Chapter 8
Australians' Desire for Children

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8.1 Introduction

Childbearing has been at the centre of demographic enquiry and policy debate for over a decade. This is not surprising since Australia, like other contemporary developed nations, has had below replacement level fertility[1] since the late 1970s, with its attendant demographic and economic consequences. The first decade of the twenty-first century was significant in Australia's demographic history because the long-term decline in the birth rate was reversed. Australian fertility reached its nadir in 2001 with a total fertility rate (TFR) of 1.73. The average number of children per woman then gradually increased to 2.02 in 2008 before dropping back to 1.92 in 2011 (ABS 2013).

The TFR is subject to distortions caused by changes in the timing of childbearing (Bongaarts and Feeney 1998) and may have exaggerated the recent fertility increase, just as it appears to have exaggerated late twentieth century fertility decline (Myrskylä et al. 2012). Australia's TFR increase was most pronounced for women in their twenties and thirties and to some extent reflected 'recuperation' (that is, women 'catching up' on births previously delayed) or 'anticipation' (women bringing forward births that they would otherwise have had later) (Lattimore and Pobke 2008). However, the pattern of increase and then decrease was observed across all

[1] A replacement-level fertility rate indicates the number of babies a woman would need to have over her reproductive lifespan in order to replace herself and her partner, allowing for current mortality levels. Because the level of fertility required to achieve replacement is dependent on the number of women who survive to reproductive ages, replacement fertility has declined as female life expectancy has increased. While 2.1 is often cited as replacement level, in fact (to two decimal places) it is somewhere between 2.05 and 2.10 (ABS 2011).

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ages of women. This suggests that changes in the macro socioeconomic and demographic environment in the 2000s affected all women, irrespective of their age and parity.

Research on childbearing behaviour, rather than intentions or preferences, indicates two broad explanations for this increase (Kippen 2006; Drago et al. 2009; McDonald and Moyle 2010; Parr and Guest 2011). First, Australia, like other western countries, experienced considerable growth in economic opportunities and average income, at least up to the global financial crisis of 2008. As McDonald and Moyle (2010:271) observe, the economic prosperity 'probably provided a confidence among young people to commence their families somewhat earlier than had been the case in the past'. The second explanation concerns the role of family policies designed to prevent further decline in the national fertility rate and, if possible, to reverse the trend. In 2004 the Australian Government introduced a modest Baby Bonus and changes to other family benefits in the following years, with a view to encouraging childbearing. However, studies have not found any noticeable effect of the introduction of the new bonus and increment in existing family benefits on childbearing (Drago et al. 2009; Parr and Guest 2011). Overall, 'the contribution to fertility change of the range of changes to family benefits which coincided with the Baby Bonus has most probably been minor' (Parr and Guest 2011:233).

Against this background of an overall increase in Australian fertility in the past decade, we examine one important aspect of fertility – the desire for children. Internationally, investigation into the dynamics of childbearing desires has assumed increased importance in recent years as below-replacement fertility has persisted and as researchers and policy makers look for solutions to reverse fertility trends across the developed world (Bongaarts 2001; Hagewen and Morgan 2005; Goldstein et al. 2009; Iacovou and Tavares 2011). It is argued that fertility levels below replacement do not necessarily imply a preference for fewer than two children in the lifetime of individuals. Indeed, if individuals were able to realise their stated desired number of children, which is over two children in most countries, then observed fertility would likely exceed replacement level. The search for answers for low fertility, then, moves to examining the individual and institutional factors that constrain individuals from achieving their desires.

In past research, fertility desire was considered a measure of demand for children that was not influenced by changing individual circumstances including changes in fecundity, relationship status and labour market participation (McClelland 1983; Miller and Pasta 1995; Thomson 1997, 2001). In other words, desire is equivalent to something like 'what one would like to do given no situational constraints' (Miller et al. 2004: 194). However, recent research has shown that desire for children is influenced by changes in employment, education, financial situation, partnering status, and attitudes towards gender equity and lifestyles (Heiland et al. 2008; Holton et al. 2011; Gray et al. 2013). This is reflected in recent efforts to understand low fertility which focus on desired fertility rather than directly on achieved fertility. Explanations for low fertility are built around understanding how desired fertility is constrained or enhanced, directly by proximate determinants and indirectly by the broader demographic, social-economic and cultural environment (Bongaarts 2001,

2002; Morgan 2003). In line with this approach, this chapter examines changes in childbearing desires at the individual level during the first decade of the twenty-first century, more specifically from 2001 to 2011.

