

DOES QUESTION ORDER AFFECT REPORTS OF CHILDBEARING DESIRES, EXPECTATIONS AND INTENTIONS IN THE HOUSEHOLD AND LABOUR DYNAMICS IN AUSTRALIA SURVEY?

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Paper prepared for the HILDA Survey Research Conference 2013,
3-4th October, Melbourne.

Note:

The data used for this research come from the Household Income and Labour Dynamics in Australia survey, which is funded by the Australian Commonwealth Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), and conducted by the Melbourne Institute for Economic and Social Research at the University of Melbourne, Australia. The research findings included below are solely the product of the researcher, and the views expressed within should not be attributed to FaHCSIA or the Melbourne Institute.

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ABSTRACT

Childbearing intentions and measures of intended family size are considered to be amongst the most important proximate determinants of subsequent childbearing behaviour. These measures are also understood to remain relatively stable at an aggregate level across the reproductive life course of cohorts. Between 2001 and 2011, Australian individuals reported dramatic fluctuations in their desires, expectations and intentions for children. Using data from 11 waves of the Household Income and Labour Dynamics in Australia Survey, this paper investigates the potential causes behind these instabilities, and focuses particularly on the effects of changing question order in the battery of family formation questions. The analyses indicate that in years when question order differed from the previous wave, both men and women reported significantly higher desires, expectations and intentions for children. The paper concludes that the current question order used in HILDA to collect family formation information is in error, and offers an alternative approach. Given that measures of childbearing intentions are becoming increasingly influential in Australia, the implications of these findings are discussed in the dual contexts of family policy and survey methodology.

Key Words: childbearing intentions; family formation; question order; context effects; fertility; survey research;

INTRODUCTION

Questions on family formation and reproductive decision making have long been included in social and demographic surveys throughout much of the developed world. In the United States, questions on ideal family size have featured in the representative Gallup polls since 1936 (Saad, 2011) and in Canada since 1945 (The Strategic Council, 2002). In the United Kingdom they first featured in the Royal Commission on Population's study into family limitation in 1949 (Bhrolcháin & Beaujouan, 2011). Closer to home, the United Nations led Family and Fertility study in New Zealand has questioned individuals on their family size preferences since the 1990's, whilst in Australia, questions on the ideal number of children first featured in the Australian Family Formation project in 1971. Since then, these types of questions have been a key feature in several cross-sectional and household panel surveys throughout the country. Their inclusion is based largely on the premise that childbearing desires and intentions hold some predictive value in highlighting the numbers of children individuals and couples will eventually have (Hin, Gauthier, Goldstein, & Buhler, 2011).

In recent years there has been a growing interest in family formation studies in Australia. There are two likely reasons for this development. First, Australia's continued below replacement level fertility and structurally ageing population are of growing concern to Government and demographers alike. Since 2005, the Australian Government has reported to the United Nations that the nations fertility rates are too low and that policy is in place to raise them (United Nations 2011; see also Jackson & Casey, 2009). Australia's 'low' fertility rates are concerning particularly given that on average, Australians have quite high desires and intentions for children (i.e. well above levels needed to maintain population replacement)(Weston, R., Qu, L., Parker, R., Alexander, 2004). This 'ideal-actual' (Testa, 2010) gap in fertility represents a potential window of opportunity for policy makers to address constraints facing Australians in having the numbers of children they want. The Government focus on making it easier for couples to do so is evidenced clearly in the substantial increases in family assistance payments that have occurred in Australia over the past decade, for example, paid parental leave schemes and increases to child care benefits (for further discussion on this see Parr & Guest, 2011).

Second, the increased availability of cross-sectional and longitudinal survey data that collects information of this kind has informed a new Australian literature concerned not only with better informing family policy (for example Drago, Sawyer, Sheffler, & Warren, 2009; Parr & Guest, 2011; Risse, 2011), but also with investigating the stability and change of childbearing intentions and the factors associated with their revision over time (Gray, Evans, & Reimondos, 2012; Mitchell & Gray, 2007). Taken together, the empirical evidence indicates that changes in labour force attachment, relationship status, parity and age are all significantly influential in couple and individual childbearing plans in Australia (Gray et al., 2012; Holton, Fisher, & Rowe, 2011; Thompson & Lee, 2011a, 2011b; Beets, Liefbroer, & Gierveld, 1999).

Cumulatively, fertility intentions and measures of intended family size are considered to be amongst the most important proximate determinants of subsequent childbearing behaviour (Testa, 2010). Research in this area has consistently found that at the aggregate, cohort fertility intentions are incredibly accurate predictors of subsequent and completed fertility (Schoen, Astone, Kim,

Nathanson, & Fields, 1999), and are understood to remain relatively stable across the reproductive life course of cohorts (Morgan & Rackin, 2010; Quesnel-Vallée & Morgan, 2003). For example, an early study of U.S. couples found that their completed family size of 2.6 accurately reflected their mean intended family size of 2.7 some 20 years earlier (Westoff, Mishler, & Kelly, 1957; see also Freedman, Coombs, & Bumpass, 1965). More recently, a Canadian study has demonstrated that women's childbearing intentions have remained relatively unchanged between 2.11-2.29 for the last 16 years (Edmonston, Lee, & Wu, 2010).

However, similar research has routinely demonstrated that childbearing intentions either over or under estimate completed family size at the individual level (Hayford, 2009; Liefbroer, 2009; Schoen et al., 1999). For example, a study of British women documented that of the 55.6 per cent of childless women aged 22-25 in 1991-1994 who expected to have a their first child within 5 years, just over 32 per cent had done so, resulting in substantial over-estimation of completed fertility (Ní Bhrolcháin, Beaujouan, & Berrington, 2010). Similarly, a U.S. study found that for women with one child, the correlation between intentions to have another child within 5 years and actually doing so was quite low at the individual level (Schoen et al., 1999). So, why do childbearing intentions predict completed fertility so well at the aggregate level? It is generally understood that a process of 'cancelling out' occurs at the cohort level over the period of the reproductive life span, whereby some individuals will have fewer children than originally intended whilst others will have more. Thus, the stabilisation of childbearing intentions occurs (Edmonston et al., 2010).

Surprisingly, between 2001 and 2011, Australian individuals reported dramatic and significant fluctuations in their desires, expectations and intentions for children. Using data from eleven waves (2001-2011) of the Household, Income and Labour Dynamics in Australia Survey (HILDA), this paper seeks to explain the observed and substantial dissimilarity in reported family formation measures. In doing so, it adopts several aims. First, to draw attention to the presence of 'context effects' in the battery of family formation questions in the HILDA survey. Second, to analyse what effect, if any, differences in question order across waves of the survey have on respondent's reports of their childbearing plans. And finally, to discuss the methodological and related policy implications of these findings.

DESIRES, EXPECTATIONS AND INTENTIONS: INTERCHANGEABLE CONCEPTS?

This article focuses on Australian individual's desires, expectations and intentions for children and their reported variability over the past decade. Problematically, research into this subjective dimension is often fraught with definitional and measurement issues. There are two key issues worthy of mention. First, there is a comparatively limited amount of Australian research existing in this area. Second, the completed investigations use several different indicators to measure and operationalize attitudes towards childbearing and family formation plans.

