

# **Family Background, Schooling and Childlessness in Australia: What HILDA Tells Us**

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## **Abstract**

This paper analyses the extent to which permanent childlessness among Australian women varies according to the size and type of family in which they were brought up, and the type of schooling they had. As in most other developed countries, the proportions of Australian women who have remained childless until their 40s and early 50s have increased considerably in recent years. Whilst the effects on fertility or family formation of some of the educational and family background variables considered by this study have been analysed in other developed countries, such studies appear absent for Australia.

The data used are from Wave 1 of the Household Income and Labour Dynamics in Australia (HILDA) survey, a large-scale, nationwide, longitudinal survey of the household population of Australia conducted in 2001 by the Australian Commonwealth Government's Department of Family and Community Services. A multi-stage, cluster sample design was used, and 13,969 men and women from 7682 households and 488 census collection districts, which were stratified by State or Territory, and metropolitan or non-metropolitan, were successfully interviewed. Data were collected on family formation and background, employment and unemployment history and status, and income.

The analysis is restricted to the 2051 female respondents who were aged between 40 and 54 years at the time of interview. Aspects of women's education considered include the sector in which she was educated, and the highest grade of schooling she completed. Aspects of family background considered include; the number of siblings she had, whether her parents died, divorced or separated when she was a child, the countries in which her parents were born, and the parents' occupations when she person was aged 14. In addition the effects of her age, country of birth, and Aboriginal or Torres Strait Islander origin are controlled for. The pathways through which these early lifecourse variables affect whether a person stays childless are also considered. Multilevel logistic models are used in the analysis.

The results show that women who were educated in non-government schools are significantly more likely than women who were educated in government schools to be childless. Women who remained in school to Year 12 are more likely than less educated women to remain childless. Having a smaller number of siblings is shown to be associated with a significantly increased risk of childlessness. Women who at age 14 had a father who was either dead or absent, and women who at age 14 had a father who was employed in a professional occupation are more likely to remain childless. The likelihood of a woman being childless has a significant inverse relationship with age between 40 and 54. There are also significant differences in rates of being childless by a woman's country of birth.

The paper concludes with discussion of the implications of the findings for fertility trends in Australia.

## **Introduction**

As in most other developed countries, the proportions of Australian women and men who have remained childless until their 40s and early 50s have increased considerably in recent years (Merlo and Rowland 2000, ABS 2002, Gray 2002). Gray (2002) estimated that in 1997 11% of women aged 45 to 54 and 14% of men were childless. Official estimates show the continuation of current first order rates would result in 24% of women will remaining childless.

With the gradual decline in total fertility which has been evident since 1993, fertility has gained prominence in Australia's public debate. The downwards leverage which a substantial childless component can exert on the overall fertility rate has also been recognised (McDonald 2000). The conflicting demands of work and care for young children, and the Howard government's introduction of a tax refund, the so-called "baby bonus", have received particular attention (Howard 2001). Universal, government-funded paid maternity leave has become a hot political issue, with Federal Sex Discrimination Commissioner Pru Goward to the fore of the campaign for its introduction (Goward 2002a, 2002b). Demographer Peter McDonald has become a prominent champion of the restructuring of family-related benefits to allow substantial, flat-rate lump sum payments to be paid to the parents of children aged under five (McDonald 2003).

Differential fertility has been studied extensively in the Australian literature (Hugo 1992, Jain. and McDonald 1997, Carmichael and McDonald 2003). However the main focus has been on ethnic differentials and differentials by socioeconomic status as measured later in the lifecourse. Studies which focus explicitly on childlessness in Australia appear to have focused mainly on measurement of its prevalence or on differentials by ethnicity and socioeconomic status measured later in the lifecourse (Merlo and Rowland 2000, ABS 2002, Gray 2002). Weston and Qu (2001) studied the reasons men and women give for not having children. However, the number of women surveyed who were towards the latter stages of the reproductive ages and who did not intend having children was small.