8.2 What Influences Fertility Desires?

When the focus is on fertility decision-making at the individual level, the explanations for changing desires tend to focus on changing individual circumstances. In other words, changing preferences are understood in terms of changes in the life course, in economic and financial circumstances and in the values and orientations of individuals. This does not mean that structural socio-economic factors are unimportant or ignored. Rather, it is assumed that macro-level changes work through individual choices, values and orientations (de Vaus 2002; Mitchell and Gray 2007). A review of the relevant literature showed four important influences on changes in desires: age, partnering status, changing employment and economic circumstances, and individual values and orientations towards children.

The relationship between age and changing fertility desire is self-evident as fecundity (the biological capacity to have children) declines with age. Although the influence of changing physiological factors is clearer and more direct for women, it also applies to men – perhaps to a relatively lesser extent directly by their own ageing and to a greater extent indirectly through their ageing partners (Heckhausen 1999). Biological constraints aside, ageing comes into conflict with what is 'socially appropriate' at a given age. Thus, as individuals age they are likely to change their intentions as a result of constraints posed by biological and social ageing. This is evident in research from the US (Quesnel-Vallee and Morgan 2003), the UK (Iacovou and Tavares 2011), Germany (Heiland et al. 2008), The Netherlands (Liefbroer 2009), Austria (Sobotka 2009) and Australia (Gray et al. 2013).

Living in a partnership is essential for childbearing in most societies, including Australia. Childbearing intentions are likely to change as singles form new relationships or those in relationships separate, divorce or become widowed (Hayford 2009; Liefbroer 2009; Iacovov and Tavares 2011). At least three Australian longitudinal studies have shown that men and women revise their intentions consequent to changes in relationship status (Qu et al. 2000; Mitchell and Gray 2007; Gray et al. 2013). There is also some difference in desire between those in a married relationship and those cohabiting. Marriage is more strongly associated with increased desire for childbearing than cohabitation (Liefbroer 2009; Gray et al. 2013).

Individuals tend to revise their fertility preferences as their economic and employment situation changes. A spell of unemployment or any decrease in earning affects one's financial ability to have another child. In contrast, any improvement in employment and economic conditions is likely to intensify the desire for additional children. However, as research in the Netherlands and the UK has shown, individuals are less likely to desire additional children even when their employment and economic prospects improve if they consider that additional children are an

impediment to their careers and incomes (Liefbroer 2009; Iacovov and Tavares 2011). Not only is one's experience in the labour market important, even one's perceived employment opportunities and sense of financial security can affect one's desire for additional children (Holton et al. 2011; Gray et al. 2013).

A final explanation for the desire to have children centres on affective reasons: a child is to love and care for and to provide meaning and connectedness in an individualised world (Bulatao 1981; Mitchell and Gray 2007). Giddens (1991) and Beck (1992) argued that in post-materialist societies individuals are engaged in constructing their own coherent 'biography' with no particular 'standard' to compare their achievements against. In late modernity, characterised by a lack of structure and regularity in individual life, having children can bring certainty and predictability to life routines, which is considered important for building individual identity through a narrative of the self (Friedman et al. 1994; Morgan and King 2001; Morgan 2003). In other words, in low fertility societies, though there are no economic benefits to having children, 'parenthood may provide a powerful source of connectedness and meaning' in life (Morgan 2003: 593). In such a social environment an individual's desire for children may intensify if it is perceived that children are relevant and important to leading a meaningful life and to self-realisation.

8.3 Data and Method

The objective of this chapter is to explore how life course and attitudinal changes are associated with changing fertility desires over time. This is addressed by using data from the first 11 waves (2001–2011) of the Household, Income and Labour Dynamics in Australia (HILDA) survey. The methodological and sampling details of the survey are provided in the Technical Appendix. Here we outline the main variables used and the method of analysis employed.