Overwhelmingly, the concepts of desires, expectations and intentions are treated as interchangeable. For example, when examining Australian individual's childbearing desires and expectations Weston et al. (2004) use preferences, aspirations and ideals synonymously. Further, when Risse (2011) discusses Australian women's childbearing intentions, respondents were questioned "how likely are you to have a child/more children in the future" which is indicative of their childbearing expectations, not intentions. Holton et al. (2011) discuss desires and expectations as if they are equivalent, while Mitchell and Gray (2007) use desires and aspirations synonymously. Not only is this practice

conceptually confusing, but it limits theoretical understandings of the processes involved in childbearing and family formation decision-making. The most commonly cited justification for using the terms interchangeably is the belief that survey respondents themselves do not make a distinction between their childbearing desires, expectations and intentions (Philipov, 2011). However, this research adopts the view, in line with others (Azjen & Klobas, 2013; Miller, 1994, 2011a, 2011b; Warshaw & Davis, 1985a) that these terms, while undeniably interrelated, measure psychologically distinct constructs. The discussion below represents an attempt to unravel the definitional confusion associated with these terms.

Childbearing desires represent what an individual wants, or wishes for (Miller, 1994). They are representative of feelings about fertility goals and objectives, and influenced by factors internal to the individual such as motivations, attitudes and beliefs about the value of children. According to the literature, desires for children are formed in a vacuum devoid of any situational constraint. Expectations for children on the other hand, refer to the estimated likelihood that an individual will perform some specified future behaviour in the aim of achieving their desires (Warshaw & Davis, 1985b). When expressing childbearing expectations, individuals take into account a variety of situational and environmental constraints that could influence their behaviour and the achievement of their goal.

Questions of childbearing and child-timing intentions are the most frequently used measures of family formation behaviour (Udry, 1983). These measures refer to a planned action or determination to act (or not act) in a certain way in order to achieve one's childbearing goals (Morgan, 2001). Notably, childbearing intentions take into account the wishes and intentions of significant others, as well as accounting for what can realistically be achieved given situational and environmental factors that simply prevent individuals from doing exactly as they want (Miller & Pasta, 1995; Miller, 1994). Further, fertility intentions provide a strong indication of how hard a person is willing to try in order to achieve their intended behaviour. Importantly, the degree to which these intentions are achievable is dependent upon the extent to which childbearing is under the individual's volitional control. That is, they can decide at will to have (or not have) children.

The following examples demonstrate the conceptual differences more clearly. A childless single individual may express a strong desire for children, intend to have children, but have little expectation that they will achieve their specific fertility goal (at least in the near future). In reality, given their un-partnered status, they have little volitional control over the act of childbearing; they are two steps removed from the childbearing process in that they need to first find a suitable partner and then have a child (Hoem & Bernhardt, 2000). A married (or partnered) individual on the other hand, is more fully able to express their desires, expectations and intentions for children in the context that their childbearing expectations are likely to be fulfilled.

DATA

The data for this study come from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. HILDA is a large-scale nationally representative² panel study that commenced in 2001 with a

² While the first wave of HILDA was broadly representative of the wider Australian population, Watson and Wooden (2002) found several groups including men, unmarried persons, young people and immigrants from

sample of close to 14,000 individual respondents aged 15 and over. Like other panel surveys, issues of attrition and changes to the composition of the general population require attention in HILDA sampling. Since the selection of the original sample in 2001, Australia's population has changed in ways the data cannot emulate (Watson, 2011)—for example, permanently settled immigrants and their children were identified as an underrepresented subpopulation. To address this, a top up sample of 2000 private dwellings was added in wave 11 (2011) in order to bring the data back into line with population representativeness³.

HILDA collects information on three key aspects of family formation and future fertility: childbearing desires, expectations for children and overall number of intended children⁴. This information is collected through the following questions:

1. Childbearing desires: *Would you like to have a child/more children in the future?* Responses are recorded on a scale of 0-10, where 0 means 'definitely does not want' and 10 means 'definitely does want'.
2. Childbearing expectations: *And how likely are you to have a child/more children in the future?* Responses are recorded on a scale of 0-10, where 0 means 'very unlikely' and 10 means 'very likely'.
3. Childbearing intentions: *How many (more) children do you intend to have (excluding current pregnancy and any children already born).*

Across each year of data collection, the HILDA consists of a core set of questions that are supplemented with a rotating special topic included in the continuing (or new) person questionnaire⁵. Beginning in 2005 as part of the special modular, additional content that focussed more heavily on fertility, family formation, and timing of childbearing was incorporated. The inclusion of this particular topic was included as part of the United Nations coordinated Generations and Gender Survey (GGS) in order to allow for cross country comparability with other developed (mostly European) countries who also administer the GGS. As part of the modular content, additional questions on issues such as recent pregnancies and their timing and intendedness, contraception and sterilisation, as well as factors considered influential in childbearing decision making were included that were not routinely collected across other waves. Initially, the special module appeared on a 3 year rotating cycle but has since been moved to a 4 year cycle following data collection in 2011. It is next scheduled to appear in 2015.

Across the majority of data collection years, the order in which the battery of family formation questions was posed is the same as noted above; respondents are questioned first on their childbearing desires, followed by their childbearing expectations and childbearing intentions. In these years, the survey design dictates that only those respondents who report an expectation of 'likely to very likely' (evidenced by a score of 6+ on the likert scale) to have a child/more children in the future are then questioned on their childbearing intentions (in absolute numbers). That is, those

non-English speaking backgrounds to be under-represented. To overcome this selection bias, population weights are used throughout this study.

³ For further discussion on the methodology of the 2011 top up sample see Watson (2011).

⁴ Referred to as 'childbearing intentions'.

⁵ There are some exceptions to this rule; 2001 (wave 1) did not include any special modular content.

Additionally, the top up sample in 2011 were not questioned on any additional 'retirement' or 'intentions and plans' content (for further discussion see *HILDA Survey Annual Report 2012, 2012*).

who provide an answer of 'don't know' or 'unlikely' (evidenced by a score of 5 or below on the likert scale) are skipped to the following section on relationship formation (see Appendix 1).

The limitations associated with this 'skip' design are numerous. Survey methodology research has demonstrated that those who respond 'don't know' to survey questions constitute an important group, particularly those who answer in this way to questions regarding fertility and childbearing plans (Beatty, Herrmann, Puskar, & Kerwin, 1998; Durand & Lambert, 1988; Gilljam & Granberg, 1993; Luskin & Bullock, 2011). By their very nature, quantitative questions on childbearing plans, such as those that appear in HILDA, produce quantitative results. The questions 'demand' answers (Bachrach & Morgan, 2012) that can sometimes result in an oversimplification of very complex and in-depth processes.

Given the centrality and importance of family formation in social structures, it is likely that most individuals will at some point form intentions for children (or no children). However, as noted by Bachrach and Morgan (2012), often this does not occur at the same point at which demographers begin questioning them. For example, a young adult still engaged in education and living at home with their parents may not have begun thinking about their family formation plans when initially questioned. In such cases, uncertainty is expected and responses of 'don't know' are not uncommon. Further, it is not unreasonable to suspect that those individuals who respond 'don't know' to questions on the likelihood of childbearing are actually reports of *false negatives*—that is, they do have an underlying desire and expectation for children, but simply decline the opportunity to express it (Gilljam & Granberg, 1993).