The effects of early lifecourse variables, such as the size and status of the family of origin and the type of schooling, on fertility and family formation have received considerable attention in the context of other mostly English-speaking developed countries (Axinn et al. 1994, Cherlin et al. 1995, Berrington and Diamond 1999, Kiernan and Cherlin 1999, Lillard and Waite. 1993). However, few studies appear to have analysed the effects of such variables on childlessness *per se*. Certainly, there appears to be a dearth of such studies in the Australian context appear to be absent. This paper aims to address this gap in the literature by analysing how the extent of childlessness among Australian women varies according to the size and type of family in which they were brought up, and the type of schooling they had; and the later lifecourse variables which mediate these effects.

## **Data and Methods**

The data are from Wave 1 of the Household Income and Labour Dynamics in Australia (HILDA) survey, a large-scale, nationwide, longitudinal survey of the household population of Australia conducted in 2001 by the Australian Commonwealth Government's Department of Family and Community Services. A multi-stage, cluster sample design was used, and 13,969 men and women from 7682 households and 488 census collection districts, which were stratified by State or

Territory, and metropolitan or non-metropolitan, were successfully interviewed. Data were collected on family formation and background, employment and unemployment history and status, and income. The household response rate was 66 per cent (Watson and Wooden 2002a, 2002b).

The analysis is restricted to the 2051 female and 1879 male respondents who were aged between 40 and 54 years at the time of interview. The overwhelming majority of this group, the post World War Two baby boom cohort, had completed their childbearing. When asked “how likely are you to have a child/more children in the future” only 1% of females and 4.7% of males rated the likelihood 6 or above on a scale from 0 (very unlikely) to 10 (very much like to). Women and men were asked how many children they had ever had (given birth to/fathered). From these data a binary response variable was created to indicate whether the respondent was childless.

Aspects of women’s education considered include the sector in which she was educated, and the grade at which she left school. Aspects of family background considered include; her number of siblings, whether her parents died, divorced or separated when she was a child, the countries in which her parents were born, and the parents’ occupations when she was aged 14. In addition the effects of a woman’s age, country of birth, and Aboriginal or Torres Strait Islander origin are controlled for. The pathways through which these early lifecourse variables affect whether a woman stays childless are also considered.

Multilevel logistic models are used in the analysis. Such models incorporate estimates of the between cluster variance of residuals offer improved estimation of the significance of coefficients and related goodness-of-fit statistics. The estimation of “cluster-level effects” may also assist model selection strategy (Goldstein 1995). The formulation of the model used is:

$$\ln \frac{P_{ij}}{1 - P_{ij}} = \beta_j X_{ij} + u_j$$

where

$P_{ij}$  is the probability that woman (or man)  $i$  in cluster  $j$  is childless

$X_{ij}$  is a vector of characteristics of woman (man)  $i$  in cluster  $j$

$\beta_j$  is a vector of parameters for cluster  $j$

$u_j$  is the value of the random effect for cluster  $j$

The statistical software package MLwiN was used for the analysis (Goldstein et al 1998).

## **Results**

### *Univariate Analysis of Women*

Roughly one in nine (11.8%) of the 40-54 years old women in the sample were childless. Table 1 shows the variation in the percentage of 40-54 year old women who are childless by schooling, family background and other early lifecourse variables.

The prevalence of childlessness rises with the highest level of schooling a woman had, with women who completed Year 12 being more than twice as likely to be childless as women who left at Year 10 or earlier. Women who attended

non-government schools are much more likely than women who attended government schools to be childless. Of the non-government schools, women who attended Catholic schools are less likely to be childless than women who attended other types of non-government schools (most of which would be private schools).

The relationship between the percentage who are childless and age shows an n-shape. Women with only one brother or sister are more likely to be childless than women with other numbers of siblings. The fairly small number of women in the sample who are only children have the second highest likelihood of being childless. Women with four or more siblings are the least likely to be childless. This pattern appears different from the pattern observed by Kiernan (1989), who found that among British women aged 36 years, those who were only children had the highest rate of childlessness with no significant differences between women with other numbers of siblings. Women who were the oldest sibling when they were growing up were more likely to be childless than those who had an older sibling.

The father's occupation when the women were aged 14 was coded into groupings based on the Australian Bureau of Statistics' (ABS) Australian Standard Classification of Occupations (ASCO) (ABS 1997). Of the various major occupational groups, women whose father had been in a professional occupation when the woman was aged 14 are the most likely to be childless, nearly twice as likely as on average. The percentage of women whose father was either deceased or absent when they were aged 14 is also notably considerably above the average. Women whose father was not employed are the least likely to be childless.

