iPS Institute of
Policy Studies

Perception of Policies in Singapore Survey (POPS) (7):
Perceptions of the Marriage & Parenthood Package

Report

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Acknowledgement

Perceptions of Policies in Singapore 7- POPS(7)

PERCEPTIONS OF THE MARRIAGE & PARENTHOOD PACKAGE 2013

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Abstract

POPS or Perception of Policies in Singapore Survey is a series of short surveys on issues of public interest conducted by the Institute of Policy Studies. The series seeks to provide timely snap-shots of how stakeholders perceive the policy being investigated.

The Perceptions of Policies in Singapore (POPS) 7: Perceptions of the Marriage and Parenthood Package 2013 survey was undertaken to examine the attitudes of married Singaporeans towards the government's various Marriage & Parenthood (M&P) measures as they existed in January 2013, in view of the constant low fertility levels. The project builds on a similar survey conducted in 2009 on perceptions and attitudes towards the Marriage & Parenthood Package 2008, which was reported upon in IPS Perceptions of Policies in Singapore (POPS) 2.

Conducted from July to September 2014, the POPS(7) survey polled 2,000 married Singapore citizens and permanent residents (the resident population) aged 21 to 49 years to investigate the adequacy of the M&P Package. The survey looked into whether the respondents were aware of the M&P measures, and whether they felt the measures were conducive to their own and other Singaporean couples' future child-bearing decision.

PERCEPTIONS OF THE MARRIAGE & PARENTHOOD PACKAGE 2013

SECTION 1: INTRODUCTION

1.1   The cornerstones of Singapore's pro-natalist policy stance in the past decade have been a series of increasingly generous and expansive Marriage & Parenthood Packages, announced in 2001, 2004, 2008 and most recently in January 2013. Notwithstanding this, Singapore's Total Fertility Rate (TFR) has remained at "ultra-low"[1] levels, with the TFR for the ten year period to 2013 ranging from 1.15-1.29 births per woman.   Is it that as Jones et al. (2009) have argued, "the general consensus about pro-natalist policies in East Asian countries seems to be that they have failed, because there is no evidence that fertility has risen as a result of their introduction"?

1.2   From July to September 2014, the Institute of Policy Studies (IPS) conducted a survey of married Singaporean citizens and permanent residents of reproductive ages (specifically those aged 21 to 49 years) to discover their views on the 2013 Marriage and Parenthood Package about eighteen months after the measures were announced.   The survey was conducted by way of a 20-question questionnaire administered face-to-face, and 2,000 valid responses were collected (respondent demographics are set out in Appendix 1).   This survey (known as POPS(7)) is a follow-on study that asked similar questions as the IPS' Perceptions of Policies in Singapore survey 2 (POPS(2)) conducted in 2009, one year after the announcement of the Marriage & Parenthood Package 2008.   We compare the results from both surveys to identify trends in perceptions of Singapore's pro-natalist policies.

1.3   The Marriage and Parenthood Package 2013 includes a large number of separate policy measures relating to:

   a) **setting up a home**;

      i)   Housing Schemes and Grants (unchanged from 2008)

      ii) Parenthood Priority Scheme (new in 2013)

      iii) Parenthood Provisional Housing Scheme (new in 2013)

   b) **having children**;

      i)   Medisave Maternity Package (unchanged from 2008)

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[1] Ultra-low fertility levels are defined as a Total Fertility Rate (TFR) of less than 1.3 births per woman (source: Jones et al (2009)). In Asia, Japan, Singapore, Taiwan, South Korea and Hong Kong SAR fall into this definition of having 'ultra-low" fertility levels with 2012 TFR lower than 1.3 (source: United Nations Population Division, 2014)

ii) Medisave for Assisted Conception Procedures (unchanged from 2008)

iii) Enhanced Co-Funding for Assisted Reproduction Technology (ART) Treatment (enhanced in 2013)

iv) Delivery Fees for Higher Order Births (enhanced in 2013)

c) **raising and caring for children**;

i) Enhanced Baby Bonus Cash Gift (enhanced in 2013)

ii) Baby Bonus Child Development Account (enhanced in 2013)

iii) Medisave Grant for Newborns (new in 2013)

iv) Medishield Coverage for Congenital and Neonatal Conditions (new in 2013)

v) Parenthood Tax Rebate (unchanged from 2008)

vi) Qualifying Child Relief and Handicapped Child Relief (unchanged from 2008)

vii) Working Mother's Child Relief (unchanged from 2008)

viii) Grandparent Caregiver Relief (unchanged from 2008)

ix) Enhanced Subsidies for Centre-based Infant and Childcare (enhanced in 2013)

x) Enhanced Foreign Domestic Worker Levy Concession (enhanced in 2013)

d) **supporting work-life harmony**;

i) Maternity Leave (unchanged from 2008)

ii) Extended Child Care Leave (enhanced in 2013)

iii) Unpaid Infant Care Leave (unchanged from 2008)

iv) Adoption Leave (new in 2013)

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     v) Enhanced Maternity Protection for Pregnant Employees (enhanced in 2013)

     vi) Government-Paid Maternity Benefit (new in 2013)

     vii) Work-Life Grant (enhanced in 2013)

   e) **encouraging shared parental responsibilities**.

     i) Paternity Leave (new in 2013)

     ii) Shared Parental Leave (new in 2013)

1.4   More details of the individual measures contained in the M&P Package 2013 are set out in Appendix 3 (on page 45).

SECTION 2: SURVEY METHODOLOGY

2.1   Face-to-face interviews were conducted by InResearch Pte Ltd, a research services firm, with 2,000 married Singaporean citizens and permanent residents aged 21 through 49 years of both sexes, selected via multiple-stage sampling with quota (to ensure a nationally representative sample based on the proportions of married persons aged 21 to 49 years as set out in the Census of Population Singapore 2010). In the first stage, all households in Singapore were grouped into Reticulated Units (RUs) with 200 households of the same house-type in each, from which a random sample of 100 RUs were obtained. Thereafter 20 households were selected from each selected RU and interview conducted with one eligible person in the selected household. Substitution was allowed in cases where the selected household did not have an eligible respondent or the person refused to take part. In these cases, matching dwellings to the left, right, above or below the selected dwelling were identified to participate in the survey.

2.2   A questionnaire in English, Mandarin and Malay was used to collect the views of respondents. Fieldwork was conducted from July to September 2014.

2.3   The detailed characteristics of the 2,000 respondents are set out in Appendix 1 of this report. The gender breakdown of the respondents was 46.8% male and 53.2% female, with 8.8% of the respondents aged 21-29 years, 42.5% in the 30-39 years age group and 48.8% aged 40-49 years. Chinese respondents made up 70.7% of the sample, with Malays and Indians 13.3% and 12.7% respectively. Other races formed 3.4%. The sample was representative of married persons of reproductive ages found in the 2010 Census of Population.

SECTION 3: MAIN SURVEY FINDINGS

3.1   Our analysis of the survey responses from cross-tabulation as well as from regression modelling indicates the main variables that have the greatest impact (either singly or in combination) are respondents' age, their stage of family formation (whether or not they had achieved their intended family size) and to a lesser extent, their gender.

3.2   There is academic literature that suggests that fertility is somewhat pro- cyclically linked to the state of the economy and in particular to employment- generating effect of upswings in the business cycle (see amongst others, Parr and Guest, 2011, Sobotka, Skirbekk and Philipov, 2011).   Notwithstanding this, we were unable to identify any high-level macro-economic factors to explain the differences between the results of the POPS(2) study conducted in 2009 at the tail-end of an economic down-turn and the rather full-employment conditions (with significant median wage growth in the preceding three years) under which the POPS(7) survey was conducted in 2014.

3.3   In this section of the report, we focus primarily on age, stage of family formation and gender in interpreting the survey results in the various dimensions of conduciveness of the Package, respondent awareness and perceived influence of each measure in child-bearing decisions, and refer to other variables such as income, ethnicity, or specific factors such as whether the respondent had experience of paternity or shared parental leave only when it is relevant.   The regression modelling is described more fully in Appendix 2.

Conduciveness of the M&P Package

3.4   One of the objectives of the POPS(7) study was to understand whether the M&P Package 2013 as a whole had any impact on the child-bearing decision- making. POPS(7) respondents were asked if the M&P Package 2013 as a whole was conducive for Singaporean couples to have children in the first instance (Question A6), and secondly whether the Package was conducive for the respondent and his/her spouse to have children (Question A7).   A large majority of respondents (70%, n=1,397) indicated that the Package was conducive for Singaporean couples to have children. About 40% (n=800) answered in the affirmative when the question was personalised to the respondent and his/her spouse (Figure 1).

Figure 1. Question A6 and A7: Conduciveness of M&P Package 2013 in general and specific to respondent (and spouse)
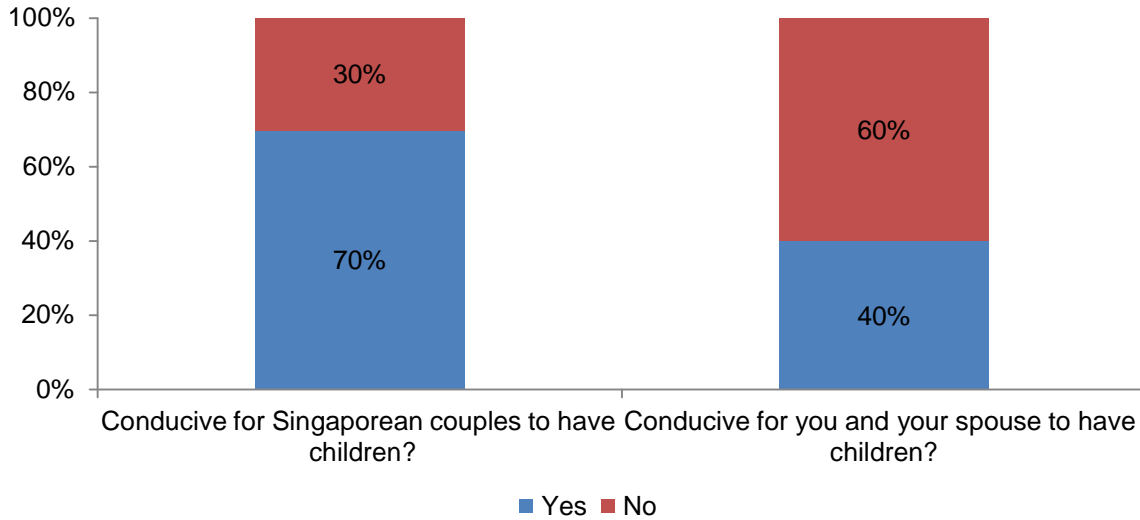
N=2,000, married residents aged 21-49 years.