Because it is psychologically possible, and also quite likely that individuals will simultaneously have positive and negative desires and expectations for future childbearing, to exclude those who report 'don't know' from reporting their intentions for children appears quite arbitrary. Recent research has documented the competing dimensions of childbearing desires in a population-based sample of American women aged 18-19 years. By priming respondents to consider the somewhat counter-intuitive notion that both positive and negative childbearing desires are possible, Miller's work (2011; see also Barber, Miller, & Gatny, 2010) found that a significant number of women reported ambivalent and indifferent desires (measured by both high positive and negative desires, and low positive and negative desires respectively) for children.

In the context of the HILDA design, the above discussion is of particular import. For example, in the most recent wave (2011) of data, 9.3 per cent of female respondents aged 20-44 (n=226) that reported they 'didn't know' or were 'unlikely' to have a child/more children in the future (childbearing expectation), also simultaneously reported an intention for one or more children. Contradictions such as these highlight the possibility (and likelihood) of individuals simultaneously reporting both positive and negative desires, expectations and intentions for children. Capturing instances of these incongruities has the potential to provide further insight into the nuances of childbearing decision making.

As mentioned above, in 2005, 2008 and 2011, a special module containing additional questions on family formation behaviours was rotated into the existing battery of child preference and desire questions in HILDA. Importantly, across these years, the order in which the family formation and fertility questions appear above is changed. That is, all female respondents (aged 18-45 years) and all male respondents (aged 18-55 years or those who report a female partner 45 years and younger)

are questioned *first* on their intentions for future childbearing and *second* on their desires and expectations that such children will occur (and the intended timing of their births). Essentially, this ensures that all respondents of suitable childbearing ages are afforded the opportunity to express their intentions for children regardless of their desire or expectation for these children. For simplicity, the differences in question order and exclusion rules across the survey years are diagrammatically represented in Appendix Figure 1.

An additional source of concern in the special fertility module was the inclusion of questions pertaining to any physical difficulties respondents may have in conceiving children. In these years, respondents were questioned on whether they or their partner had ever undergone sterilisation procedures that made it impossible to bear (or father) children. Similarly, respondents were given opportunity to report, based on medical advice, if they knew of any physical or health reason that would make it difficult to bear (or father) children. Respondents who reported 'yes' to these questions were not questioned on their desires, expectations or intentions for children.

Problematically however, across the regular waves of data collection, there are no such 'skips' for people who are sterile or have difficulty conceiving children. As such, there is potential they are included in the sample of respondents who report a positive intention for children. However, given that the design of the family formation questions dictate that only respondents who express a high likelihood they will have children in the future are subsequently questioned on their intentions for children, it is unlikely that a sterile respondent would simultaneously report a high expectation as well as a positive intention for future childbearing—although it is not possible to know for sure.

QUESTION ORDER EFFECTS: A METHODOLOGICAL PROBLEM IN HILDA?

Population surveys, such as HILDA, are frequently used to obtain information on individuals' family formation plans and behaviours. However, non-sampling errors, such as question order effects in these surveys may lead to imprecision in the collection of this important data. The risks associated with changes to question order are well documented throughout survey methodology literature (Johnson, O'Rourke, & Stevens, 1998; Schuman, 1992; Schwarz, Park, & Fritsch, 2007; Siminski & Yerokhin, 2010; Siminski, 2006; Tourangeau et al., 1988; Tourangeau, Rips, & Rasinski, 2000). Context effects refer to changes in the answers to a survey question as a function of the previous items in the questionnaire (R. Tourangeau, Singer, & Presser, 2003). Put simply, changing the 'context' in which certain survey questions appear has the potential to significantly alter responses to later questions. Changes to question order have been demonstrated to influence the reporting of a wide range of issues such as medical presentation at hospital emergency departments (Siminski, 2006), visual impairment (R. Tourangeau et al., 2003), opinions on homosexuality (Herek & Capitanio, 1999), as well as attitudes about abortion (Schuman, 1992) and skin cancer (Rimal & Real, 2005).

The effect of altering question order in family formation measures has not been heavily scrutinised. However, more recently, the context effects of preceding questions on the reporting of childbearing intentions (Iacovou & Mathews, 2012) and preferences for children have been examined (Mathews & Sear, 2008). Using randomised experiments, Iacovou and Mathews (2012) employed two separate data sets to examine the effects of mortality priming, and the effects of social network priming on

respondent's reports of their fertility intentions. Similarly, Mathews and Sear (2008) tested the effects of mortality priming on respondents reports of their preferences for children.

Cumulatively, their results demonstrate, in line with demographic transition theory, that priming individuals to consider mortality prior to childbearing had a significant impact on their intentions and preferences for children. This was the case particularly for men. Male respondents were found to routinely report a significant increase in their ideal number of children when they were primed to believe that population mortality rates were high (Mathews & Sear, 2008).

The majority of research that examines context effects is designed, like those above, specifically to elicit those types of results. That is, pre-existing surveys are taken and context effects experiments embedded within them. For example, in their currently unpublished work, Iacovou and Mathews (2012) include their priming experiment in a sub-sample of the UK Household Longitudinal Study (UKHLS) that has been reserved for methodological experiments such as theirs. Similarly, Tourangeau et al's. (2003) priming experiments were embedded in U.S Census surveys relating to privacy and confidentiality, while Herek and Capitanio (1999) embed their investigation on attitudes towards homosexuality in a pre-existing telephone survey of U.S households.

There is far less research that examines the unintentional, natural occurrence of such effects (however, see Tourangeau et al., 2000 for an exception), and no Australian studies were identified⁶. However, the frequency with which unintentional context effects occur within surveys is considered to relatively high (Couper, Conrad, & Tourangeau, 2007). This is particularly true when related questions are placed relatively close together, and their order varies—as the fertility related questions do in HILDA. This research differs from those above as it analyses the accidental question order effects in HILDA's family formation records.

DESCRIPTION OF ANALYSIS

This paper analyses family formation data from eleven waves (2001-2011) of HILDA. This time-series provides a comprehensive panel for the descriptive analysis of question order context effects.

Variables:

The dependent variables for this study are childbearing desires, childbearing expectations and childbearing intentions. The first two variables are measured and operationalized fairly easily—the mean scores from each likert scale are used as a measure of overall childbearing desires and expectations for both men and women. Respondents who refused to answer these questions, or were not asked due to a reported inability to have children (in 2005, 2008 and 2011 only) are excluded from the analysis and are coded as missing.

The third dependent variable, childbearing intentions, is measured through the combination of two separate variables. The variable children ever born—the number of children the respondent has had at the time of the current survey wave, is summed with the variable additional number of intended children. This provides a comprehensive measure of total intended children, sometimes referred to

⁶ For Australian experiments in context effects see Hanley, Duncan, & Mummery (2013) and Siminski (2006). For specific research in HILDA context effects see Siminski and Yerokhin (2010).

as intended family size (Hagewen & Morgan, 2005). As mentioned earlier, across the majority of survey collection years, respondents who report a low likelihood for future childbearing (evidenced by a score of 5 or below) are excluded from reporting their future childbearing intentions. These respondents are coded as 'not asked' (and assigned a value of -1) for the variable '_icn' (intention for child/more children). To ensure that these respondents are included in the overall sample, values of 'not asked' are recoded in this analysis to zero (0). That is, it is assumed in line with HILDA design, that these respondents intend no future children. This process is repeated across all years (excluding 2005, 2008 and 2011).