Just over half the women reported their mother was not employed when they were aged 14. Women whose mother was not employed when they were aged 14 are only slightly less likely than those whose mother was in employment to be childless. Variation in the percentage childless between categories for the mother's occupation when the woman was aged 14 is generally less marked than that by the father's occupation at this age. Women whose mother was deceased or absent are the least likely to be childless, followed by those whose mother was in a professional occupation. Women whose mother was an Associate Professional (by far the largest component of this group were "Managing Supervisors") are the least likely to be childless.

First generation migrants are only slightly less likely to be childless than the Australia-born. However the percentage who are childless varies considerably between the different regions of birth. Women who were born in East or South-East Asia (the largest subgroups are those born in the Philippines, Vietnam and China) are the most likely to be childless. Women who were born in Northern or Western Europe or in North America (nearly three-quarters of this group were born in the UK or Ireland) are also relatively likely to be childless. Women who were born in Southern or Eastern Europe (of which the former Yugoslavia, Italy and Poland are the largest subgroups) are the least likely to be childless. The Australia-born with an overseas-born father or mother are more slightly likely to be childless than those with Australia-born parents. The percentage of Aboriginal and Torres Strait Islander women who are childless is less than half that for non-Aboriginals. However the number of Aboriginal and Torres Strait Islanders in the sample is small.

### *Multivariate Analysis*

The multilevel logistic regression (Table 2) reveals substantial and significant effects of the type and level of schooling a woman had, the size and type of family in which she was brought up, and of her ethnic background on the probability of a woman aged 40-54 being childless.

Having been educated in non-government schools as opposed to in government schools significantly increases the likelihood of a woman being childless. However, after controlling for the highest level of schooling attained, age, family background and ethnicity, the difference between the women from the two types of non-government schools, Catholic schools and other non-government schools (private schools) in the percentage who were childless is not significant. Women who were educated to Year 12 or above are significantly more likely than less educated women to be childless. However the difference between women who were educated to Year 11 and women who were educated to Year 10 or below is not statistically significant.

The number of siblings in a woman's family of origin has a significant negative effect on her probability of being childless. Initially a quadratic term for number of siblings was included in the model to allow for a possible non-linearity in this effect, however this term was removed after it was found to be not significant. The effect of being the eldest sibling was not significant when number of siblings and other variables was controlled for.

The effects of the occupation a woman's father had when she was aged 14 remain significant after controlling for other variables. Women who when aged 14 had a father in a professional occupation are significantly more likely to be childless than women whose father had another occupation or was not employed. Women whose father was either dead or absent when they were aged 14 also are significantly more likely to be childless. However, after controlling for other variables, differences in a woman's probability of being childless by her mother's occupation at age 14 are not statistically significant.

The effects of region of birth are significant, with women born in East or South-East Asia having the highest likelihood of being childless, followed by women who were born in North or Western Europe or North America. Women born in other overseas countries were less likely to be childless than the Australia-born. The effect of being Aboriginal and Torres Strait Islander was not significant, probably due to the small number of such women in the sample. The probability of a woman being childless reduces significantly as age increases over the 40-54 age range. Non-linearities in the age effect were tested for by including quadratic and cubic terms in the model. However, the higher-order terms proved to be not significant. The cluster-level variance term is small and not statistically significant.

### *Mediating Factors*

#### *Marital Status*

For obvious reasons, being childless has a strong correlation with marital status. The majority of never married women are childless (71%), compared to less than six percent of married women are and less than a fifth of women in de facto relationships (Table 3). Of those who had never married and were not currently in a de facto relationship just under half (43%) reported that in the past they had been in a de facto relationship in the past. The percentage of these women who were childless

(53%) was lower than for women who had never been in a de facto relationship (85%). Among the legally married women, those who had been married more than once are slightly more likely to be childless. The percentage who are childless generally increases with the age at first marriage (Pearson correlation = 0.24). Legally married women who lived with their partner in a de facto relationship before marrying are more likely to be childless (9.1% were childless) than those who did not do so. Thus some of the differences in childlessness by schooling and family background variables may be linked to differing propensities to marry or enter de facto relationships.