In each wave of HILDA all respondents aged 18–49 were asked the question: 'Would you like to have a child of your own/more children in the future?'. The degree to which respondents desired additional children was indicated on an eleven-point 0–10 scale with the extreme values labelled 'Definitely do not want children' and 'Definitely want children'. We treat the fertility desire variable as a continuous variable as this makes the interpretation of results straightforward and allows us to capture even small changes in fertility desires for individuals over time. Treating it as a categorical variable would make the interpretation complex as there would be eleven categories to consider in descriptions and interpretations. Although this could be overcome by merging adjacent values into fewer categories (for instance, into three groups; 0–3, 4–6, 7–11), this classification would underestimate the overall change because change within each category would be ignored.

We use an unbalanced sample of men and women who were interviewed in at least two waves between 2001 and 2011. The analysis presented here is based on a final total sample of 14,121 respondents (7,251 women and 6,875 men) contributing 61,706 person years. Sample size by gender and parity is given in Table 8.2.

As the focus is on change in desire for additional children over time between 2001 and 2011, we include only time-varying independent variables. Variables that do not change during the period of observation (e.g. country of birth, year of birth, number of siblings) are not included in the analysis. The variables are grouped under three broad headings: life course variables, structural factors and values/orientation variables. The variables and their associated values are:

Age (18–24, 25–29, 30–34, 35–39, 40–44)
Relationship status (single, married, cohabiting)
Period (2001–4, 2005–8, 2009–11)
Highest education (University, Certificate/Diploma, Year 12 or less)
Employment status (working, unemployed, not in the labour force)
Self-rated health (excellent, very good, good, fair/poor); as this information was included in the self-completion questionnaire, a 'missing' category was used to include those who did not return the questionnaire.

Satisfaction with employment opportunity: this was treated as a continuous variable with values ranging from 0 to 10. More satisfaction is associated with higher values, less satisfaction with lower values. The questionnaire also included a statement on 'satisfaction with financial situation'. One-way analysis of variance for desire for additional children among those childless at the time of interview showed that satisfaction with one's 'employment opportunity' was more powerful in accounting for change in fertility desire than satisfaction with one's 'financial situation'. We therefore decided to include only the former in the analysis.

A special fertility module with a comprehensive list of attitudinal and behavioural questions on family formation was included in Waves 5, 8 and 11. Each of these three waves included a set of attitudinal statements assessing how individuals evaluated the importance of a number of factors in making their decision to have another child. The results of one-way analysis of variance indicated five variables that had the strongest association with the change in desire for additional children. These variables along with their response categories are listed below. All the attitudinal variables had a category for missing values to include a significant number of respondents who did not respond to these questions or did not return the self-completion questionnaire.

A women has to have children in order to be fulfilled (disagree, mixed feelings, agree)
Having time and energy for career (not important, limited importance, important, very important)
Having someone to love (not important, limited importance, important, very important)
Providing more purpose to life (not important, limited importance, important, very important)
Giving parents grandchildren (not important, limited importance, important, very important).

We analyse the revisions in desire for additional children, not the desire for additional children as such. Thus the dependent variable is change in desire from the mean self-rated desire (averaged over the number of waves for which the

individual was observed) for each individual. It is analytically powerful and meaningful to relate the changes in the dependent variable, fertility desire, to changes in the independent variables. As mentioned above, all our independent variables are time-varying, and by implication time-invariant variables are not included in the analysis. We therefore employ fixed effect regression models to estimate the influence of covariates that vary for individuals over time; this modelling approach does not use the information on variation between persons (Allison 2005; Gray et al. 2013; Rabe-Hesketh and Skrondal 2012). The within-person regression is run separately for men and women and by parity. The estimated coefficients are presented in Tables 8.2, 8.3, and 8.4.

8.4 Desired Family Size

We first examine the average desired family size in the 2000s in Australia, comparing different groups within the population, and then present the regression results on changes in individual desires in Sect. 8.5. The desired family size was obtained by adding the number of additional children desired to the number of children individuals already have. For those who already have one or more children, the desired family size may be an overestimate to the extent that any existing children were unplanned and 'unwanted' when they were conceived. Nevertheless, the measure gives some indication of desired family size at the population level.