As above, in the years that included the special fertility module, all respondents were questioned on their childbearing intentions. In these years the question is formed so as to include 'zero' additional intended children (variable: '_icniz') in order to accord with the GGS survey questionnaire. To ensure comparability across years, a derived variable for numbers of intended children was created that set a response of 'zero' additional children in 2005, 2008 and 2011, as equal to 'not asked' (-1) in other waves. Importantly, this provides a continuous series for intended children across all waves (2004-2011). To ensure comparability in fertility intentions across survey waves, only respondents in 2005, 2008 and 2011 who also recorded an expectation for childbearing of 'likely-very likely' (6 or greater) are included in the analysis. Had the question order remained unchanged across these years, only these respondents would have been provided the opportunity to report their intentions for future children.

The independent variable in this study is the order in which the family formation questions appear.

Defining the sample:

In HILDA, questions regarding family formation are limited to respondents differently across survey collection years. From 2001-2004 all respondents aged 18-55 years old were questioned on their family formation plans. In 2005 (the first 'special' wave on fertility) questions were restricted to a sample of men aged 18-55 years and women aged 18-44 years. From 2006 onwards, family formation questions were restricted to a male sample 18-54 years and a female sample aged 18-44 years.

This research uses weighted, un-balanced unit-record data from all eleven waves (2001-2011) of the HILDA survey. In line with Quesnel-Vallée and Morgan (2003), this research adopts the view that it is important to study individuals for whom childbearing plans are meaningful—that is, old enough for their baseline intentions to be realistic, but also young enough to ensure that family formation was/is a recent, current or imminent future issue of consideration. Therefore, this analysis is restricted to male respondents aged 20-49 years and female respondents aged 20-44 years.

Method:

The analytical approach adopted in this study is relatively straightforward. Aggregated mean scores and 99% confidence intervals are calculated and compared across the sample for questions on childbearing desires, expectations and intentions. Analysis is run separately for men and women. In Appendix Tables 1-3, these results are disaggregated across each year according to key socio-economic and demographic variables. Simple, descriptive bivariate analyses are employed to test for any significant differences in response type.

RESULTS

The results for men and women's mean childbearing desires, expectations and intentions are reported in Table 1 below.

When data from 2005, 2008 and 2011 are initially ignored, on average, women's desires and expectations for children have both been gradually increasing over the previous decade ranging between 4.33-5.12 and 3.8-4.46 respectively. Interestingly, their intentions for future children have remained relatively stable ranging between 2.04-2.11—roughly the level required for population replacement. Aggregate data for men's scores follow similar patterns. Again, their childbearing desires and expectations for children have increased steadily over the previous decade ranging between 4.36-4.87 and 3.8-4.43 respectively. Overall, men's intended family size scores have also remained relatively stable over the past ten years ranging between 1.89-1.98. Notably, on all measures, men's mean scores are lower than their female counterparts, particularly across intended family size scores.

In Appendix Tables 1-3, the recorded responses for childbearing desires, expectations and intended family size are disaggregated according to key socio-economic and demographic variables including 5 year age group, relationship status, labour force attachment, children ever born (parity) and highest educational attainment. Again, excluding data from the years in which the special fertility modules were included, some key patterns in family formation plans are observed. As expected, across all years, men and women in younger age groups (20-34 years) report higher desires and expectations for children than their older counterparts. Older respondents report higher intended family sizes than those in the younger cohorts. Due to the developmental nature of childbearing intentions, it is expected that older respondents' reports of intended family size are more closely aligned with already achieved family size, whilst reports of intended numbers of children from younger respondents are most likely reflective of the strong two child norm in Australia (Holton, 2010; Iacovou & Tavares, 2010; Weston, R., Qu, L., Parker, R., Alexander, 2004).

It is notable that across all years where the regular survey content only was included, married men and women report lowest desires and expectations for future childbearing, but also highest intentions for family size. Somewhat counterintuitive, this finding is likely a result of those married individuals already achieving their intended family sizes. Similar patterns emerge for those who are employed full time. The effect of educational attainment is of particular interest in these results when disaggregated by sex. Not unsurprisingly, men and women with higher levels of educational attainment (bachelor degree or higher) report higher childbearing desires and expectations. However, men with mid-level educational qualifications (diploma and certificate) routinely report significantly lower desires and expectations than both their more and less educated counterparts. Women with the lowest levels of formal education routinely report the lowest desires and expectations, but the highest intended family size scores across all women, across all years.

When findings from 2005, 2008 and 2011 are taken into account, the effect of question order context effects become clear. Put simply, when respondents are questioned first on their childbearing intentions followed by their desires and expectations, they report significantly higher desires and expectations for childbearing, and also report intentions for significantly larger family

sizes. The differences are quite stark. For example, in 2004, on average, women reported a desire for children of 4.54 (CI: 4.36-4.72; roughly neutral), an expectation of childbearing of 4.02 (99% CI: 3.84-4.20; unlikely) and an intended family size of 2.13 (CI: 2.07-2.19). However, in 2005, their desires increased significantly to 5.90 (CI: 5.69-6.11, $p<0.01$; like to have a child), their expectations increased to 5.27 (CI: 5.06-5.48, $p<0.01$; neutral to likely expectation) and their intended family size increased significantly by roughly .4 of a child (from 2.13-2.51, $p<0.01$). Similarly, men's reports follow a parallel pattern, albeit somewhat more extreme. For example, between 2004-2005 their mean intended family size score significantly increased from 1.98 (CI: 1.91-2.06) to 2.54 (CI: 2.46-2.62, $p<0.01$)—over half a child, and well above levels required for population replacement.

Significant increases in desires, expectations and intentions scores are identified for both men and women across all variables in Appendix Tables 1-3. For example, for men and women, with 2 or more children, desires, expectations and intentions for additional children are significantly higher in 2005, 2008 and 2011. Interestingly, for women in de-facto relationships, difference in question order appears to have little to no significant effect on their desires or expectations for children, however in these years they do routinely report intentions for significantly larger families.

The findings related to parity are of notable importance, particularly those related to mean intended family size scores. As the variable for intended family size includes children ever born as a component of the measure, these results suggest that over and above their current family sizes, on average, individuals actually intend additional future children that are not captured across the majority of survey years. For example, in ordinary survey years, men and women with 2 children report, on average, intended family sizes between 2.1-2.2. However, in 2005, 2008 and 2011, their overall child number intentions are significantly higher between 3.3-3.6.