Table 4 shows the variation in the marital status distributions between schooling and family background variables. The higher percentage who were childless among women who were educated to Year 12 or above would partly be due to their being less likely than less educated women to have married or entered a de facto relationship. Similarly the higher percentage who are childless among women who attended non-government schools reflects their being nearly twice as likely as women who attended government schools to never marry or enter in a de facto relationship. Differences in marital status by the number of siblings a woman has are generally slight. The higher percentage of women with relatively small numbers of siblings who are childless is despite their being slightly less likely to be married.

The higher percentage of women whose father was in a professional occupation when she was aged 14 reflects their being more likely never have married or entered in a de facto relationship. Such a pattern also helps to explain the higher percentage childless among women whose father was either deceased or absent. However the striking feature of the marital status distribution of this group is the high proportion who are either divorced, separated or widowed. The apparent tendency for marital disruption to run in families has also been observed in the British context (Kiernan and Cherlin 1999).

The relatively high percentage of women who were born in East or South-East Asia who are childless is despite their high propensity to be currently married. For those born in Northern or Western Europe or North America a relatively high percentage who are in de facto unions appears to be a contributory factor to their relatively high propensity to be childless.

### *Socioeconomic Status*

There are marked differentials in the rate of childlessness by variables measuring a woman's current socioeconomic status. The proportion of women with a Bachelor's degree (23%) is nearly double the average. One fifth of women in a professional occupation are childless. Childlessness is markedly higher among higher-earning women, with one third of those with an income above A\$50,000 being childless. Thus some of the effects of early lifecourse variables, such as family background and schooling may be mediated by their effects on these socioeconomic status variables as measured later in the lifecourse. However, it should be noted that the relationship between childlessness and these variables may also be affected by the effects of the arrival of children on a woman's educational and labour force participation and on her career progression.

Table 5 shows the differences in the proportions of women with a Bachelor's degree, in a professional occupation, and the differences in mean gross annual income by the family background, schooling and region of birth variables which have statistically significant effects on childlessness. Women who were educated to Year

12 and women who were educated at non-government schools are more likely to attain a Bachelor's degree, to be in a professional occupation, and tend to earn higher incomes later in life than less educated women and women who attended government schools. Thus a greater opportunity cost of childbearing may explain their higher propensities to be childless.

The number of siblings a woman has an inverse relationship with the likelihood she attains a Bachelor's degree and also with her income. Women with four or more siblings are considerably less likely than women with three or fewer siblings to be in a professional occupation. Women whose father had a professional occupation when she were aged 14 are more likely to attain Bachelor's degrees, to themselves be in professional occupations, and to have higher incomes than women whose father had a different occupation. Women whose father was either deceased or absent when they were aged 14 also tend to have above average incomes, but are not more likely to attain a Bachelor's degree, and are less likely to be in a professional occupation.

The higher percentage childless of women who were born in Northern or Western Europe or in North America may stem partially from their relatively high socioeconomic status. However, whilst the women who were born in East or South-East Asia are more likely to have a Bachelor's degree than the Australia-born are, they are less likely to be in professional occupations, and their average income is considerably lower.

#### *Inclusion of Marital Status and Socioeconomic Status Variables in the Multivariate Analysis*

The higher rates of childlessness of women who have never married, and of women who are in a de facto relationship compared to those for legally married women remain large and statistically significant after controlling for the early lifecourse variables and later life socioeconomic status. However the difference between women who are divorced, separated or widowed and currently married women is not significant. The most notable effects of the addition of marital status to the model are the reduction of the effect of age to insignificance (Table 6). The contrast between women who at age 14 had a father in a professional occupation and women whose father had a different occupation or was not employed is reduced somewhat and the estimated significance is raised to just above the conventional 5% cut off.

Of the three correlated indicators of socioeconomic status, whether a woman has a Bachelor's degree, whether she is in a professional occupation and gross annual income, only income shows a significant relationship with whether a woman is childless, after schooling, family background, country of birth, and marital status variables are controlled for (Table 6). The addition of a woman's gross income to the model reduces the effect of being educated to Tear 12 or above and those who were less educated to insignificance. This suggests the level of schooling effect is largely mediated by its effect on a woman's subsequent level of income.