The reported desired number of children by selected characteristics is presented in Table 8.1. As would be expected in low-fertility societies, the desired family size is above the achieved total fertility rate of recent years in Australia. More importantly, the overall desired family size is 2.06, which, if fully realised in individuals' lifetimes, would be just enough to replace the population in the long run. The total fertility rate in the early 2000s (2000–2004) was around 1.73 but increased to around 1.95 in the late 2000s (2008–2010). However, the cohort fertility rate (CFR) for women aged 40–44 in 2011, who were close to completing their childbearing, was 1.99 and the average completed family size of women aged 45–49 in 2011 was exactly 2.06 (see Chap. 9.1 for an explanation of these measures). This means that current fertility in Australia is very close to the desired level, assuming the estimated desired level reported by HILDA respondents is close to the 'true' figure.

Desired family size by period indicates that the prevailing social, economic and political environment may influence childbearing desires and actual fertility behaviour in the same direction and to a similar extent. The desired family size was lower in 2001–2004 than in the latter half of the decade. This is similar to the trend in the TFR over the decade. Gender differences in desired family size are also interesting. Women in general desire a larger family size, above two children, than men whose average desired size is slightly less than two.

Although desired family size increases with age, the increase is minimal up to age 35. The increase above age 35 may reflect post-facto rationalisation of children born more than any increase in desire for a larger family size. Interesting, however,

Table 8.1 Desired family size by selected characteristics in Australia, 2001–2011

Characteristics	Desired number of children
Overall	2.06
Year	**
2001–2004	2.00
2005–2008	2.13
2009–2011	2.06
Gender	**
Male	1.97
Female	2.15
Education	**
University	1.99
Certi/diploma	2.07
Year 12	2.04
Year 11 or less	2.15
Age	
18–24	2.00
25–29	2.05
30–34	2.05
35–39	2.09
40–44	2.13
Relationship status	*
Married	2.36
Cohabitation	2.04
Single	1.69

**$p<.05$; *$p<.10$, tested using one-way analysis of variance; Also assessed for violations of homogeneity of variance assumption using 'simanova' add-on in Stata 12.0

is the difference by relationship status. The reported desired family size among people who are single (1.69) is much lower than that reported by those living in a partnership, although close to the observed TFR between 2001 and 2004. It is likely that singles revise their preferences upward once they enter into a relationship (see Sect. 8.4). Being married is also associated with desiring more children, on average, than cohabiting. These differences indicate the importance and relevance of partnership formation to fertility desires and behaviours.

The last factor of importance in Table 8.1 is education. There is a clear education gradient to desired family size. The university-educated reported on average a smaller desired family size (1.99) than the rest. Those who had not completed Year 12 reported the largest desired family size (2.15).

It is clear from the data provided here that the average desired family size in Australia is still above two children, and that there was a slight increase in the desired size in the second half of the last decade. It is also evident that women, those without degrees, and partnered people desire on average a larger number of children. Conversely, men, singles and the university educated prefer fewer children – on average, less than two.

8.5 Changes in Fertility Desires and Their Correlates

The results of the fixed effects regression models by gender and parity are presented separately for each of the three sets of independent variables in Tables 8.2, 8.3 and 8.4. Although they are presented in three separate tables for ease of description and interpretation, the estimates come from a single regression model that included all the variables presented in Tables 8.2, 8.3 and 8.4. The regression coefficients indicate the direction (plus or minus) and magnitude of change in the dependent variable as the independent variable changes from the reference category or changes from one value to another (for the non-categorical variable 'satisfaction with employment opportunity').

All three variables shown in Table 8.2 have a strong relationship with change in desire for additional children. It is clear that as people age and when they experience any change in their relationship status they are likely to revise their desires for additional children. Although there is a gradual decline in the desired number of children as people age, age 30–34 appears to be a threshold. As people move into the late thirties and early forties, they revise their preferences downward substantially. This is the case at all parities. Gray et al. (2013) described a similar finding among those who had no children at the time of interview. The results presented here show that the negative relationship between age and desire for additional children extends to women and men at all parities.

The estimates for the 40–44 age group show that the magnitude of the relationship differs by parity. In particular, when individuals reach ages 40–44, they revise their desire for additional children downward to a greater extent if at parity zero or one than if they are at parity two or more. For instance, childless women aged 40–44 revise their desire for additional children downward by 1.74 points compared to when they were aged 30–34. This is three times the revision made by women with at least three children. Although the relationship between age and change in desire holds for both men and women, the relationship is more pronounced for women than for men.