TABLE 1: MEAN SCORES FOR CHILDBEARING DESIRES, EXPECTATIONS AND INTENDED FAMILY SIZE, 2001-2011.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Women (20-44yrs)											
Childbearing Desire	4.33	4.42	4.55	4.54	5.90 ***	4.87	4.99	5.88 ***	5.12	5.04	5.88 ***
Expectation for children	3.80	3.89	3.93	4.02	5.27 ***	4.30	4.37	5.34 ***	4.45	4.46	5.24 ***
Intended Family Size	2.10	2.12	2.10	2.13	2.51 ***	2.13	2.11	2.54 ***	2.09	2.04	2.53 ***
Men (20-49yrs)											
Childbearing Desire	4.36	4.42	4.47	4.55	5.99 ***	4.76	4.66	6.05 ***	4.87	4.95	5.96 ***
Expectation for children	3.80	3.82	3.89	4.02	5.29 ***	4.12	4.14	5.41 ***	4.31	4.43	5.38 ***
Intended Family Size	1.95	1.93	1.94	1.98	2.54 ***	1.97	1.92	2.53 ***	1.92	1.89	2.46 ***

Source: HILDA waves 1-11 (2001-2011), population weighted data.

Notes: *** $p < 0.01$ tested using 99% CI. Difference in mean scores in 2005, 2008 and 2011 are compared with previous year scores.

Noticeably, these patterns occur each time the family formation questions appear in a different order. Although not yet available, this research predicts that desires, expectations and family size intentions in 2012 will once again return to those levels witnessed in previous years where only the core family formation content was collected. The implications of these findings are discussed in the following sections.

DISCUSSION

Overall the findings above demonstrate a significant change in men and women's reported childbearing desires, expectations and intentions when the order of family formation questions differs across different years of HILDA. Given that very little change occurred to the actual wording of the fertility questions over the previous decade, it is unlikely that the significant differences in respondents' reports are caused by anything other than question context effects.

However, because childbearing desires and intentions are related to so many factors, and their formation (and subsequent childbearing behaviour) occurs within broad social, economic and political contexts, other possible explanations of the observed differences in mean scores were sought out. For example, the possible effects of the Australian Government's introduction of the 'baby bonus' policy in late 2004 was considered.

The baby bonus was a means tested⁷ cash payment to all women upon the birth (or adoption) of a child and its announcement and implementation in the latter half of 2004 coincided with reports of increased childbearing desires, expectations and intentions in 2005⁸. Some research exists that suggests the baby bonus had a measurable effect on women's childbearing intentions following its introduction⁹ (Risse, 2011).

Using HILDA data from 2001-2008, Risse (2011) examines the effect of the policy on Australian women's (men are excluded from the analysis) childbearing 'intentions' and finds that the introduction of the baby bonus coincided with a significant increase in women's childbearing intentions in 2005, and to a lesser (but still significant) extent in 2008 when the payment value was increased. Specifically her results demonstrate that the most marked increase in fertility intentions over this time occurred amongst those women from lower income households. Cumulatively, these results are taken to question the ability of the policy to halt aggregate dependency ratios.

The current research queries the conclusions reached by Risse (2011) on the basis of two key points. First, women's reported scores for their childbearing expectations are erroneously applied as a measure of their childbearing intentions. That is, women's responses to the question "how likely are you to have a child/more children in the future?" are taken as indicative of women's childbearing intentions. As outlined above, expectations and intentions measure psychologically distinct components of behaviour and to use them interchangeably is to ignore an important theoretical distinction. As such, Risse's (2011) study measures women's childbearing expectations and not their intentions for future childbearing. This point may seem one based on semantics, but given that it is

⁷ Families were eligible for the payment if their combined adjusted taxable income was \$75,000 or less in the six months after a child was born or adopted.

⁸ In the most recent 2013/2014 budget, the current Government abolished the lump sum baby bonus payment. However, a sum of \$2000 is now available for lower income families as part of the Family Tax Benefit Part A for the birth of a first child. The payment reduces to \$1000 for second and subsequent children. Prior to the budget release, parents were able to choose between the tax-free Baby Bonus payment (worth \$5000 for a first child and \$3000 for second and subsequent children) and the Paid Parental Leave Scheme (currently calculated at \$606.50 (before tax) for a maximum of 18 weeks. Parents who are eligible for paid parental leave through their private employer are also eligible to receive both of these schemes.

⁹ Evidence to suggest that the Baby Bonus had a positive effect on childbearing preferences and subsequent births is mixed in Australia. See Drago et al. (2009) and Fan and Maitra (2011) for discussion.

entirely possible for women (and men) to simultaneously report a positive expectation for future childbearing with little or no intention for future children (or vice versa), it is a point worth making¹⁰.

Second, Risse's (2011) argument provides little explanation for why women's expectations fluctuate so dramatically between 2001-2008. If, as she suggests, the baby bonus is significantly influential in the increase in childbearing intentions in 2005 following its introduction, and again in 2008 following its increase in value, it is unclear why women's reported childbearing expectations would not remain at these increased levels over the entire period that the payment was available, particularly given that at no point during this time was it announced that the baby bonus would decrease in value. Furthermore, (as pointed out by Risse) there is no corresponding increase in women's childbearing expectations in 2006—the first year after the policy's introduction that the payment increased from the original \$3000 to \$4000.

Although this study discounts the explanation that the introduction of the baby bonus is responsible for the significant increases in reports of childbearing expectations in 2005 and 2008, it is plausible that the introduction of the policy did influence the context in which individuals assess their intentions (and expectations) for childbearing, although findings for this result are mixed (Drago et al., 2009; Guest & Parr, 2009; Jackson, 2006; Lattimore & Pobke, 2008; Parr & Guest, 2011; Sinclair, Boymal, & de Silva, 2010; Sinclair, Boymal, & Silva, 2012). In any case, the effect of the policy, in comparison to the identifiable question order effects is likely to be quite small—particularly given that in 2011 the Australian Government announced budget cuts to the baby bonus that would see its value drop for second and higher order births. As such, in 2011, reports of childbearing expectations (and desires and intentions) would be expected to decrease to levels similar to previous years. This analysis has demonstrated the opposite to be true.

While it would undoubtedly be easier to exclude data from the special fertility modules in HILDA, using only the core survey content for analyses of family formation attitudes and behaviours, its inclusion is particularly meaningful when compared with other independent Australian studies. Findings from the Australian Institute of Family Studies' (AIFS) report on the Fertility Decision Making Project (FDMP) indicate aggregate family size intentions similar to those evidenced within this analysis. They find that men and women aged between 20-39 years, on average, intend family sizes of 2.4 and 2.5 respectively (Weston, R., Qu, L., Parker, R., Alexander, 2004: 49). The Australian Family Formation Decisions Project (AFFD) finds that respondents intend family sizes of between "two to three" (Carmichael, 2013: 13), while results from the NLC study also indicate Australians intend family sizes between two to three children (McDonald & Evans, 2000)—all findings accord with those from this study.

It is clear that context effects in HILDA significantly influence respondent's reports of their childbearing desires, expectations and intentions. When taken in the context of previous research, the findings of this investigation confirm that the order in which the family formation questions in HILDA feature in 2005, 2008 and 2011 provide a more accurate reflection of respondent's childbearing plans.

¹⁰ For example, in 2005, there were 27 women who reported a high expectation for children, but no intention for them. Similarly, in 2008 there were 30 such women. Presumably these women are included in Risse's sample. In 2011, there were 52 cases where respondents reported their expectations and intentions in this way.

The limitations of this study are worth noting. As this report employs bi-variate analytical techniques, the interaction effects of other key variables that have been previously identified as influential in revisions to childbearing desires, expectations and intentions (for example, age and relationship status) are not detected. Along with question order effects, it is likely that changes to relationship, employment and parity for example, are also responsible for changes to individual's family formation plans. Further, this study focuses on changes to childbearing plans at the macro-level only. These limitations are being addressed by the author in current research.