3.5 There was not much age-variation in the responses to the question of the Package's conduciveness to child-bearing decisions in general. However, the responses did vary by age when the question was personalised, with 62% of younger respondents aged 21-29 years (n=176) answering affirmatively when the question was posed to them as a married couple, a still substantial 49% for the 30-39 age group, and 28% for respondents in their forties.

Figure 2. Question A6 and A7: Conduciveness of M&P Package 2013 in general and specific to respondent (and spouse) by age (% of Yes responses)

N=2,000, married residents aged 21-49 years.

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3.6   Respondents who had not yet achieved their intended number of children (as derived from the difference between their responses to questions about their intended number of children and their actual number of children at the time of the survey) formed 37.4% (n=748) of the POPS(7) sample while the remaining respondents already had or even exceeded the number of children they intended to have. Those respondents who had not completed their families were more likely to indicate that the M&P Package 2013 was conducive for them and their spouses to have children (57%) than those who had completed their families (30%) even as both groups were just as likely to say that the package was conducive for Singaporean couples to have more children.
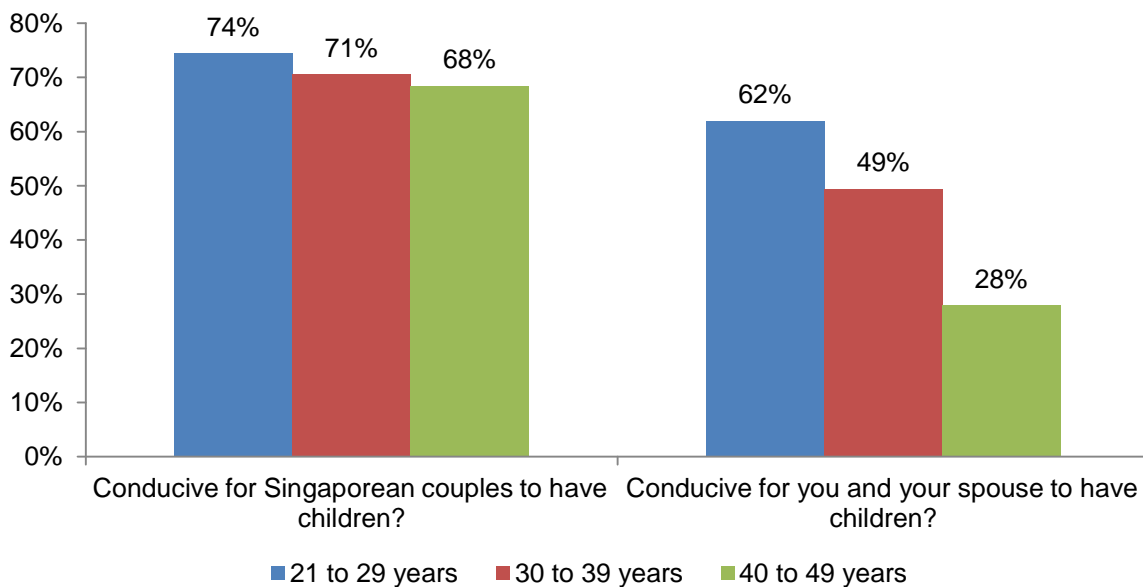
Figure 3. Question A6 and A7: Conduciveness of M&P Package 2013 in general and specific to respondent (and spouse) by stage of family formation (whether the respondent had completed his/her family) (% of Yes responses)

N=1,999, married residents aged 21-49 years.

3.7   Although male and female respondents were little different in their responses about the conduciveness of the M&P Package 2013 for Singaporean couples in general, men (43%) were more likely than women (37%) to indicate that the package was conducive to them and their spouses to have children (Figure 4).

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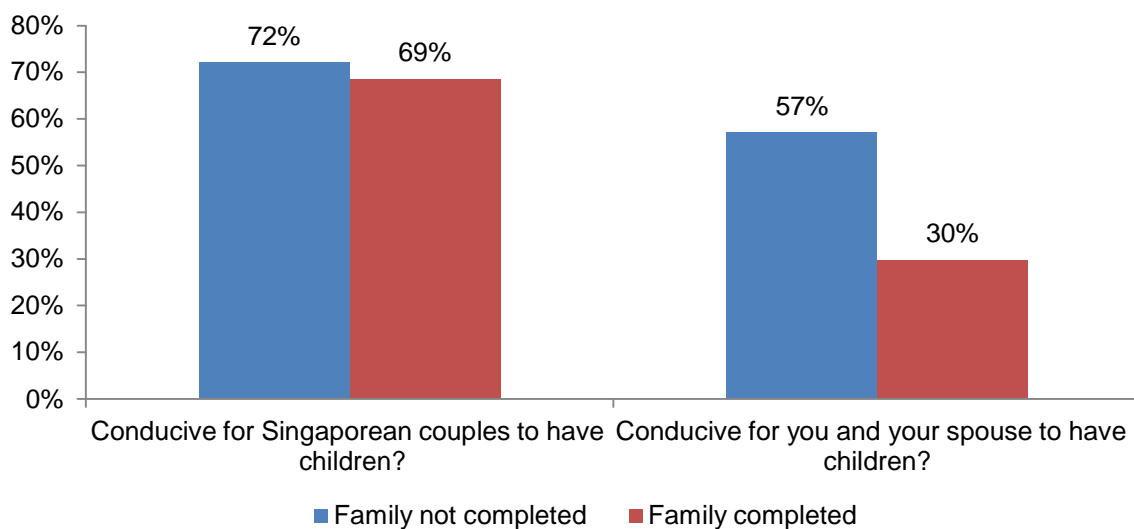Christopher Gee, Yap Mui Teng and Loh Soon How

Figure 4. Questions A6 and A7: Conduciveness of M&P Package 2013 in general and specific to respondent (and spouse) by gender (% of Yes responses)

N=2,000, married residents aged 21-49 years.

3.8   The M&P Package 2013 seemed to appeal more to respondents with monthly household income below $5,000 than higher income respondents as conducive for the respondent and his/her spouse to have a child (Figure 5). These results may be due to a relative income/wealth effect where the perceived value of the benefits of the Package is higher for the lower income groups compared to those with higher incomes.

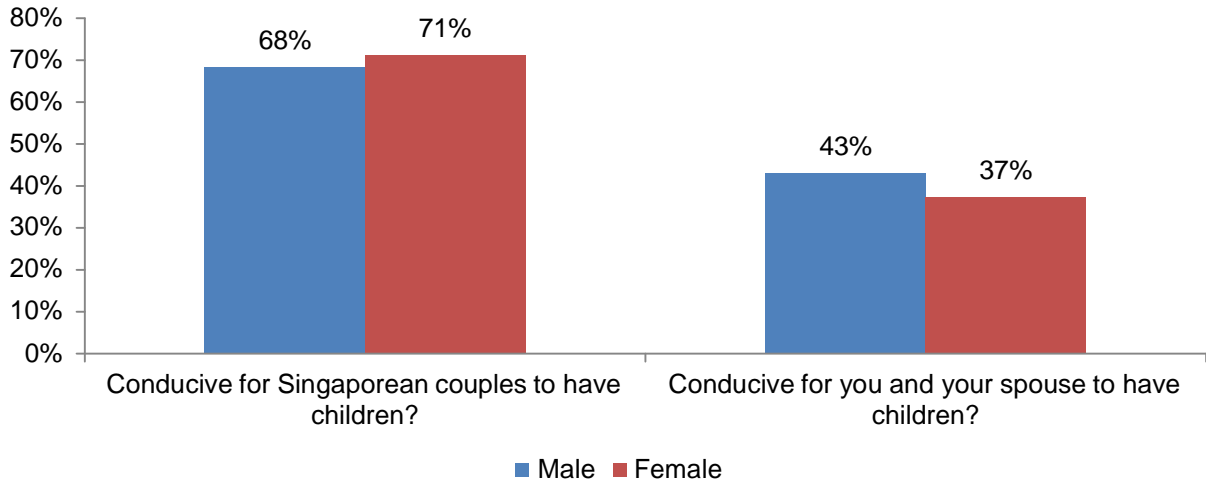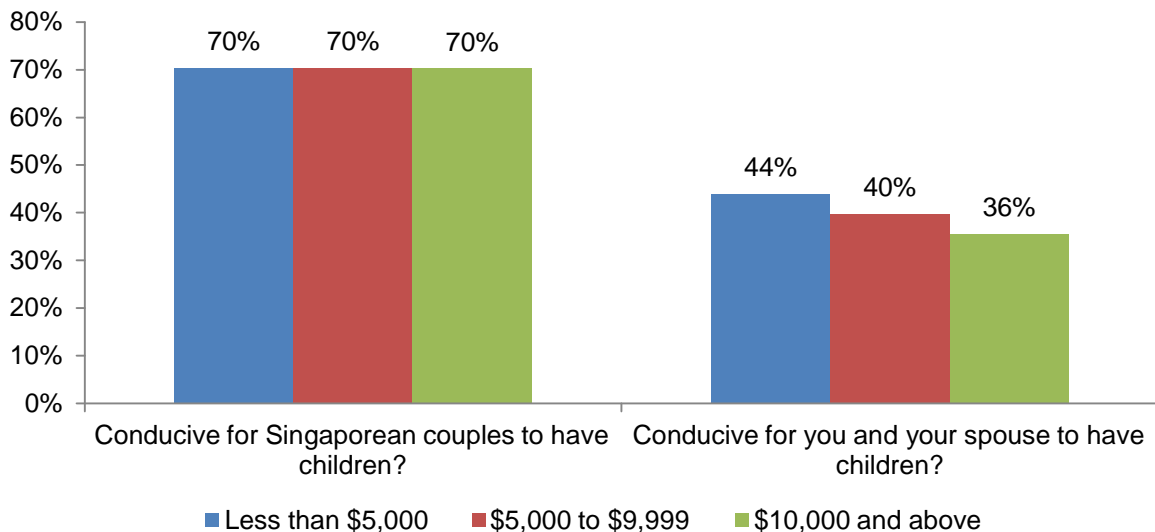**Figure 5. Question A6 and A7: Conduciveness of M&P Package 2013 in general and specific to respondent (and spouse) by household income group (% of Yes responses)**

N=1,865, married residents aged 21-49 years.