Another result worth highlighting is the relationship between age and change in desire among women at parity two. Among those with two children, the desire for children was lower at both younger and older ages compared to when these women were aged 30–34. Most notably, women when aged 18–24 expressed a desire for additional children that was 1.16 points lower than the desire expressed when they were aged 30–34. Although the magnitude of changes in desire seems similar among both younger and older women, the underlying drivers of such change may be different.

Partnership status has a strong association with change in desire. Being in a relationship, whether married or cohabiting, increases the desire for additional children. Here the relationship is gender and parity dependent. While the relationship is observed across almost all women, irrespective of the number of children they have already had, it holds only for men without any children. Being in a married relationship increases the desire for additional children among women with no children or

Table 8.2 The effects of age and relationship status on desire for additional children, men and women, 2001–2011

	Women – desires for additional children				Men – desires for additional children			
	Parity 0	Parity 1	Parity 2	Parity 3+	Parity 0	Parity 1	Parity 2	Parity 3+
Age group								
18–24	0.09	0.58	−1.16***	−0.19	0.11	0.17	−0.33	−1.78***
25–29	0.14*	0.17	−0.06	0.40**	0.10	−0.05	0.42**	0.60**
30–34 (ref)	–	–	–	–	–	–	–	–
35–39	−0.50***	−0.36*	−0.47***	−0.41***	−0.44***	−0.43***	−0.05	−0.43***
40–44	−1.74***	−1.26***	−0.94***	−0.68***	−0.96***	−0.78***	−0.29	−0.57**
Relationship status								
Single (ref)	–	–	–	–	–	–	–	–
Married	0.66***	1.04***	0.20	−0.28	0.77***	0.47	−0.32	−0.85*
Cohabiting	0.43***	0.69***	0.44*	0.75***	0.41***	0.12	0.27	0.18
Period								
2001–2004 (ref)	–	–	–	–	–	–	–	–
2005–2008	−0.06	−0.58***	−0.12	−0.50***	0.01	−0.62***	−0.07	−0.39***
2009–2011	−0.07	−1.03***	−0.29**	−0.72***	0.06	−0.92***	−0.46***	−0.64***
No. of observations	14,332	4,495	7,433	5,422	16,398	4,157	5,803	3,666
No. of respondents	3,005	1,475	1,684	1,087	3,354	1,343	1,378	800
Fraction of variance due to person level	0.65	0.62	0.71	0.55	0.63	0.65	0.71	0.61

Note: The variables presented in Tables 8.3 and 8.4 are included as controls
*$p<.10$;**$p<.05$;***$p<.01$

Table 8.3 The effects of selected structural factors on desire for additional children, women and men, 2001–2011

	Women – desires for additional children				Men – desires for additional children			
	Parity 0	Parity 1	Parity 2	Parity 3+	Parity 0	Parity 1	Parity 2	Parity 3+
Education								
University	–0.09	0.98	0.71	–0.97	–0.13	0.91	–0.69	–0.95
Cert/diploma	0.13	0.25	0.08	–0.27	0	0.18	–0.06	–0.18
Year 12 or less (ref)	–	–	–	–	–	–	–	–
Labour force status								
Working (ref)	–	–	–	–	–	–	–	–
Unemployed	0.11	–0.13	0.36**	–0.15	0.02	0.30	–0.08	–0.34
Not in labour force	0.11	–0.00	0.16*	–0.09	–0.10	0.20	–0.18	–0.16
Self-rated health								
Excellent	0.06	–0.29	–0.03	–0.42***	0.20***	–0.21	–0.08	–0.15
Very good (ref)	–	–	–	–	–	–	–	–
Good	–0.05	0.16	0.04	–0.04	0.04	–0.07	–0.13	–0.22**
Fair/poor	–0.24***	–0.06	–0.23*	–0.11	–0.07	0.01	–0.16	0.23
Satisfaction with economic opportunity (score 0–10)	0.02	–0.02	0.00	0.05***	0.06***	–0.01	0.04*	0.06***

Note: The variables presented in Tables 8.2 and 8.4 are included as controls
*$p<.10$; **$p<.05$; ***$p<.01$

with one child only. It is interesting that living in a cohabiting relationship, not in a marital union, has a positive influence on the desire for additional children among women with two or more children. This may indicate that cohabiting women with two or more children are likely to live with a new partner, and may want to strengthen the relationship by having children with their new partner.