Further, it would prove beneficial to conduct similar analyses in other countries that also incorporate family formation sections of the GGS survey into their already established panel studies. This may reveal particularly interesting context effects in lowest low fertility countries such as Italy who also include GGS questions on fertility intentions into their ongoing *Famiglia e Soggetti Sociali* (FSS) (Regnier-Loilier & Vignoli, 2011). It is theoretically possible that measures of Italian's childbearing intentions have also been mis-specified in the same ways they have been in Australia.

The focus on the battery of family formation questions in this study means that the possibility of context effects in other special modules in HILDA was not discussed. Herein lies potential for future research. For example, there are subtle changes in the context, ordering and exclusion rules to questions in the module on retirement and retirement intentions in 2003, 2007 and 2011. Given the results of this study, it is entirely reasonable to expect that respondents' reports of their retirement plans may also be influenced by these changes.

CONCLUSION

Understanding Australian's desires, expectations and intentions for children are key to any understanding of the nations' overall fertility trends. It provides an opportunity to specifically tailor policy in order to provide a supportive social and economic context in which individuals and couples can achieve their family formation plans. Through its method, findings and discussion of an alternative methodological approach to questioning Australians on their childbearing plans, this study makes an important original contribution not only to knowledge of Australian's childbearing plans, but also to the ways in which such information is collected. It is the only research of its kind in an Australian context.

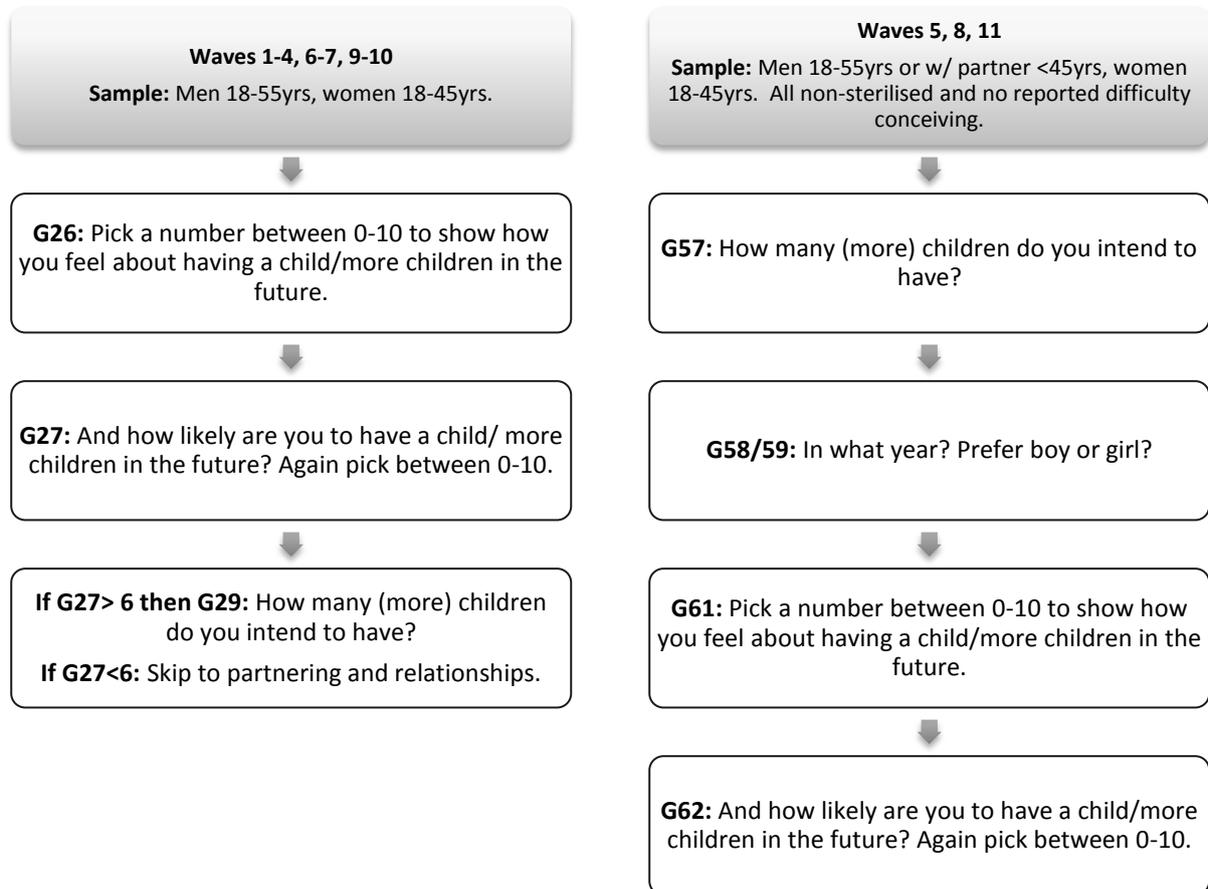
Specifically, this study has shown that responses to family formation questions are subject to significant question order context effects. This paper maintains that the current method in which this information is collected in HILDA is in error. In this case, the presence of context effects poses a serious threat to conclusions that can be made from HILDA's family formation data. It is a recommendation of this study that all respondents, regardless of their reported expectations for children, be also questioned on their childbearing intentions. This will provide an improved and more realistic measure of Australian's childbearing plans, and will bring Australia into line with other developed countries that adopt this practice in their longitudinal panel surveys (for example, Canada's General Social Survey).

Currently, there are no direct and explicit policies in place to increase the fertility rate in Australia. There are however, numerous family policies designed and implemented with the aim to make it

easier for Australians to bear and raise children (Parr & Guest, 2011). Given recent claims that increases to Australia's fertility rate are, in part, attributable to the success of these policies (Drago et al., 2009; Risse, 2011; Sinclair, Boymal, & Silva, 2012), the findings within present a serious challenge to the apparent success of these measures. Because Australians actually intend to have significantly larger families than previously understood, then policies designed to alleviate constraints to childbearing (for example, paid parental leave schemes and family tax benefits) have much farther to go than originally thought. In order to design effective policies that make it easier for Australians to achieve their childbearing goals, it is necessary that an accurate picture of these goals is obtained—an aim that at present, remains only partially achieved.

APPENDIX

APPENDIX FIGURE 1. FAMILY FORMATION QUESTION ORDER, HILDA, 2001-2011.