Awareness and influence of specific measures

3.9   For each of the specific measures in the M&P Package 2013, POPS(7) respondents were asked if they were aware of the measure, and whether or not they felt the measure would influence couples like themselves to have children (Questions A1-A5). In the interviews, show cards with brief explanations of each of the measures were shown to the respondents.

3.10   More than half the POPS(7) respondents were aware of 18 or more specific measures out of the 26 in the M&P Package 2013, with 9% (179 respondents) indicating awareness of all 26 M&P measures (Figure 6).   Only 5% (100 respondents) were aware of five or fewer of the M&P Package 2013 measures.

3.11   The average number of measures that POPS(7) respondents indicated would have influence on child-bearing decisions was eleven, with some polarisation in the responses (Figure 7).

Figure 6. Questions A1-A5: Number of M&P measures each respondent was aware of (26 in total)	**Figure 7. Questions A1-A5: Number of M&P measures each respondent believes will influence child-bearing decisions (26 in total)**
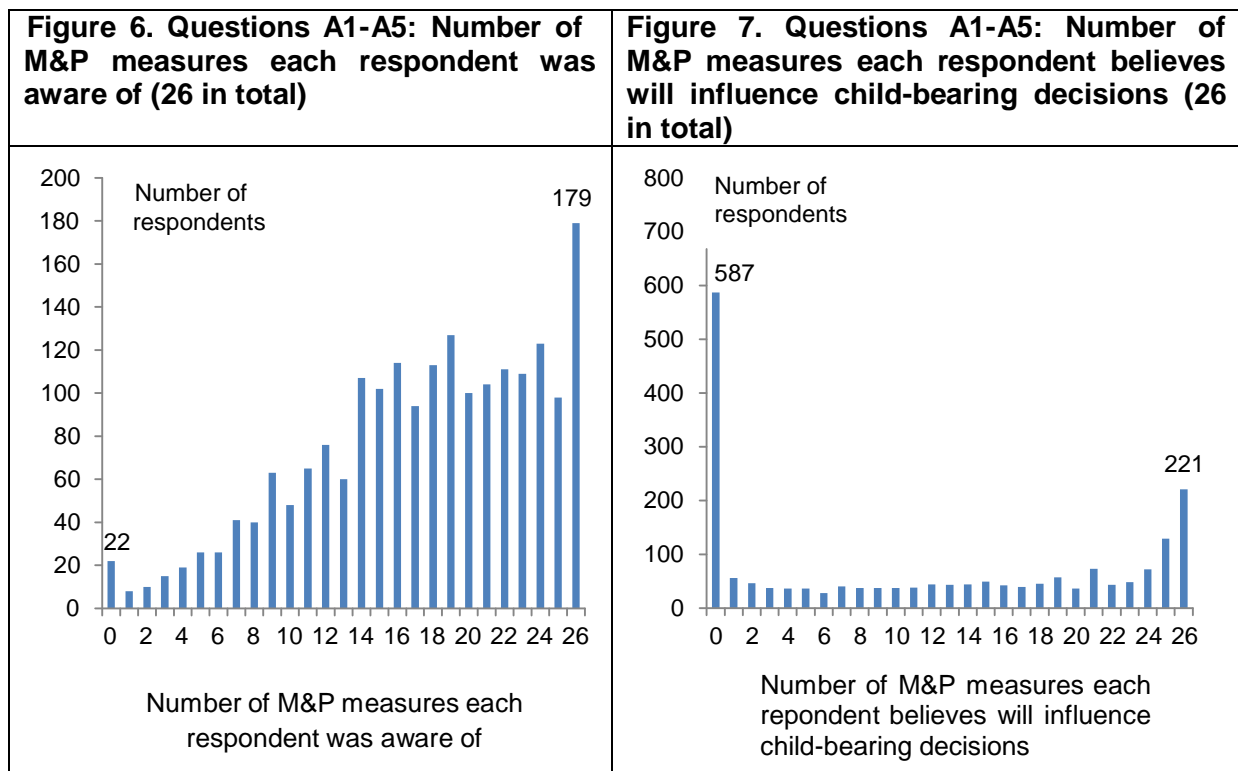
N=2,000 married residents aged 21-49 years.

3.12   Those who indicated greater prior awareness of each of the measures in the package before the interview were more likely to have sought out information about the 2013 Package (on accessing information, see paragraph 3.42 below).

3.13   Whilst 11% of the respondents (221 persons) said that all 26 measures would have an influence on child-bearing decisions, a sizeable minority of 29% (587 respondents) indicated that none of the measures would influence child-bearing decisions. Further analysis of the latter respondents reveals that they were more

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likely to be older (almost two-thirds were in their 40s) and to have completed their families.

3.14   POPS(7) survey respondents had a very high level of awareness of some of the specific M&P policy measures, with 85%-95% of respondents having heard or read about measures such as the measures on Maternity Leave, Enhanced Baby Bonus Cash Gift, and Extended Childcare Leave (Table 1).   Schemes like the Paternity Leave, the Housing Grants Scheme and the Parenthood Tax Rebate were also known to more than 80%.   The lowest level of awareness were found for measures such as the (flat) Delivery Fees for Higher Order Births, Enhanced Co- funding for Assisted Reproduction Technology (ART) Treatment and Adoption Leave (less than 40% of respondents were aware of these measures).   These were either new (Adoption Leave) or just enhanced in 2013 (flat Delivery Fee and enhanced co- funding for ART treatment).   Awareness of the other measures fell somewhere in between these extremes (see Table 1).

Table 1. Questions A1-A5: Awareness of specific measures in M&P Package 2013

	Yes
Maternity Leave (unchanged)	94.5%
Enhanced Baby Bonus Cash Gift (enhanced)	91.1%
Baby Bonus Child Development Account (enhanced)	86.0%
Extended Child Care Leave (enhanced)	85.0%
Paternity Leave (new)	84.9%
Housing Schemes & Grants (unchanged)	81.6%
Parenthood Tax Rebate (unchanged)	80.4%
Medisave Maternity Package (unchanged)	75.2%
Working Mother's Child Relief (unchanged)	72.6%
Enhanced Subsidies for Centre-Based Infant & ChildCare (enhanced)	71.0%
Parenthood Priority Scheme (new)	69.9%
Qualifying Child Relief and Handicapped Child Relief (unchanged)	68.8%
Shared Parental Leave (new)	68.2%
Enhanced Foreign Domestic Worker Levy Concession (enhanced)	65.6%
Medisave Grant for Newborns (new)	65.5%
Enhanced Maternity Protection for Pregnant Employees (enhanced)	64.2%
Unpaid Infant Care Leave (unchanged)	63.2%
Government-Paid Maternity Benefit (new)	61.6%
Parenthood Provisional Housing Scheme (new)	58.9%
Work-Life Grant (enhanced)	56.1%

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Grandparent Caregiver Relief (unchanged)	56.0%
MediShield Coverage for Congenital & Neonatal Conditions (new)	49.5%
Medisave for Assisted Conception Procedures (unchanged)	47.5%
Enhanced Co-Funding for Assisted Reproduction Technology (ART) Treatment (enhanced)	38.8%
Delivery Fees for Higher Order Births (enhanced)	38.5%
Adoption Leave (new)	35.3%

N=2,000 married residents aged 21-49 years.

3.15   Half or more of the POPS(7) respondents believed that M&P measures such as Maternity Leave and Government-Paid Maternity Benefits, Parenthood Tax Rebate, Extended Childcare Leave, Enhanced Baby Bonus Cash Gift and Medisave Maternity Package would influence couples like themselves to have a child or additional children (Table 2). Measures with the least perceived influence were items such as Adoption Leave, Parenthood Provisional Housing, Enhanced Co- Funding for Assisted Reproduction Technology Treatment and Medisave for Assisted Conception Procedure (in reverse order).

Table 2. Questions A1-A5: Influence of specific measures in M&P Package 2013

Do you think the [M&P measure] will influence couples like you to have children/more children? (% saying yes)	All respondents	Only respondents who had prior awareness of the measure
Maternity Leave	55.4%	56.7%
Parenthood Tax Rebate	52.0%	55.8%
Extended Child Care Leave	51.5%	54.4%
Enhanced Baby Bonus Cash Gift	50.4%	51.0%
Government-Paid Maternity Benefit	50.3%	55.2%
Medisave Maternity Package	50.1%	54.4%
Enhanced Subsidies for Centre-Based Infant & Child Care	49.4%	54.2%
Paternity Leave	49.0%	51.3%
Working Mother's Child Relief	48.6%	53.3%
Work-Life Grant	48.0%	55.3%
Baby Bonus Child Development Account	47.9%	49.4%
Medisave Grant for Newborns	47.7%	50.9%
Enhanced Maternity Protection for Pregnant Employees	47.6%	53.7%

Shared Parental Leave	45.9%	50.7%
Grandparent Caregiver Relief	44.5%	45.8%
Qualifying Child Relief and Handicapped Child Relief	43.3%	47.9%
Enhanced Foreign Domestic Worker Levy Concession	43.2%	47.4%
Medishield Coverage for Congenital & Neonatal Conditions	43.0%	47.6%
Parenthood Priority Scheme	41.4%	45.7%
Unpaid Infant Care Leave	41.0%	47.0%
Delivery Fees for Higher Order Births	40.3%	47.8%
Housing Schemes & Grants	40.1%	43.5%
Medisave for Assisted Conception Procedures	39.6%	41.7%
Enhanced Co-Funding for Assisted Reproduction Technology (ART) Treatment	38.2%	39.0%
Parenthood Provisional Housing Scheme	37.1%	42.7%
Adoption Leave	32.0%	35.7%

N=2,000 married residents aged 21-49 years.