In terms of period, there is an apparent gradual downward revision in people's desire for additional children over the decade in question. The results of the population level analysis reported in Table 8.1 showed that the average desired family size increased in the latter half of the 2000s. In contrast, the within-person results provided in Table 8.2 point to both men and women experiencing declines in their desire for children by 2005–2011 compared to the 2001–2004 period. This apparent difference may be due to the fact that the results in Table 8.2 are from a robust multivariate analysis whereas Table 8.1 presents unrefined bivariate results.

There was one exception: for men and women without children, the desire for additional children remained stable throughout the entire decade. In other words, the effect of socio-economic and political changes over the decade was parity specific. While these changes negatively influenced the preferences of men and women

Table 8.4 The effects of selected individual values and orientations on desire for additional children, women and men, 2001–2011

	Women – desires for additional children				Men – desires for additional children			
	Parity 0	Parity 1	Parity 2	Parity 3+	Parity 0	Parity 1	Parity 2	Parity 3+
A woman has to have children								
Disagree	–	–	–	–	–	–	–	–
Mixed feelings	0.15*	0.09	0.10	0.03	0.23***	0.03	0.02	−0.07
Agree	0.24*	−0.12	0.11	0.03	0.25**	−0.27	0.29	−0.64**
Having time and energy for career								
Not important	–	–	–	–	–	–	–	–
Limited important	−0.47***	−0.44*	−0.09	−0.30	−0.20***	−0.42*	0.23	−0.17
Important	−0.59***	−0.55**	−0.23	−0.57*	−0.28***	−0.37	0.07	−0.57*
Very important	−0.85***	−1.26***	−0.38*	−0.74***	−0.42***	−0.03	0.56*	−1.23***
Having someone to love								
Not important	–	–	–	–	–	–	–	–
Limited important	0.32***	−0.36	0.13	0.40	0.42***	−0.19	0.29	0.15
Important	0.39***	−0.25	−0.20	0.58	0.49***	−0.10	0.30	0.41
Very important	0.56***	−0.30	−0.21	0.53**	0.65***	0.28	0.12	0.90**
Providing more purpose in life								
Not important	–	–	–	–	–	–	–	–
Limited important	0.11	0.60**	0.27	0.88***	0.15	−0.01	0.35	−0.21
Important	0.33***	0.70**	0.36**	0.23	0.36***	0.14	0.13	−0.27
Very important	0.39***	1.03***	0.51**	0.30	0.45***	0.12	0.19	0.14
Giving parents grandchildren								
Not important	–	–	–	–	–	–	–	–
Limited important	0.28***	0.24	−0.04	0.13	0.11	0.64***	0.06	−0.06
Important	0.40***	0.47*	0.23	0.19	0.22***	0.48*	0.37	−0.77**
Very important	0.54***	0.27	0.27	0.68*	0.15	0.44	0.11	0.37

Note: The variables presented in Tables 8.2 and 8.3 are included as controls
*$p<.10$; **$p<.05$; ***$p<.01$

with at least one child, childless people were immune to such socio-economic changes in developing their desires for children.

In Table 8.3 are the estimated associations between change in fertility desire over time for individuals and change in four factors, which we classify as structural. It is interesting that change in education was not related to change over time in individual childbearing desires. This was true across all parities. Although the magnitude of the association was substantial for both men and women with university level qualifications for parities one and above, it was not statistically significant. We believe this is because the change in educational attainment, particularly among those aged 25–44, was likely to apply to very few individuals, yielding high stand errors which render the estimated associations statistically insignificant. Nonetheless, the estimated coefficients indicate that women with a university education were likely to express an increased desire for additional children if they already had one or two children, but a decreased desire for additional children if they already had three or more children. Change in desire for children in either direction is equally likely among all childless women irrespective of their completed level of education. A similar pattern is observed among men without children.

Although Gray et al. (2013) found that childless men experienced a decrease in their desire for children as they became unemployed or moved out of the labour force, our analysis did not show any such relationship for any parity. This was also the case among women, with one exception. Women with two children expressed an increase in their desire for additional children as they became unemployed or left the labour force entirely for one reason or another.