APPENDIX TABLE 1. CHILDBEARING DESIRES: MEN AND WOMEN'S MEAN SCORES BY SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES, 2001-2011.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Men: (20-49yrs)											
AGE											
20-24	7.33	7.66	7.75	7.33	7.50	7.35	7.28	7.52	7.44	7.54	7.80
25-29	6.89	6.65	7.21	7.61	7.67	7.79	7.39	7.52	7.42	7.34	7.38
30-34	5.66	5.70	5.49	5.73	6.44	6.17	6.15	6.85	6.25	6.58	6.72
35-39	3.55	3.82	3.82	3.80	4.86	4.21	3.95	4.91	4.11	4.09	4.71
40-44	2.05	2.01	2.06	2.09	2.95	2.39	2.14	3.58	2.67	2.68	3.59
45-49	1.02	1.11	1.13	1.19	3.52	1.34	1.38	2.48	1.15	1.21	2.95
RELATIONSHIP STATUS											
Married	3.07	3.15	3.07	3.22	5.44**	3.51	3.44	5.39**	3.77	3.66	5.14**
De-Facto	5.14	5.11	5.48	5.17	6.13**	5.57	5.63	6.52**	5.58	5.79	6.31
Single	5.66	5.68	5.71	5.80	6.31*	5.88	5.66	6.34**	5.77	5.96	6.36
LABOUR FORCE											
Full Time	4.21	4.31	4.33	4.47	5.97**	4.68	4.58	6.05**	4.78	4.84	5.89**
Part Time	5.45	5.56	5.50	5.34	6.63**	5.69	5.73	5.99	5.35	5.68	6.58
Unemployed	4.43	4.21	4.55	4.41	5.50	4.52	4.31	6.08**	5.03	5.10	5.76
PARITY											
0	6.48	6.55	6.63	6.62	6.97	6.75	6.44	6.89	6.55	6.65	7.03
1	5.12	5.16	5.25	5.28	5.91	5.62	5.60	7.00**	6.07	5.81	6.25
2	1.90	1.91	1.77	1.84	3.52**	2.14	2.20	3.41**	2.16	2.20	3.46

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3+	1.24	1.18	1.14	1.10	3.05**	1.23	1.35	2.89**	1.50	1.71	2.70**
EDUCATION LEVEL											
Bach+	4.88	4.91	5.18	5.10	6.53**	5.44	5.38	6.15**	5.37	5.38	6.08**
Dip/Cert	3.85	3.93	3.89	4.05	5.85**	4.12	4.14	5.89**	4.39	4.34	5.59**
Yr. 12 or less	4.54	4.60	4.62	4.69	5.76**	4.98	4.73	6.11**	5.05	5.28	6.21**
Women: (20-44 yrs)											
AGE											
20-24	7.52	7.57	7.82	7.87	8.18	7.73	7.83	7.94	7.79	7.61	7.94
25-29	6.74	6.69	6.87	6.86	7.32	7.57	7.50	7.34	7.43	7.31	7.51
30-34	4.84	5.09	4.83	5.08	5.92	5.33	5.52	6.02	5.40	5.55	6.44
35-39	2.30	2.39	2.92	2.60	3.67	2.99	3.12	4.13	3.45	3.22	3.88
40-44	0.93	0.99	1.01	1.03	2.26	1.11	1.24	1.83	1.30	1.31	2.08
RELATIONSHIP STATUS											
Married	3.28	3.45	3.41	3.41	5.20**	3.78	3.89	5.19**	4.09	4.03	5.07**
De-Facto	5.52	5.42	6.03	5.78	6.35	5.96	6.02	6.72	5.87	6.15	6.29
Single	5.29	5.32	5.45	5.51	6.40**	5.84	5.91	6.18	6.02	5.72	6.38**
LABOUR FORCE											
Full Time	5.34	5.49	5.48	5.51	6.54**	5.76	5.78	6.42**	5.90	5.68	6.38**
Part Time	3.73	3.84	4.04	4.11	5.54**	4.16	4.17	5.16**	4.43	4.51	5.63**
Unemployed	3.63	3.68	3.87	3.74	5.28**	4.34	4.73	5.66**	4.72	4.62	5.37

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PARITY											
0	7.04	7.14	7.24	7.19	7.54	7.39	7.38	7.46	7.45	7.20	7.57
1	5.41	5.55	5.89	5.70	6.37	5.96	6.27	6.70	6.15	5.90	6.14
2	1.79	1.87	1.80	1.86	3.29**	2.18	2.16	3.16**	2.44	2.56	3.39**
3+	1.29	1.23	1.19	1.28	2.51**	1.35	1.68	2.69**	1.45	1.71	2.38
EDUCATION LEVEL											
Bach+	5.32	5.58	5.67	5.70	6.63**	5.82	5.79	6.38	5.65	5.43	6.14**
Dip/Cert	4.46	4.11	4.36	4.39	5.65**	4.70	4.96	5.71**	5.04	4.98	5.71**
Yr. 12 or less	3.78	3.99	4.02	3.95	5.50**	4.32	4.41	5.54**	4.75	4.75	5.78**

APPENDIX TABLE 2. CHILDBEARING EXPECTATIONS: MEN AND WOMEN'S MEAN SCORES BY SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES, 2001-2011.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Men: (20-49yrs)											
AGE											
20-24	7.21	7.22	7.29	7.05	7.18	7.08	7.05	7.20	7.17	7.29	7.55
25-29	6.61	6.29	6.81	7.28	7.33	7.43	7.04	7.08	7.05	6.98	7.25
30-34	4.98	4.96	4.80	5.02	5.68	5.50	5.56	6.29	5.65	6.14	6.22
35-39	2.62	3.12	3.02	3.19	3.85	3.16	3.18	3.99	3.18	3.31	3.89
40-44	1.30	1.31	1.38	1.36	1.90	1.55	1.48	2.33	1.94	1.90	2.51
45-49	0.50	0.48	0.69	0.70	2.24	0.76	0.86	1.82	0.62	0.62	1.70
RELATIONSHIP STATUS											
Married	2.60	2.55	2.51	2.63	4.70**	2.89	2.87	4.79**	3.23	3.13	4.47**

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De-Facto	4.88	4.84	5.06	4.93	5.49	4.94	5.16	6.08**	5.13	5.46	5.90
Single	4.88	4.97	5.04	5.23	5.62	5.22	5.17	5.62	5.13	5.36	5.77
LABOUR FORCE											
Full Time	3.62	3.72	3.77	3.92	5.21**	4.06	4.08	5.39**	4.24	4.34	5.32**
Part Time	5.04	4.87	4.88	4.93	6.07	5.00	5.10	5.33	4.82	5.14	6.02
Unemployed	3.90	3.61	3.79	3.88	5.10	3.82	3.72	5.59**	4.31	4.47	5.13**
PARITY											
0	5.84	5.92	5.97	6.07	6.29	6.11	5.98	6.30	5.94	6.09	6.47
1	4.56	4.45	4.73	4.68	5.28	4.83	4.93	6.20**	5.40	5.16	5.60**
2	1.38	1.29	1.19	1.30	2.76**	1.44	1.58	2.59**	1.74	1.72	2.73**
3+	0.82	0.75	0.70	0.68	2.12**	0.80	0.88	2.44**	1.04	1.37	2.40**
EDUCATION LEVEL											
Bach+	4.30	4.30	4.53	4.56	5.85**	4.89	4.84	5.46	4.84	4.90	5.46
Dip/Cert	3.35	3.34	3.34	3.43	5.03**	3.37	3.56	5.18**	3.77	3.75	4.96**
Yr. 12 or less	3.93	3.99	4.03	4.25	5.15**	4.40	4.27	5.56**	4.52	4.80	5.70**
Women: (20-44 yrs)											
AGE											
20-24	7.35	7.20	7.50	7.70	7.89	7.52	7.50	7.80	7.40	7.40	7.64
25-29	6.31	6.36	6.15	6.38	6.91	7.12	6.94	6.98	7.07	6.94	7.22
30-34	4.20	4.43	4.15	4.43	5.18	4.64	4.75	5.41	4.60	4.73	5.59
35-39	1.55	1.70	2.06	1.85	2.70	2.07	2.31	3.15	2.42	2.30	2.91
40-44	0.34	0.41	0.53	0.54	1.29	0.55	0.63	1.03	0.57	0.67	1.06

