*	-0.16

Parenthood +

Parenthood\*Female

<sup>#</sup> Reverse coded items

#### References

Australian Bureau of Statistics. (2006). *Australian Social Trends* 2006, cat. no. 4102.0, Canberra.

Amato, P. R., & Booth, A. (1991). Consequences of parental divorce and marital unhappiness for adult well-being. *Social Forces*, 69(3), 895–914.

Amato, P. R. (2010). Research on Divorce: Continuing Trends and New Developments. *Journal of Marriage and Family* 72: 650-666.

Barber, J. S., & Axinn, W. G. (1998). Gender Role Attitudes and Marriage among Young Women. *The Sociological Quarterly* 39: 11-31.

Baxter, J. Hewitt, B. and Haynes, M. (2008). Life Course Transitions and Housework: Marriage, Parenthood and Time on Housework. *Journal of Marriage and Family*, 70, 259-272.

Bianchi, S. M., Robinson, J. P., & Milkie, M. A. (2006). *Changing Rhythms of American Family Life*. United States: Russell Sage.

Bolzendahl, C. & Myers, D. J. (2004). Feminist attitudes and support for gender equality: Opinion change in women and men, 1974-1998. *Social Forces* 83: 759-790.

Brewster, K. L., & Padavic, I. (2000). Change in gender-ideology, 1977–1996: The contributions of intracohort change and population turnover. *Journal of Marriage and Family*, 62(2), 477–487.

Brooks, C., & Bolzendahl, C. (2004). The transformation of US gender role attitudes: Cohort replacement, social-structural change, and ideological learning. *Social Science Research*, 33(1), 106–133.

Budig, M. J., & England, P. (2001). The wage penalty for motherhood. *American Sociological Review*, 66, 204 – 225.

Ciabattari, T. (2001). Changes in men's conservative gender ideologies, cohort and period influences. *Gender and Society*, 15(4), 574–591.

Coltrane, S. (1996). Family man. Fatherhood, housework and gender equity. New York: Oxford University Press.

Corrigall, E. A. & Konrad, A. M. (2007). Gender role attitudes and careers: A longitudinal study. *Sex Roles* 56: 847-855.

Craig, L. (2007). How employed mothers in Australia find time for both market work and childcare. *Journal of Family and Economic Issues*, 28(1), 89–104.

Cunningham, M. (2008). Changing attitudes toward the male breadwinner, female homemaker family model: Influences of women's employment and education over the lifecourse. *Social Forces*, 87(1): 299-323.

Cunningham, M., Beutel, A. M. Barber, J. S. & Thornton, A. (2005). Reciprocal relationships between attitudes about gender and social contexts during young adulthood. *Social Science Research*, 34: 862-892.

Davis, N. J., & Robinson, R. V. (1991). Men's and women's consciousness of gender inequality, Austria, West Germany, Great Britain, and the United States. *American Sociological Review*, 56(1), 72–84.

Firestone S. (1970). *The Dialectic of Sex. The Case for Feminist Revolution*. New York: William Morrow.

Folbre, N. (1994). Roemer's Market Socialism: A Feminist Critique. *Politics and Society*, 22(4), 595-595-606

Galinsky, E. (1999). *Ask the children: What America's children really think about working parents*. New York: William Morrow.

Gauthier, A. H., Smeeding, T. M., & Furstenberg, F. F., Jr. (2004). Are parents investing less time in children? Trends in selected industrialized countries. *Population and Development Review*, *30*(4), 647–671.

Goode, A., & Watson, N. (Eds.). (2007). *HILDA User Manual - Release 5.0*: Melbourne Institute of Applied Economic and Social Research, University of Melbourne.

Ingehart, R., and Norris, P. (2003). *Rising Tide: Gender Equality and Cultural Change around the World*. Cambridge: Cambridge University Press.

Kane, E. W. (1995). Education and beliefs about gender inequality. *Social Problems*, 42(1), 74–90.

Kane, E. W., & Sanchez, L. (1994). Family status and criticism of gender inequality at home and at work. *Social Forces*, 72(4), 1079–1102.

Kaufman, G., & Uhlenberg, P. (2000). The influence of parenthood on the work effort of married men and women. *Social Forces*, 78(3), 931-931-947.

Lamb, M. E. (2004). The role of the father in child development. New York: Wiley.

Lareau, A. (2003). *Unequal Childhoods: Class, Race and Family Life*. Berkeley: University of California Press.

Morgan, S. P., & Waite, L. J. (1987). Parenthood and the Attitudes of Young Adults. *American Sociological Review*, 52(4), 541-547.

Phillips, T., and Western, M. (2006). "Social Change and Social Identities: Postmodernity, Reflexive Modernisation and the Transformation of Social Identities in Australia", In Devine, F., Savage, M., Scott, J. and Crompton, R. (eds). *Rethinking Class: Identities. Cultures and Lifestyles*. London: Palgrave, 2005. Pp 163-185.

Scott, J. (2008). Changing gender role attitudes. In J. Scott, S. Dex, & H. Joshi (Eds.), *Women and employment: Changing lives and new challenges* (pp. 156–178). Cheltenham: Edward Elgar.

Scott, J., Alwin, D. F., & Braun, M. (1996). Generational Changes in Gender-Role Attitudes: Britain in a Cross-National Perspective. *Sociology*, *30*(3), 471-492.

Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: modeling change and event occurrence*. Oxford: Oxford University Press.

Singley, S. G., & Hynes, K. (2005). Transitions to Parenthood: Work-Family Policies, Gender, and the Couple Context. *Gender & Society*, 19(3), 376-397.

Thornton, A., Alwin, D. F., & Camburn, D. (1983). Causes and consequences of sex-role attitudes and attitude change. *American Sociological Review*, 48(2), 211–227.

Thornton, A., & Young-DeMarco, L. (2001). Four decades of trends in attitudes toward Family issues in the United States: The 1960s through the 1990s. *Journal of Marriage and the Family*, 63(4), 1009–1037.

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.

Warner, R. L. (1991). Does the Sex of Your Children Matter? Support for Feminism among Women and Men in the United States and Canada. *Journal of Marriage and the Family*, 53(4), 1051-1056.

Warner, R. L., & Steel, B. S. (1999). Child Rearing as a Mechanism for Social Change: The Relationship of Child Gender to Parents' Commitment to Gender Equity. *Gender & Society*, 13(4), 503-517.

Watson, N. and M. Wooden (2002). *The Household, Income and Labour Dynamics in Australia (HILDA) Survey: Wave 1 Survey Methodology*. Melbourne, The University of Melbourne.

Watson, N., & Wooden, M. (2002). Assessing the Quality of the HILDA Survey Wave 1 Data. Melbourne: Department of Family and Community Services, and The University of Melbourne.

Weigert, A. J., Teitge, J.S. and Teitge, D. W. (1986). *Society and Identity*. Cambridge: Cambridge University Press.

Yeung, W. J., Sandberg, J. F., Davis-Kean, P. E., & Hofferth, S. L. (2001). Children's time with fathers in intact families. *Journal of Marriage and Family*, 63(1), 136–154.