We considered two economic variables: satisfaction with economic opportunities and satisfaction with one's financial situation. The analysis showed no consistent relationship between the change in one's self-assessment of one's financial situation and change in fertility desire. But any improvement in an individual's satisfaction with employment opportunities increased his or her desire for additional children. This was very much the case for almost all men, but true only for women who had at least three children. Taken together, these results indicate that desire for additional children is more sensitive to changes in perceived employment opportunities than to perceived financial security, and that this is more relevant for men than for women.

The associations between changes in desire for additional children and changes in selected attitudes and values relating to children are given in Table 8.4. While the effects of some variables are parity specific, others are gender specific. Those who believed that a woman has to have children in order to be fulfilled in life, those who considered it important to have someone to love and those who thought it important to give parents grandchildren were likely to report stronger desire for children. More importantly, this relationship holds only among those without any children at the time of interview. The absence of the relationship among men and women with at least one child may be expected as these three goals (fulfilment, someone to love and providing grandchildren) can be achieved with just one child (Bulatao 1981; McDonald 2000a, b).

Those with a view that children provide more purpose in life were more likely to experience an increase in their desire for additional children. While this relationship was found among women without children and with one or two children, it was evident only for men without any children. In other words, men seem to consider that more purpose in life is achieved by becoming a parent, rather than by having many children. By contrast, for women, more children seem to provide more purpose in life.

The last attitudinal variable was whether having time and energy for career was important to the desire for additional children. The results indicate that women in particular consider this a critical dimension in their desires for more children. Of all the 'values and attitudes' variables included in the analysis, this value dimension had the strongest relationship across all parities. The relationship was observed only among childless men, although it was not as strong as it was among women.

8.6 Discussion and Conclusion

This chapter has provided descriptive results on desired family size and has examined changes in desire for additional children as expressed by individual respondents over time. We used the relevant data from 11 waves of HILDA. Guided by the literature, we have analysed changes in individuals' desire over time by a number of explanatory factors, which we classified as life-course, structural and values and orientation variables. The results showed most variables included in the analysis had significant associations with changes in the desire for additional children. However, while some were equally important across all parities and for both men and women, others were parity and gender specific.

The results show that the average desired family size in Australia is over two children, which, if fully realised, would be just enough to replace the population over time through reproduction. This suggests that decline in desired fertility in the last decades of the twentieth century was less than the decline in observed fertility as measured by the TFR. According to a Survey of Birth Expectations carried out in 1979, the average expected number of children was around 2.5 (Ruzicka and Caldwell 1982: 228). Although the 'expected' number is different from the 'desired' number of children, it is reasonable to infer, in the absence of more comparable data, that the desired size has declined by around 0.44 children between 1979 and the 2000s. The average desired family size in Australia in the 2000s is, however, similar to what is found in comparable industrialised countries with the possible exception of the German-speaking areas of Europe (Kohler et al. 2002; Goldstein et al. 2003, 2009). There were some differences in average desired family size, particularly by gender, education and partnership status. In particular, men, the university educated and single people expressed preferences for less than two children. Conversely, women, those who did not complete year 12 and those in married or cohabiting relationships wanted more than two children.

The lowest preferred family size (1.69) was observed among those not in any partnership. Individuals are likely to revise their desired number of children upward as they enter into a relationship. This is evident from analysis of change in desire over time, presented in Table 8.2. A change in relationship status from single to married or cohabiting increases the desire for additional children particularly among women. Although growing numbers of Australian children in the last decade or two have been born to cohabiting couples, childbearing among those not in co-residential relationships is still a rare phenomenon. This finding corresponds to a core social norm among Australians, observed both in historical and in contemporary times: establishing a stable and secure relationship is a prerequisite for childbearing for most (Ruzicka and Caldwell 1982; Caldwell 1982; Qu et al. 2000; Baxter et al. 2008; Lattimore and Pobke 2008; Hewitt and Baxter 2012; Shanahan 2007; Heard 2007, 2011; Heard and Dharmalingam 2011; also see Sect. 9.6.1 in this volume). It is for this reason that a sound understanding of fertility behaviour requires a sound grasp of the formation and dissolution of partnerships in Australia. This finding also suggests that desires and expectations may be conflated to some extent: individuals allow themselves to express a greater desire for children when they are partnered and when childbearing desires are therefore more likely to be realised.