#### **Recent Trends**

For most of the educational and family background explanatory variables the recent trend in Australia has been one of increases in the percentages of children in the groups which are more likely to remain childless. The proportion of full-time

school students attending non-government schools rose from 28% in 1992 to 32% in 2002 (ABS 2003a). Although rates of retention from Year 7/8 to Year 12 both for males and for females are slightly lower now than they were during the recession of the early 1990s, the rates for 2002 were more than double those for 1982 (ABS 2003a). Between 1991 and 2001 the percentage of children under the age of 15 who are in lone parent families increased from 14% to 20% (ABS 2002b). The proportion of employed males who are in professional occupations rose from just under 13% in 1991 to 16% in 2001. Moreover, trends in numbers of children ever born for women aged 40-44 suggest between 1981 and 1996 the average number of siblings their children had fallen substantially (ABS 2002a).

## **Summary and Discussion**

This study finds substantial differences in the propensity of a woman to be childless by characteristics measured early in the lifecourse. These include the level and type of education, the size, socioeconomic status, and disruption of the family of origin, and the country of birth.

To what extent is women's lifetime childlessness a voluntary decision? When asked how much (on a scale of 0 to 10) they would like to have a child in the future three-quarters (75%) of childless women in the 40 to 54 age range gave a value of 0, indicating that they definitely would not like a child in the future and 79 percent gave a value of 4 or less, indicating they would prefer not to have a child. This would appear to suggest that in most cases childlessness is in accordance with the woman's wishes. However it may be that for some childless women the expressed preference to have no children in the future stems from a resignation to the practicalities of their age or (lack of) partnership, as opposed to being a positive lifestyle choice for a life without children or longer standing disinterest in or active dislike of children (Weston and Qu 2001). As future waves of data from the survey are released further research which would identify changes over time in women's attitudes towards their remaining childless, particularly changes in circumstances associated with a change from a preference not to be childless for life to a preference to be childless for life.

The explanation of the link between education and higher levels of childlessness shown by this study, at least to the extent that it is determined by voluntary factors, may lie in the greater life chances, particularly the higher incomes, enjoyed in later life by the "better" educated. The data did not allow parental income or wealth to be controlled for. It may be that some of the apparent effect of being privately educated is the result of the effects of these unmeasured factors on women's attainment of socioeconomic status.

The link between having a father in a professional occupation and childlessness may also reflect the opportunities that may stem from the greater resources of those with professional fathers. It may also be that families in which the fathers had a professional occupation are more supportive of female children pursuing education and a career. It is to be expected that a higher proportion of the female friends, work colleagues, and associates of families in which the father had a professional occupation would themselves be childless. This may influence the attitudes of the families and their female towards childlessness.

The link between a woman's number of brothers and sisters when growing up and her propensity to be childless is particularly interesting. It may be that parents with fewer children are able to invest more in the wellbeing of each of their children, especially their female children. Thus being from a small family may enhance the

chances of becoming an educated, high-earning career woman. This finding may also be that those who grew up surrounded by fewer siblings feel less of a need to be surrounded by family in later life. Kiernan (1989) suggests that a younger age of menarche among women who were only children as an explanatory factor for their higher rate of childlessness in the United Kingdom. However, the HILDA data do not allow this hypothesis to be tested for Australian women.

One of the concerns in relation to childlessness is that they will lack the support provided by children, and often also of a partner, later in life. Childless women have been observed to have higher rates of institutionalisation later in life, than women with children (Rowland 1998). The lack of support in later life for childless women may be compounded their tending also to have fewer siblings to offer support and assistance to them, which has been demonstrated by this study. However, with their tending to have come from higher socioeconomic status backgrounds and tending to have fewer siblings the proceeds of inheritances to the childless may also be greater. Moreover, their higher individual incomes would also enhance the affordability of suitable residential facilities and of care later in life.

Clearly the socio-demographic characteristics of the childless have implications for who would gain and who would lose financially from recent and proposed changes to family-related benefits and to changes to maternity-related leave, now so prominent in Australia's public debate (McDonald 2003). From the results of this study, it is clear that, whilst those who would receive no direct benefit from such policies by virtue of their remaining childless are a minority, they are nonetheless a relatively high income, well-educated, and middle-class-background minority who may be able to exert influence disproportionate to their number. That for most of the educational and family background explanatory variables with a significant relationship to childlessness later in life the recent trend in Australia has been one of increases in the percentages of children in the groups which are more likely to remain childless may provide some reason to expect further increases in childlessness in the future.