3.16   Those respondents who indicated prior awareness of each individual measure before the interview were slightly more likely (by one to seven percentage points) to answer in the affirmative when asked whether specific measures would influence couples to have children.   The smallest improvements in their answers about the measure's perceived influence over child-bearing with prior awareness were with regard to the Baby Bonus Cash Gift, Enhanced Co-funding for ART Treatment, Maternity Leave and Grandparent Caregiver Relief.   The largest improvements with prior awareness were with regard to the newly introduced flat Delivery Fee regardless of order of birth, the Work-Life grant scheme, Enhanced Maternity Protection and Unpaid Infant Care Leave (the last three having to do with employment).   Respondents who have prior knowledge of the measures are likely to have provided a more considered perspective (having had more time to think about it) than those who heard it for the first time at the survey interview, and thus their responses might be more truly reflective of the perceived influence of particular measures.

Age differences in awareness and perceived influence

3.17   The age of POPS(7) respondents has an impact on both awareness of the M&P Package 2013 measures as well as their perceived influence on child-bearing decisions. The level of awareness of each of the measures is related to its likely relevance at the particular stage of the respondent's life-cycle.   For example, younger respondents (for whom setting up a home must have been a current or recent consideration) were more likely to be aware of the public housing priority schemes than older respondents (who may already be home-owners, and thus the

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issue is no longer salient), whilst older respondents who were more likely to be higher income earners were more aware of the Parenthood Tax Rebate (Figure 8).

3.18   The perceived influence of specific measures on child-bearing was linked with the age of the respondent, with the youngest respondents (aged 21-29 years) the most likely to indicate that individual measures would have an influence on couples like themselves, and the oldest respondents (aged 40 and above) the least likely to feel that the measures would influence couples like themselves (Figure 9).

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Figure 8. Questions A1-A5: Awareness of measures in the M&P Package 2013 by age group (years)

N=2,000, married residents aged 21-49 years.

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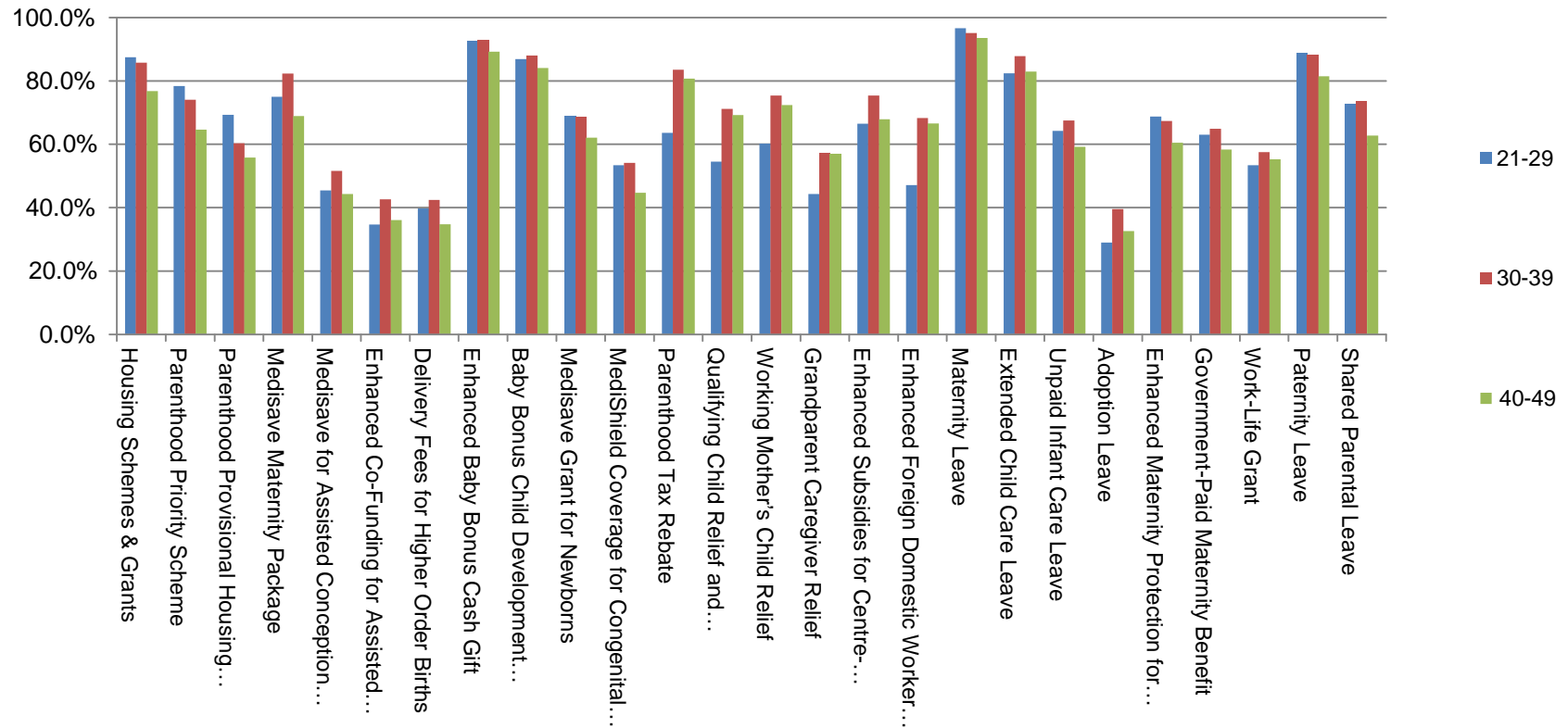
Figure 9. Questions A1-A5: Perceived influence of measures on child-bearing decisions in the M&P Package 2013 by age group (years)

N=2,000, married residents aged 21-49 years.

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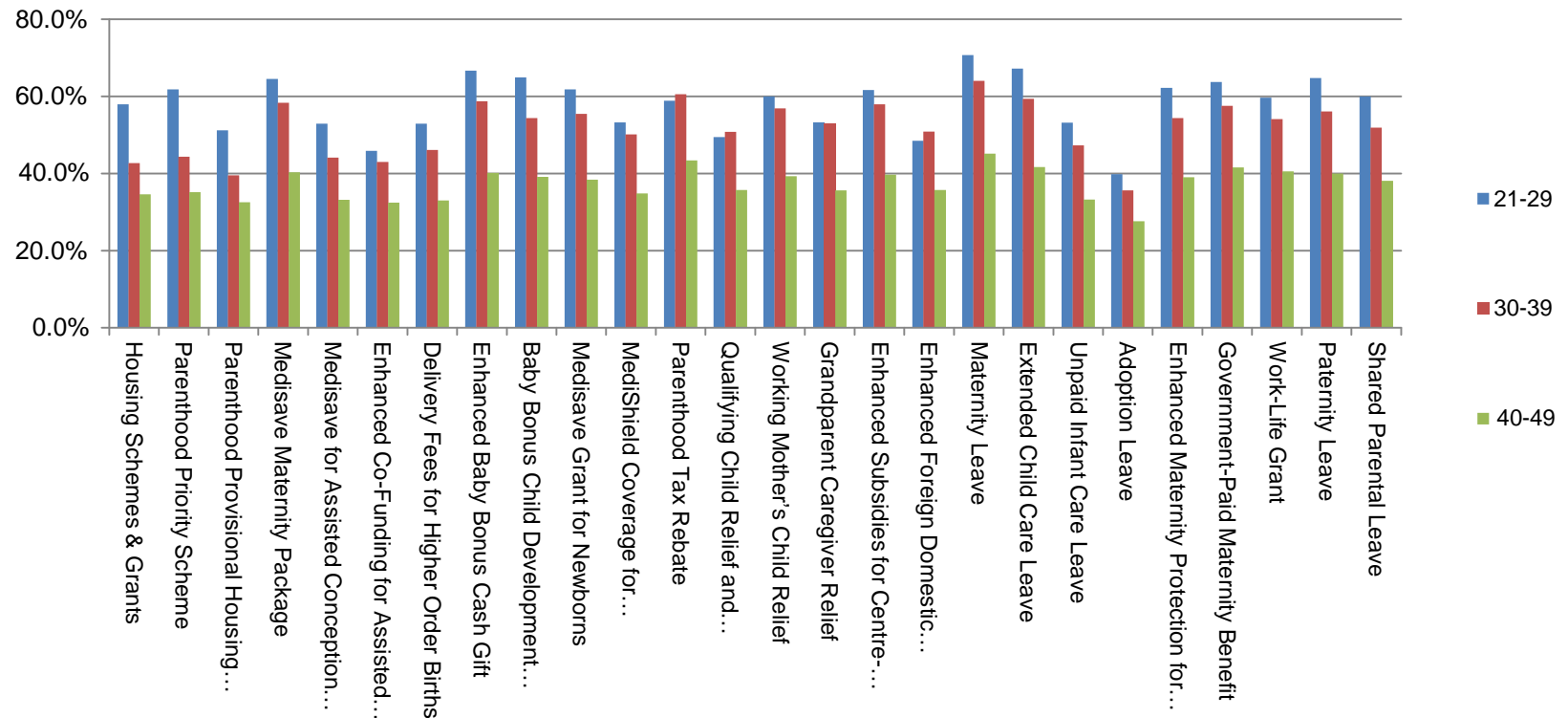
3.19. The top five measures that were perceived to be influential by each age group are shown in Table 3 below.