The longer it takes to form a stable and secure relationship, the harder it becomes to realise fertility desires, and this may lead to revising downward the desire for additional children. One factor over which individuals have no control is age. The results presented here clearly show that both men and women revise their desire for additional children downward as they age into their 30s and 40s. Independent of other changes in life, women experience a decrease in their biological capacity to bear children as they pass the critical age of 35 years (Menken 1983). Women revise their desire for additional children downward when they are in their 30s and 40s, probably because they become more aware of the biological constraints on reproduction. This is evident, as shown earlier, in the greatest fall in desire for children being among those in their 40s who are childless or who have only one child. Such revisions may be facilitated by stories of high-profile individuals, in particular professional women, who regret being childless as a result of delaying childbearing. For instance, McDonald and Moyle (2010) argue that the gradual increase in Australia's TFR from the mid-2000s was partly due to the cessation of continued delay in childbearing, and that this was probably due to the wide media coverage given in the first half of 2000s to many professional women who regretted delaying childbearing for too long, resulting in childlessness or being unable to have as many children as they wanted (Crittenden 2001; Hewlett 2002; Cannold 2005; Haussegger 2005; Macken 2005).

Previous research in Australia has also shown that individuals' sense of economic and financial security is critical in making decisions on childbearing (Qu et al. 2000; Weston and Parker 2002; Weston et al. 2004; Lattimore and Pobke 2008; Drago et al. 2009; Holton et al. 2011; Evans and Baxter 2013; Gray et al. 2013). Economic uncertainty characterised by a weak labour market and poor working conditions is shown to influence fertility behaviour and intentions in other devel-

oped countries (Sobotka et al. 2010; Morgan et al. 2011). Results presented here showed that men's confidence in economic opportunity has a strong positive association with the change in desire for additional children. In other words, men in particular delay or avoid childbearing and reduce their desired number of additional children if they perceive insecurity and uncertainty in employment (Coale 1973; Coleman 1998, 2000; McDonald 2000a, b).

A leading explanation for low fertility is the mismatch between work and family life for women (McDonald 2000a, b; Morgan 2003). As women spend more years in education and employment, the opportunity costs of becoming a parent or having many children can become prohibitive. In societies that lack public or market mechanisms to minimise this cost, fertility declines to low or very low levels. By contrast, fertility is relatively high (albeit below replacement level) if there are social arrangements that enable women and men to combine work and childbearing (Esping-Anderson 1990; McDonald 2000a, 2006; Gauthier 2006; Neyer and Andersson 2006; Letablier et al. 2009). Our analysis of change in desire from 2001 to 2011 confirms that women who attach importance to having enough time and energy to further their careers are likely to report a decline over time in their desire for additional children, presumably as they adjust to the reality of conflict between work and family goals. That this finding is evident for individuals over time, regardless of differences *between* women with varying levels of career ambition, is important because it suggests that policy settings to mitigate the conflict between work and family could influence the individual aspirations of career-oriented women – contrary to the suggestion that women's family size preferences are fixed to a large degree, and that only family-oriented women are likely to respond to pronatalist policies (Hakim 2003, 2004).

A final finding of this research concerns the importance of children to individual identity. Those who consider that children provide more purpose in life, particularly women, are likely to report an increase in desire for additional children over time. This accords with the life course experiences of individuals in late modern societies in which people are driven by individualism, liberalism, and self-realisation (Inglehart 1977; Lesthaeghe and Moors 1996; van de Kaa 1997; McDonald 2000a, b; Hakim 2003, 2004). In a post-modern world characterised by economic, social and personal uncertainty and insecurity, in which individuals are motivated by a need to develop their own unique 'biography', it is argued that children provide some degree of certainty and routineness to daily life and may provide an anchor for the 'narrative of the self' (Giddens 1991; Beck 1992; Morgan 2003).

In conclusion, individuals' change in desire for children is shaped by: (i) relationship status; (ii) the stability and security of economic circumstances; (iii) the degree of compatibility between childbearing and advancement of career; and (iv) the role of children in creating and reinforcing individual identity, social connectedness and meaning. While not all the findings reported here are new, few studies have examined the importance of children as enablers of social connectedness and identity in changing desires for children. This research explored the change in desire within individuals over time. Future research can complement this by focusing on the differences between individuals in desire for additional children.

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