**Table 1: Percentage of Women Aged 40-54 who are Childless by Family Background and Schooling: Living in Australia (HILDA) Survey Wave 1**

	Percentage Childless (%)	N
<i>Highest Level of Education</i>		
Year 12 or more	17.2	775
Year 11	11.1	271
Year 10 or less	7.9	1003
<i>Type of School Attended</i>		
Government	9.6	1543
Catholic Non-government	16.9	332
Other Non-Government and Other	22.0	173
<i>Number of Siblings</i>		
0	12.7	79
1	15.0	360
2	12.0	475
3	12.1	421
4+	9.3	709
<i>Was Oldest Sibling When Growing Up</i>		
Yes	13.5	592
No, Had Older Sibling	10.8	1373
<i>Father's Occupation at Age 14</i>		
Managerial or Administrative	11.8	338
Professional	20.0	225
Associate Professionals	10.9	211
Tradespersons and Related	10.3	435
Advanced and Intermediate Clerical, Sales and Service	8.3	157
Intermediate Transport and Production	8.0	262
Elementary Clerical, Sales and Service	12.3	65
Labourers and Related	11.1	161
Father Deceased or Absent	19.1	110
Not Employed	3.6	56
<i>Mother's Occupation at Age 14</i>		
Managerial or Administrative	9.1	55
Professional	17.1	123
Associate Professionals	4.9	81
Tradespersons and Related	11.4	70
Advanced and Intermediate Clerical, Sales and Service	14.0	193
Intermediate Transport and Production	14.3	49
Elementary Clerical, Sales and Service	7.0	142
Labourers and Related	11.9	193
Mother Deceased or Absent	18.9	37
Not Employed	11.5	1085
<i>Country of Birth</i>		
New Zealand	6.5	46
NW Europe or North America	14.7	232
S or E Europe	5.1	99

E or SE Asia	17.6	108
Other Overseas	5.7	106
Australia	12.0	1469
<i>Father's Country of Birth</i>		
New Zealand	10.5	38
NW Europe or North America	11.6	344
S or E Europe	10.8	214
E or SE Asia	17.2	105
Other Overseas	5.9	101
Australia	11.8	1238
<i>Mother's Country of Birth</i>		
New Zealand	6.5	46
NW Europe or North America	13.7	313
S or E Europe	8.8	181
E or SE Asia	17.0	106
Other Overseas	5.0	100
Australia	11.8	1298
<i>Aboriginal or Torres Strait Islander</i>		
Yes	5.3	38
No	11.9	2013
<i>Total</i>	11.8	2051

**Table 2: Multilevel Logistic Regression Model of Whether a Woman Aged 40-54 is Childless: Living in Australia (HILDA) Survey Wave 1**

	Coefficient( $\beta$ )	Std Error( $\beta$ )	Exp( $\beta$ )
<i>Highest Level of Education</i>			
Year 12 or more	0.61**	0.16	1.84**
Year 11 or less	0.00		1.00
<i>Type of School Attended</i>			
Government	-0.64**	0.15	0.53**
Non-Government	0.00		1.00
<i>Number of Siblings</i>			
	-0.10*	0.04	0.91*
<i>Father's Occupation at Age 14</i>			
Professional	0.50*	0.20	1.65*
Father Deceased or Absent	0.81**	0.27	2.25**
Other Occupation or Not Employed	0.00		1.00
<i>Region of Birth</i>			
Australia	0.87**	0.30	2.39**
NW Europe or North America	1.16	0.34	3.20**
E or SE Asia	1.36**	0.39	3.89**
Other Overseas	0.00		1.00
<i>Age</i>	-0.04*	0.02	0.96*
<i>Constant</i>	-0.56	0.90	0.57
<i>Cluster-level variance</i>	0.20	0.29	

\*\*  $p < 0.01$ , \*  $0.01 \leq p < 0.05$

**Table 3: Percentage of Women Aged 40-54 who are Childless by Current Marital Status: Living in Australia (HILDA) Survey Wave 1**

<i>Marital Status</i>	Percentage Childless	N
Married	5.7	1379
De Facto	19.9	166
Divorced, Separated or Widowed	8.0	361
Never Married and Not De Facto	71.1	142