Table 3. Top 5 measures perceived to be influential by age group

	21 to 29 years	30 to 39 years	40 to 49 years
1st	Maternity Leave (69.9%)	Maternity Leave (63.8%)	Maternity Leave (44.8%)
2nd	Extended Child Care Leave (66.5%)	Parenthood Tax Rebate (60.2%)	Parenthood Tax Rebate (43.1%)
3rd	Enhanced Baby Bonus Cash Gift (65.9%)	Extended Child Care Leave (59.2%)	Extended Child Care Leave (41.3%)
4th	Paternity Leave (64.8%)	Enhanced Baby Bonus Cash Gift (58.3%)	Government-Paid Maternity Benefit (40.7%)
5th	Baby Bonus Child Development Account (64.2%)	Medisave Maternity Package (57.7%)	Enhanced Baby Bonus Cash Gift (39.9%)

N=2,000, married residents aged 21-49 years.

The 30-39 year old age group: peak child-bearing years

3.20   The age group 30-39 years comprised 42.5% of the POPS(7) sample (n=849). With the median age at first marriage[2] in 2013 at 30.2 years and 28.1 years for males and females respectively, and peak age-specific fertility rates[3] in the age group 30-34 years, it is this cohort whose opinions and perceptions of the M&P Package 2013 (and whose child-bearing decisions as influenced by the Package) that will likely have the greatest impact on fertility rates at this time.

3.21   This age group was in general more likely to have accessed information about the M&P Package 2013 (see paragraph 3.41 below) and to be aware of each of the specific M&P measures (Figure 8). They were also more likely, after the 21-29 year olds, to agree that the measures would have a positive influence on child-bearing decisions (Figure 9).

3.22   Leave measures such as Maternity Leave and Government-Paid Maternity Benefit, Paternity Leave, Work-Life Grant, Shared Parental Leave, Extended Childcare Leave, and financial measures such as the Parenthood Tax Rebate, Enhanced Baby Bonus Cash Gift and Medisave Maternity Package, were regarded by the greatest number of respondents aged 30-39 years as potentially having influence on child-bearing decisions. Measures such as those relating to the Parenthood Provisional Housing Scheme and the Parenthood Priority Scheme were regarded by relatively fewer respondents in this age group, perhaps reflecting the

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[2] From Department of Statistics, Population Trends 2014, Table A3.1
[3] From Department of Statistics, Population Trends 2014, Table A4.2

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fact that most married persons in this age-group may have already purchased their HDB flats.

Table 4. Questions A1-A5: Awareness and influence of measures in M&P Package 2013 amongst 30-39 year olds, ranked by the most influential measures

	Aware	Influence
Maternity Leave	95.2%	64.1%
Parenthood Tax Rebate	83.5%	60.5%
Extended Child Care Leave	87.9%	59.4%
Enhanced Baby Bonus Cash Gift	92.8%	58.7%
Medisave Maternity Package	82.3%	58.3%
Enhanced Subsidies for Centre-Based Infant & ChildCare	75.4%	57.9%
Government-Paid Maternity Benefit	64.9%	57.6%
Working Mother's Child Relief	75.4%	56.9%
Paternity Leave	88.1%	56.1%
Medisave Grant for Newborns	68.7%	55.5%
Enhanced Maternity Protection for Pregnant Employees	67.4%	54.3%
Baby Bonus Child Development Account	88.0%	54.3%
Work-Life Grant	57.5%	54.1%
Grandparent Caregiver Relief	57.4%	52.9%
Shared Parental Leave	73.4%	51.9%
Enhanced Foreign Domestic Worker Levy Concession	68.3%	50.8%
Qualifying Child Relief and Handicapped Child Relief	71.1%	50.8%
MediShield Coverage for Congenital & Neonatal Conditions	54.2%	50.2%
Unpaid Infant Care Leave	67.5%	47.3%
Delivery Fees for Higher Order Births	42.4%	46.1%
Parenthood Priority Scheme	74.1%	44.4%
Medisave for Assisted Conception Procedures	51.6%	44.1%
Enhanced Co-Funding for Assisted Reproduction Technology (ART) Treatment	42.6%	43.1%
Housing Schemes & Grants	85.7%	42.7%
Parenthood Provisional Housing Scheme	60.3%	39.5%
Adoption Leave	39.6%	35.7%

N=849 married residents aged 30-39 years.

Stage of Family Formation

3.23   Respondents' perceptions about the likely influence of the measures differed depending on whether they had attained their intended family size. Unsurprisingly, younger respondents aged below 30 years were less likely to have completed their families than the older respondents. Whilst 71% of those aged 21-29 years had not yet completed their families, just under half of those in their thirties and only 23% of those in their forties had yet to attain their desired family size (Table 5).

Table 5. Family formation stage by age group

	21 to 29 years		30 to 39 years		40 to 49 years		Total	
	No.	%	No.	%	No.	%	No.	%
Family not completed	124	70.5%	401	47.2%	223	22.9%	748	37.4%
Family completed	52	29.5%	448	52.8%	751	77.1%	1251	62.6%
Total	176	100.0%	849	100.0%	974	100.0%	1999	100.0%

N=1,999 married residents aged 21-49 years.

3.24   Those who had not completed their families were more likely to have accessed information about the M&P Package 2013, were more aware of the specific measures, and more likely to indicate that specific measures would be influential in child-bearing decision-making, as compared with those that had completed their families (Table 6).

3.25   Unsurprising as well, given that the majority of this group who had not completed their family were in the age group 30-39 years, the measures regarded as influential by the greatest proportion were similar to those in the 30-39 age group (compare Table 6 column 1 with Table 4).

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Table 6. Perceived influence of measures in the M&P Package 2013 on child-bearing decisions in the M&P Package 2013 by family formation stage

	Family not completed (column 1)	Family completed (column 2)
Maternity Leave	67.9%	47.4%
Parenthood Tax Rebate	65.1%	43.6%
Enhanced Baby Bonus Cash Gift	64.4%	41.3%
Extended Child Care Leave	63.4%	43.8%
Medisave Maternity Package	62.3%	41.6%
Medisave Grant for Newborns	61.0%	38.8%
Paternity Leave	60.8%	41.0%
Baby Bonus Child Development Account	60.4%	39.7%
Government-Paid Maternity Benefit	60.0%	43.1%
Enhanced Subsidies for Centre-Based Infant & ChildCare	59.9%	42.1%
Working Mother's Child Relief	59.1%	41.2%
Enhanced Maternity Protection for Pregnant Employees	57.8%	39.9%
Work-Life Grant	56.3%	40.5%
Shared Parental Leave	55.9%	38.7%
Qualifying Child Relief and Handicapped Child Relief	54.4%	35.6%
Grandparent Caregiver Relief	54.0%	37.3%
MediShield Coverage for Congenital & Neonatal Conditions	53.3%	34.6%
Enhanced Foreign Domestic Worker Levy Concession	51.7%	36.6%
Parenthood Priority Scheme	50.3%	35.5%
Housing Schemes & Grants	49.9%	33.3%
Unpaid Infant Care Leave	49.2%	35.3%
Delivery Fees for Higher Order Births	47.3%	33.9%
Medisave for Assisted Conception Procedures	46.4%	33.1%
Enhanced Co-Funding for Assisted Reproduction Technology (ART) Treatment	44.4%	31.8%
Parenthood Provisional Housing Scheme	43.4%	32.1%
Adoption Leave	36.1%	26.0%

N=1,999, married residents aged 21-49 years.

Gender differential in awareness and perceived influence

3.26   Female respondents in this study had, in general, higher levels of awareness of each individual measure in the M&P Package 2013 than males respondents (Table 7); however, males were more likely than females to indicate that the measures would influence child-bearing decisions.

3.27   Amongst the measures with the largest gender differential, males were more likely than females to agree that Shared Parental Leave (7.5 percentage points) and Paternity Leave (7.3 percentage points) would influence the childbearing decision of couples like themselves. Enhanced Subsidies for Child and Infant Care and Unpaid Infant Care Leave were next.

Table 7. Questions A1-A5: Awareness and influence of measures in M&P Package 2013 by gender, ranked by gender difference in influence

	Males (M)		Females (F)		Difference	
	Aware	Influence	Aware	Influence	Aware	Influence
Shared Parental Leave	67.1%	49.9%	69.1%	42.4%	-2.0%	7.5%
Paternity Leave	83.4%	52.9%	86.2%	45.6%	-2.8%	7.3%
Enhanced Subsidies for Centre-Based Infant & Child Care	69.0%	52.8%	72.7%	46.4%	-3.7%	6.4%
Unpaid Infant Care Leave	63.0%	44.3%	63.3%	38.0%	-0.3%	6.3%
Work-Life Grant	55.2%	51.0%	56.8%	45.4%	-1.6%	5.6%
Maternity Leave	94.3%	58.2%	94.6%	53.0%	-0.3%	5.2%
Baby Bonus Child Development Account	86.2%	50.5%	85.8%	45.5%	0.4%	5.0%
Enhanced Foreign Domestic Worker Levy Concession	65.3%	45.7%	65.9%	41.1%	-0.6%	4.6%
Extended Child Care Leave	85.7%	53.8%	84.4%	49.4%	1.3%	4.4%
Parenthood Priority Scheme	70.0%	43.4%	69.7%	39.7%	0.3%	3.7%
Housing Schemes & Grants	82.9%	42.0%	80.4%	38.3%	2.5%	3.7%
MediShield Coverage for Congenital & Neonatal Conditions	50.1%	45.0%	49.0%	41.3%	1.1%	3.7%
Parenthood Tax Rebate	82.1%	54.0%	78.9%	50.3%	3.2%	3.7%
Enhanced Baby Bonus Cash Gift	90.4%	51.9%	91.6%	49.0%	-1.2%	2.9%
Parenthood Provisional Housing Scheme	58.1%	38.7%	59.6%	35.8%	-1.5%	2.9%
Qualifying Child Relief and Handicapped Child Relief	70.6%	44.6%	67.1%	42.1%	3.5%	2.5%
Adoption Leave	34.2%	33.3%	36.2%	30.9%	-2.0%	2.4%
Government-Paid Maternity Benefit	59.7%	51.5%	63.2%	49.3%	-3.5%	2.2%
Medisave Maternity Package	73.4%	51.1%	76.7%	49.2%	-3.3%	1.9%
Medisave Grant for Newborns	67.7%	48.7%	63.4%	46.9%	4.3%	1.8%

Grandparent Caregiver Relief	55.8%	45.4%	56.1%	43.8%	-0.3%	1.6%
Enhanced Maternity Protection for Pregnant Employees	62.1%	48.3%	66.0%	46.9%	-3.9%	1.4%
Delivery Fees for Higher Order Births	35.8%	40.7%	40.8%	40.0%	-5.0%	0.7%
Working Mother Child Relief	71.2%	48.9%	73.9%	48.3%	-2.7%	0.6%
Medisave for Assisted Conception Procedures	43.7%	39.6%	50.8%	39.5%	-7.1%	0.1%
Enhanced Co-Funding for Assisted Reproduction Technology (ART) Treatment	35.6%	37.2%	41.5%	39.0%	-5.9%	-1.8%

N=2,000, married residents aged 21-49 years.