RELATIONSHIP STATUS

Married	2.84	2.90	2.82	2.88	4.53**	3.25	3.28	4.63**	3.36	3.33	4.31**
De-Facto	5.25	5.24	5.51	5.24	5.82	5.44	5.56	6.42**	5.51	5.71	5.92
Single	4.55	4.67	4.76	5.01	5.76**	5.19	5.20	5.57	5.28	5.21	5.71

LABOUR FORCE

Full Time	4.73	4.96	4.71	4.87	5.89**	5.12	5.07	5.86**	5.26	5.18	5.72**
Part Time	3.20	3.27	3.53	3.58	4.87**	3.61	3.59	4.67**	3.70	3.87	4.97**
Unemployed	3.22	3.17	3.34	3.38	4.72**	3.83	4.18	5.13**	4.08	3.96	4.77**

PARITY

0	6.39	6.58	6.54	6.62	7.04	6.83	6.76	7.03	6.75	6.69	7.04
1	4.88	4.91	5.07	5.07	5.50	5.13	5.48	5.96	5.22	5.25	5.29
2	1.39	1.36	1.26	1.41	2.51**	1.55	1.60	2.63**	1.90	1.86	2.53**
3+	0.87	0.80	0.82	0.87	1.95**	1.02	1.11	2.02**	0.94	1.13	1.95**

EDUCATION LEVEL

Bach+	4.74	4.99	5.01	5.07	5.98**	5.29	5.21	5.74	5.02	4.91	5.45
Dip/Cert	3.76	3.50	3.69	3.85	5.06**	3.98	4.23	5.14**	4.36	4.43	5.01
Yr. 12 or less	3.36	3.51	3.46	3.51	4.87**	3.80	3.83	5.12**	4.06	4.08	5.22**

APPENDIX TABLE 3. INTENDED FAMILY SIZE: MEN AND WOMEN'S MEAN SCORES BY SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES , 2001-2011.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Men: (20-49yrs)											
AGE											
20-24	1.84	1.77	1.82	1.82	2.40	1.79	1.78	2.50	1.86	1.88	2.45
25-29	1.89	1.75	1.90	2.14	2.56	2.09	1.94	2.60	1.92	1.83	2.47
30-34	1.86	1.84	1.85	1.81	2.60	1.96	1.94	2.36	1.95	2.00	2.41
35-39	1.83	1.92	1.90	1.88	2.65	1.94	1.90	2.64	1.84	1.85	2.50
40-44	2.07	2.09	2.04	2.00	2.63	1.93	1.91	2.98	2.02	1.90	2.71
45-49	2.25	2.20	2.14	2.24	2.92	2.11	2.06	2.23	1.95	1.89	2.24
RELATIONSHIP STATUS											
Married	2.35	2.34	2.33	2.41	2.82**	2.37	2.35	2.73**	2.38	2.32	2.57**
De-Facto	1.90	1.90	1.89	1.85	2.45**	1.87	1.90	2.44**	1.96	1.93	2.48**
Single	1.49	1.47	1.53	1.56	2.40**	1.56	1.46	2.45**	1.42	1.43	2.39**
LABOUR FORCE											
Full Time	1.99	1.99	1.99	2.01	2.48**	1.99	1.95	2.49**	1.98	1.97	2.42**
Part Time	1.77	1.80	1.67	1.87	2.57**	1.90	1.97	2.55**	1.82	1.70	2.44**
Unemployed	1.88	1.71	1.89	1.88	2.86**	1.90	1.69	2.78**	1.67	1.55	2.71**
PARITY											
0	1.34	1.33	1.36	1.45	2.36**	1.42	1.37	2.36**	1.37	1.39	2.32**
1	1.63	1.61	1.67	1.72	2.63**	1.70	1.69	2.63**	1.79	1.77	2.53**
2	2.16	2.11	2.12	2.11	3.47**	2.14	2.18	3.20**	2.21	2.14	3.22**
3+	3.59	3.62	3.57	3.58	4.89**	3.68	3.59	4.88**	3.60	3.52	4.14**

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EDUCATION LEVEL

Bach+	2.03	1.92	1.99	2.00	2.52**	2.00	1.95	2.54**	1.95	2.01	2.38**
Dip/Cert	2.02	2.02	2.04	2.02	2.54**	2.00	1.99	2.45**	2.01	1.91	2.50**
Yr. 12 or less	1.85	1.85	1.83	1.94	2.55**	1.93	1.85	2.585**	1.81	1.80	2.47**

Women: (20-44 yrs)

AGE

20-24	2.10	2.01	2.03	2.08	2.46	2.03	2.06	2.60	2.02	1.95	2.60
25-29	2.02	2.09	2.01	2.11	2.65	2.15	2.01	2.48	2.07	2.05	2.49
30-34	2.00	2.02	2.08	2.03	2.41	2.11	2.13	2.57	2.15	1.98	2.50
35-39	2.19	2.21	2.10	2.16	2.64	2.14	2.14	2.44	2.08	2.03	2.49
40-44	2.20	2.25	2.24	2.28	2.31	2.18	2.20	2.54	2.13	2.20	2.19

RELATIONSHIP STATUS

Married	2.33	2.30	2.31	2.36	2.59**	2.36	2.34	2.62**	2.36	2.31	2.60**
De-Facto	2.01	1.93	2.00	1.96	2.53**	2.02	2.03	2.41**	2.06	2.03	2.41**
Single	1.83	1.46	1.85	1.90	2.44**	1.86	1.85	2.54**	1.77	1.72	2.54**

LABOUR FORCE

Full Time	1.81	1.84	1.81	1.84	2.34**	1.88	1.84	2.32**	1.83	1.75	2.35**
Part Time	2.13	2.17	2.17	2.15	2.45**	2.21	2.16	2.60**	2.16	2.16	2.59**
Unemployed	2.44	2.41	2.39	2.50	2.97**	2.41	2.49	2.94**	2.39	2.39	2.81**

PARITY

0	1.50	1.54	1.55	1.59	2.33**	1.64	1.59	2.34**	1.59	1.52	2.37**
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WORK IN PROGRESS- PLEASE DO NOT CITE WITHOUT PERMISSION.

1	1.65	1.65	1.65	1.72	2.44**	1.66	1.76	2.56**	1.74	1.69	2.46**
2	2.13	2.14	2.12	2.12	3.60**	2.15	2.13	3.39**	2.20	2.19	3.37**
3+	3.63	3.63	3.59	3.66	4.56**	3.64	3.65	4.63**	3.56	3.57	4.47**
EDUCATION LEVEL											
Bach+	1.87	1.89	1.90	1.94	2.40**	2.01	1.94	2.37**	1.99	1.93	2.39**
Dip/Cert	2.02	2.02	2.06	2.12	2.43**	2.04	2.12	2.55**	2.08	2.08	2.63**
Yr. 12 or less	2.25	2.28	2.23	2.25	2.66**	2.26	2.22	2.70**	2.17	2.12	2.56**

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