**Table 4: Marital Status of Women Aged 40-54 By Schooling and Family Background Variables: Living in Australia (HILDA) Survey Wave 1**

	Percentage With Marital Status			
	Married	De Facto	Divorced, Separated or Widowed	Never Married and Not in De Facto
<i>Highest Level of Education</i>				
Year 12 or more	66.8	8.1	15.9	9.2
Year 11 or less	67.6	8.1	18.7	5.6
<i>Type of School Attended</i>				
Government	68.4	8.4	17.7	5.5
Non-Government	64.0	7.1	17.4	11.5
<i>Number of Siblings</i>				
0	67.9	9.0	17.9	5.1
1	67.5	7.8	18.6	6.1
2	68.8	8.9	16.5	5.9
3	69.4	7.8	15.7	7.1
4+	65.5	7.9	18.9	7.6
<i>Father's Occupation at Age 14</i>				
Professional	62.2	7.6	19.1	11.1
Father Deceased or Absent	54.6	10.2	26.9	8.3
Other Occupation or Not Employed	68.8	8.0	16.9	6.3
<i>Region of Birth</i>				
Australia	66.2	8.3	17.6	7.9
NW Europe or North America	65.9	12.1	17.2	4.7
E or SE Asia	78.7	4.6	13.0	3.7
Other Overseas	70.5	4.8	19.9	4.8
Total	67.5	8.1	17.6	6.8

**Table 5: Mean Gross Annual Income, Percentage Currently in a Professional Occupation, and Percentage With Bachelor's Degree or Higher of Women Aged 40-54 By Schooling and Family Background Variables: Living in Australia (HILDA) Survey Wave 1**

	Mean Gross Annual Income	Percentage in Professional Occupation	Percentage With Bachelor's Degree
<i>Highest Level of Education</i>			
Year 12 or more	27,205	37.6	39.1
Year 11 or less	15,260	9.0	5.6
<i>Type of School Attended</i>			
Government	18,963	17.8	15.4
Non-Government	22,600	25.7	26.9
<i>Number of Siblings</i>			
0	25,797	21.5	21.5
1	23,238	24.4	24.4
2	20,800	24.6	21.7
3	20,739	22.6	18.1
4+	16,193	12.3	12.4
<i>Father's Occupation at Age 14</i>			
Professional	26,928	36.9	45.3
Father Deceased or Absent	21,310	13.6	14.6
Other Occupation or Not Employed	18,797	17.9	14.9
<i>Region of Birth</i>			
Australia	20,010	21.1	16.9
NW Europe or North America	22,976	22.4	22.4
E or SE Asia	16,377	14.8	25.0
Other Overseas	17,307	11.6	19.5
<i>Total</i>	19,836	19.8	18.2

**Table 6: Multilevel Logistic Regression Model of Whether a Woman Aged 40-54 is Childless With Effects for Current Marital Status and Income Included: Living in Australia (HILDA) Survey Wave 1**

	Coefficient( $\beta$ )	Std Error( $\beta$ )	Exp( $\beta$ )
<i>Income (000s)</i>	0.02**	0.004	1.02**
<i>Marital Status</i>			
Never Married and Not in De Facto	3.93**	0.26	50.91**
Divorced or Separated or Widowed	0.36	0.24	1.43
De Facto	1.19**	0.26	3.29**
Legally Married	0.00		1.00
<i>Highest Level of Education</i>			
Year 12 or more	0.21	0.19	1.23
Year 11 or less	0.00		1.00
<i>Type of School Attended</i>			
Government	-0.44*	0.19	0.64
Non-Government	0.00		1.00
<i>Number of Siblings</i>	-0.16**	0.04	0.85
<i>Father's Occupation at Age 14</i>			
Professional	0.45	0.25	1.57
Father Deceased or Absent	0.89**	0.33	2.44**
Other Occupation or Not Employed	0.00		1.00
<i>Region of Birth</i>			
Australia	0.86*	0.37	2.36*
NW Europe or North America	1.31**	0.42	3.71**
E or SE Asia	2.14**	0.48	8.50**
Other Overseas	0.00		1.00
<i>Age</i>	-0.03	0.02	0.97
<i>Constant</i>	-2.09	1.08	0.12
<i>Cluster-level variance</i>	0.00	0.00	

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