3.28 Nevertheless, this study also found that both male and female respondents similarly considered Maternity Leave, Parenthood Tax Rebate and Extended Childcare Leave, in rank order, as the three most influential measures, though in slightly different proportions (Table 8). It was only after these three measures that males and females differed: Paternity Leave and Enhanced Subsidies for Centre- based Infant and Child Care were the next two measures considered influential by male respondents but for females, it was Government-Paid Maternity Benefit and Medisave Maternity Package.

Table 8. Top 5 measures perceived to be influential by men and women

	Men	Women
1st	Maternity Leave (58.2%)	Maternity Leave (53.0%)
2nd	Parenthood Tax Rebate (54.0%)	Parenthood Tax Rebate (50.3%)
3rd	Extended Childcare Leave (53.8%)	Extended Childcare Leave (49.4%)
4th	Paternity Leave (52.9%)	Government-Paid Maternity Leave (49.3%)
5th	Enhanced Subsidies for Centre-based Infant and Childcare (52.8%)	Medisave Maternity Package (49.2%)

N=2,000, married residents aged 21-49 years.

3.29 These gender differentials may appear surprising, However they may reflect fundamental differences in the way in which men and women think and talk about fertility (as suggested by Maher et al., 2004). The considerations that are most important for men are not necessarily those that are most important for women. It may be that many of the M&P Package measures appeal more to men as these address financial and work-lifestyle issues that reflect "society-wide constructions of men as breadwinners and providers" (Maher et al., 2004, p 5). Women however may be more concerned with matters such as career interruption, difficulties associated with birthing (the gender differential is the lowest for the M&P measures to do with assisted reproduction technology) or access to convenient childcare.

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Paternity Leave and Shared Parental Leave

3.30   Paternity leave and shared parental leave schemes were introduced in the M&P Package 2013. Under these measures, working fathers[4] of a Singaporean citizen child born on or after 1 May 2013 who are lawfully married to the child's mother are eligible for 1 week of government paid paternity leave to be taken continuously within 16 weeks of the birth of the child. They are also able to share 1 week of their spouse's 16-weeks maternity leave entitlement (if she qualifies for government-paid maternity leave), subject to the agreement of their spouse.

3.31   By the time the POPS(7) survey was conducted, the paternity leave and shared parental leave schemes had been offered to eligible working fathers for just over 14 months. A total of 9.4% (n=187) of POPS(7) respondents indicated that they made use of one or both of these leave schemes (about half of whom were men who took the leaves themselves and the balance were women whose husbands took the paternity or shared parental leave). Over two-thirds of those who availed themselves of paternity and/or shared parental leave were aged 30-39 years.

3.32   This group that had experience of paternity and/or shared parental leave were significantly more likely to say that these leave schemes for working fathers would have a positive influence on child-bearing decisions, with 64% and 54% respectively indicating that paternity leave and shared parental leave would influence child- bearing decisions (Figure 10).

Figure 10. Question A5ab and bb: Influence of paternity leave and shared parental leave on child-bearing decisions – % of Yes responses amongst those with actual experience of either or both schemes
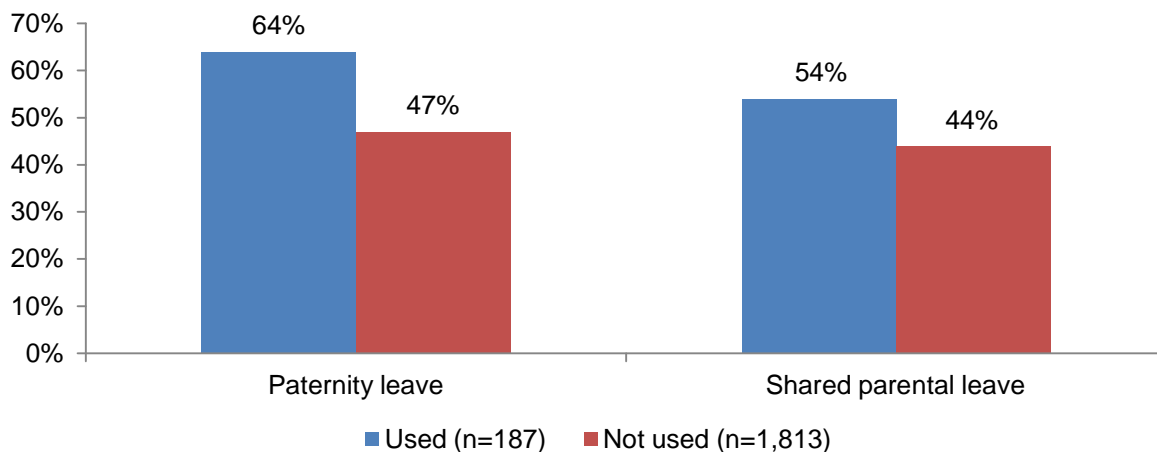
N=2,000, married residents aged 21-49 years.

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[4] Employees are required to have served their employer for at least 3 months prior to the birth of the child, whilst self-employed have to be engaged in a business, trade or profession for a continuous period of 3 months prior to the birth of the child.

3.33   Whilst there was no significant gender difference in the responses from those with experience of these two leave schemes for working fathers (see Figures 11 and 12 below), the perceptions of influence amongst women whose spouses had taken either or both of the leave schemes were very much higher than for the overall sample of female respondents.   We infer from these results that women whose spouses had availed themselves of paternity and shared parental leave could be more willing to have another or more children than those without this experience.

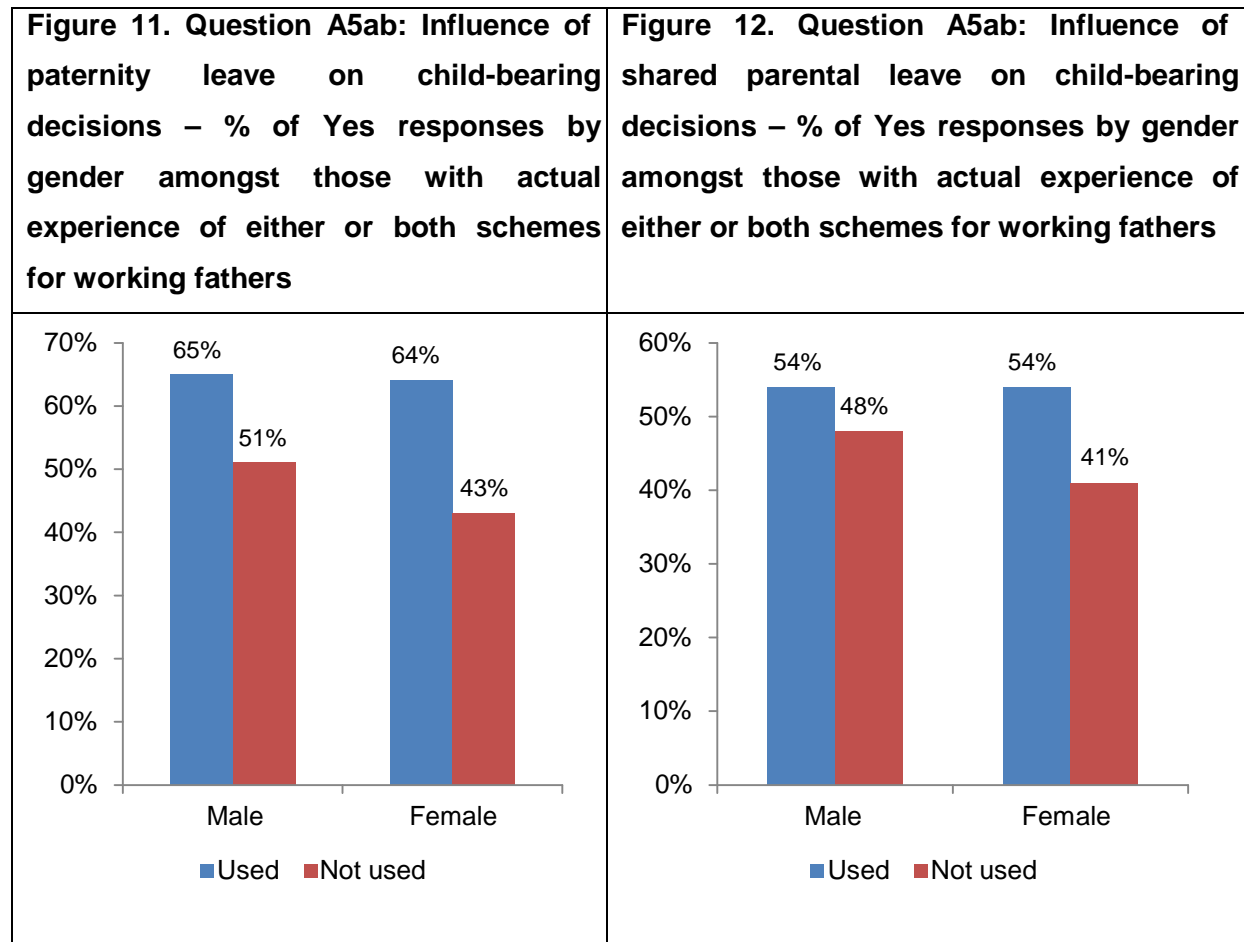| **Figure 11. Question A5ab: Influence of paternity leave on child-bearing decisions – % of Yes responses by gender amongst those with actual experience of either or both schemes for working fathers**	**Figure 12. Question A5ab: Influence of shared parental leave on child-bearing decisions – % of Yes responses by gender amongst those with actual experience of either or both schemes for working fathers**

N=2,000 married residents aged 21-49 years.

Comparison of perceptions of the 2013 M&P Package with that of 2008

3.34   The POPS(2) sample comprised of 2,010 married respondents aged 20-49 years of age, with age, gender and ethnic characteristics weighted according to their distributions in the resident population in 2008.   Reflecting the general ageing of the population as well as the continuation of the trend (between 2008 and 2014) of delay in median age at first marriage, the POPS(2) sample was slightly younger than the POPS(7) sample, with 11% respondents in the 20-29 age group, as compared to the POPS(7) sample where 8.9% were aged between 21 and 29 years. The economic context in which the two surveys were conducted was also somewhat different, with the POPS(2) survey conducted in the midst of an economic downturn in 2009, whereas the POPS(7) survey was carried out against a relatively more optimistic

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economic backdrop. As discussed in paragraph 3.2 above, we were unable to identify macro-economic factors that would explain the differences in the two survey results.

3.35 The levels of awareness amongst POPS(7) respondents for most of the measures in the M&P Package 2013 that were carried over and enhanced from the 2008 Marriage & Parenthood Package were higher than those recorded by POPS(2) survey respondents in 2009.

3.36 Awareness of measures such as the Working Mother Child Relief, Qualifying Child Relief and Handicapped Child Relief and the Enhanced Foreign Domestic Worker Levy Concession rose by double digit percentages (Table 10). Measures such as the Enhanced Baby Bonus Cash Gift and Maternity Leave which had already high levels of awareness in the earlier study did not record large increases in awareness between 2009 and 2014.

Table 10. Awareness of Marriage & Parenthood Measures (Comparison of POPS(7) and POPS(2): % of Yes responses)

	POPS(2)	POPS(7)	
Qns A1a-5a: Have you heard or read about …?	**2009**	**2014**	**change**
Unchanged measures			
Maternity Leave	90%	95%	+5%
Parenthood Tax Rebate	73%	80%	+7%
Medisave Maternity Package	65%	75%	+10%
Working Mother's Child Relief	57%	73%	+16%
Unpaid Infant Care Leave	54%	63%	+9%
Qualifying Child Relief and Handicapped Child Relief	53%	69%	+16%
Grandparent Caregiver Relief	49%	56%	+7%
Medisave for Assisted Conception Procedures	33%	48%	+15%
Enhanced measures			
Enhanced Baby Bonus Cash Gift	89%	91%	+2%
Extended Child Care Leave	73%	85%	+12%
Enhanced Subsidies for Centre-Based Infant & Child Care	65%	71%	+6%
Enhanced Maternity Protection for Pregnant Employees	54%	64%	+10%
Enhanced Foreign Domestic Worker Levy Concession	53%	66%	+13%

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Enhanced Co-funding for Assisted Reproduction Technology (ART) treatment	26%	39%	+13%

N=2,000 for POPS(7) and N=2,010 for POPS(2) surveys, married residents aged 21-49 years.

3.37   Whilst measures such as the Enhanced Baby Bonus Cash Gift and Maternity Leave remained influential policy measures for the majority of POPS(7) respondents, the proportions of those indicating that these M&P policy centrepieces are influential on child-bearing decisions were higher in 2009 (Table 11).

Table 11. Influence on child-bearing decisions of various Marriage and Parenthood measures (Comparison of POPS(2) and POPS(7): % of Yes responses)

	POPS(2)	POPS(7)	
Qns A1b-5b: Do you think the… would influence couples like you to have children/more children?	**2009**	**2014**	**change**
Unchanged measures			
Maternity Leave	66%	55%	-11%
Parenthood Tax Rebate	59%	52%	-7%
Medisave Maternity Package	57%	49%	-8%
Working Mother's Child Relief	45%	48%	+3%
Unpaid Infant Care Leave	44%	41%	-3%
Grandparent Caregiver Relief	40%	44%	+4%
Qualifying Child Relief and Handicapped Child Relief	40%	43%	+3%
Medisave for Assisted Conception Procedures	29%	38%	+9%
Enhanced measures			
Enhanced Baby Bonus Cash Gift	69%	50%	-19%
Extended Child Care Leave	58%	51%	-7%
Enhanced Subsidies for Centre-Based Infant & Child Care	55%	49%	-6%
Enhanced Maternity Protection for Pregnant Employees	44%	47%	+3%
Enhanced Foreign Domestic Worker Levy Concession	41%	42%	+1%
Enhanced Co-funding for Assisted Reproduction Technology (ART) treatment	25%	37%	+12%

N=2,000 for POPS(7) and N=2,010 for POPS(2) surveys, married residents aged 21-49 years.

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3.38   On the other hand, measures such as Working Mother Child Relief and Grandparent Caregiver Relief (although less well-known) improved in terms of the proportion of respondents believing the measures are influential in couples' decision to have children.   Measures relating to ART treatment and assisted conception procedures also saw improvement in perceived influence.

3.39   POPS(7) respondents appear to believe the current package to be less conducive to Singaporean couples in general as well as to them specifically than were the POPS(2) respondents to the measures prevailing in 2009.   In POPS(7), 70% of respondents perceive that the current M&P Package has made it conducive for Singaporean couples to have children, down from the 79% who felt so in 2009. The proportion who said the current M&P Package has made it conducive for them (and their spouses) to have children has also declined (40% in 2014 compared to 53% in 2009).   This decline in positive answers was observed across all age groups, although younger respondents remained in both studies more likely than older respondents to believe the relevant M&P Package would be conducive to Singaporean couples in general as well as to them specifically to have children. Nevertheless,   the large   majority   of   respondents   still   believe   the   Package   is conducive for Singaporean couples to have children.

Table 12. Conduciveness of the Marriage and Parenthood Packages (2008 and 2013 compared)

	2009	2014
Qn A6: On the whole, has the most recent Marriage & Parenthood Package made it conducive for Singaporean couples to have children?		
Yes	79%	70%
No	21%	30%
Qn A7: On the whole, has the most recent Marriage & Parenthood Package made it conducive for you and your spouse to have children?		
Yes	53%	40%
No	47%	60%

N=2,000 for POPS(7) and N=2,010 for POPS(2) surveys, married residents aged 21-49 years.

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Table 13. Conduciveness of Marriage and Parenthood Package (Comparison of POPS(2) and POPS(7): % of Yes responses) by age group

	POPS(2)	POPS(7)	
	2009	**2014**	**change**
Qn A6: On the whole, has the most recent Marriage & Parenthood Package made it conducive for Singaporean couples to have children?			
21 to 29 years	86%	74%	-12%
30 to 39 years	80%	71%	-9%
40 to 49 years	76%	68%	-8%
Qn A7: On the whole, has the most recent Marriage & Parenthood Package made it conducive for you and your spouse to have children?			
21 to 29 years	63%	62%	-1%
30 to 39 years	56%	49%	-7%
40 to 49 years	48%	28%	-20%

N=2,000 for POPS(7) and N=2,010 for POPS(2) surveys, married residents aged 21-49 years.

3.40   The decline in the perceived conduciveness of the M&P Package 2013 by POPS(7) respondents from that by POPS(2) respondents of the M&P Package 2008 was also evident if just the respondents in both surveys aged 30-39 were to be considered. The proportion of those aged 30-39 indicating that the M&P Package 2013 was conducive to the respondent (and spouse) having children fell from 56% in 2009 (POPS(2)) to 49% in 2014.

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Figure 13. Questions A6 and A7: Conduciveness of M&P Package 2013 and 2008 in general and specific to respondent (and spouse) – % of Yes responses from respondents aged 30-39 years
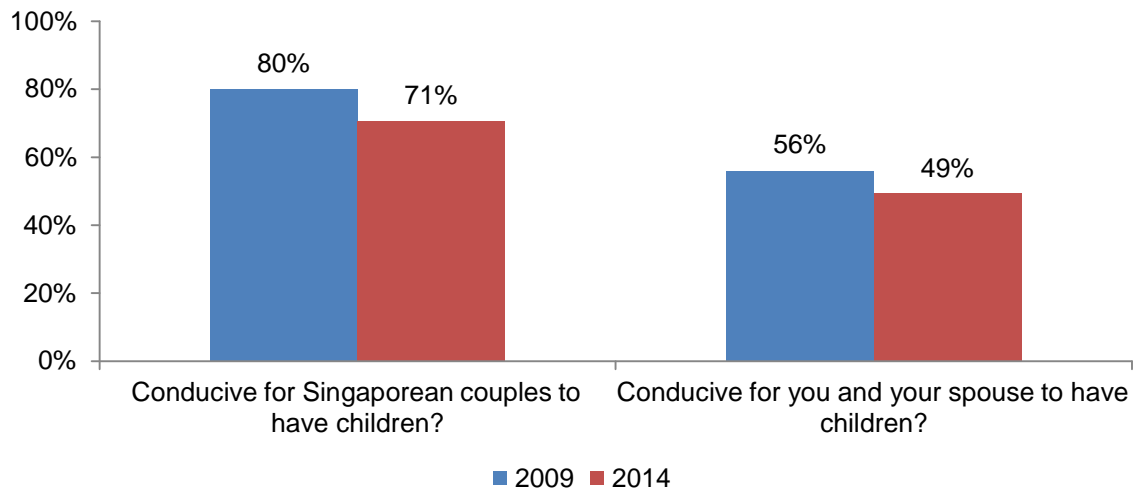
M&P 2014: N=849 married respondents, age 30 to 39 years.

M&P 2009: N=839 married respondents, age 30 to 39 years.

Accessing information about the M&P Package

3.41   The POPS(7) survey included a question on accessing information about the M&P Package (which was not included in 2009). A third of POPS(7) respondents indicated they had sought information on the current Marriage & Parenthood Package. Of these, the most popular sources were, in rank order, newspapers, ministry websites and "friends, neighbours and relatives". A minority (18%) accessed the NPTD website www.heybaby.sg (Figure 14). Those aged in their 30s were more likely to have sought out information about the current package, being the group most likely to be making child-bearing decisions or eligible for the benefits (Figure 15).

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Figure 14. QnA9b. From what sources did you obtain the information on the current M&P Package?
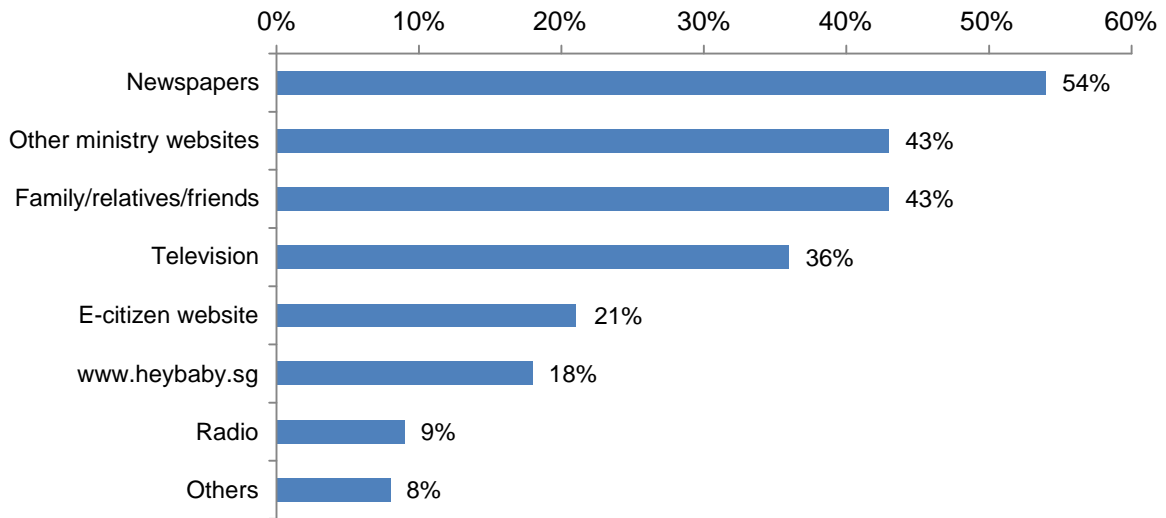
N=655 married residents aged 21-49 years.

Figure 15. Question A9: Have you tried to look for information on the 2013 M&P Package? by age group

N=2,000 married residents aged 21-49 years.

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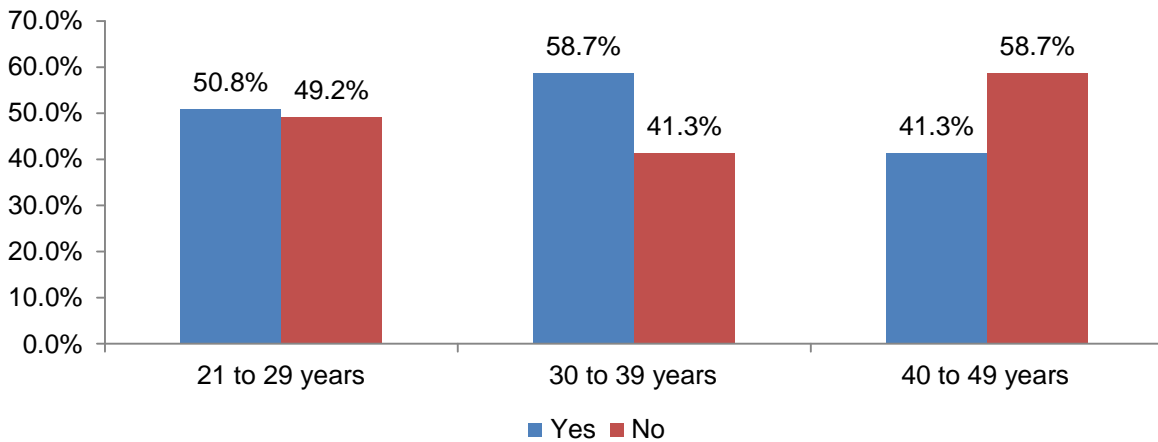
SECTION 4: POLICY IMPLICATIONS OF KEY FINDINGS

4.1   POPS(7) results highlight the impact of age in shaping perceptions of the M&P Package 2013, whether in aggregate or for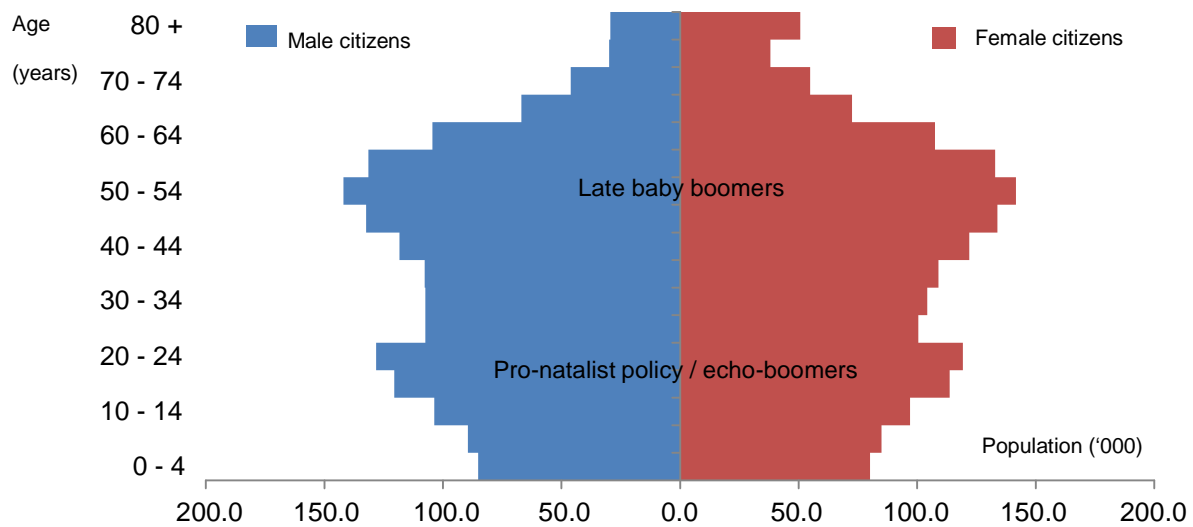 specific measures. This is in keeping with international studies (Parr and Guest 2011; Sobotka 2011 for example) as well as research conducted in the Singapore context (Hashmi and Mok 2013). Younger respondents aged 21-39 years were almost twice as likely to say that the M&P Package 2013 was conducive for couples like them to have children, as compared with respondents aged 40 years and above. For the individual measures, older respondents aged 40 and above were 22-33% less likely than younger respondents to say that the M&P measures would influence couples like them to have children.

4.2   The increasing trend in the age at first marriage and first child-birth towards and above the age of 30, coupled with a lack of social desirability for out-of-wedlock births and markedly lower levels of perceived influence of M&P measures amongst those 40 years and over suggests that the measures are impactful mainly on married couples in their thirties.   This is a relatively short window of potential policy effectiveness, being less than a third of what is traditionally considered a woman's child-bearing years (15-49).

4.3   Over the next decade however, there may well be a demographic boost from relatively larger cohorts of women (born to late Baby Boomers following Singapore's shift to a pro-natalist policy stance in 1988) reaching their thirties (Figure 16). These women, the eldest of whom are aged 27 years will be reaching their "biologically optimal child-bearing years[5]" in the next 10 years. With the measures in the M&P Package perceived positively in terms of child-bearing decision-making by this group, there is thus some prospect of a boost in the resident birth-rate in the coming years.

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[5]. See "Best age for childbearing remains 20–35 — Delaying risks heartbreak, say experts" (http://www.medicalnewstoday.com/releases/30737.php) and "Which career first?", editorial, BMJ. 2005 September 17; 331(7517): 588–589. doi: 10.1136/bmj.331.7517.588

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Figure 16. Age pyramid of the Singapore citizen and resident population, June 2013

Source: Adapted from Department of Statistics, Population Trends 2013, p31, and National Population and Talent Division, Population in Brief 2013, pg 16, annotations by authors

4.4   Gender differentials in the responses about how influential each M&P measure is in child-bearing decisions may point to future directions for Singapore's marriage and parenthood policies. If the Maher et al. (2004) thesis is correct about how differently men and women think about fertility, the focus of marriage and parenthood policies going forward may need to be more on what concerns women – matters such as career interruption and difficulties in re-joining the workforce after childbirth, problems with birthing and the availability of convenient, high-quality childcare (rather than just the actual cost of it).

4.5   Hashmi and Mok's small, Internet-based, survey of Singaporean women who had completed their child-bearing found that women have slightly more weight in the decision to have a child (Hashmi and Mok, 2013). The POPS(7) findings on married women's attitudes towards paternity leave (a new and eagerly anticipated measure in the 2013 Package), especially in the difference in perceptions between those who have not experienced paternity leave and those that have (see paragraph 3.33) suggest that women may need a little more convincing and indirectly support the points expressed in Thévenon (2010) and Sobotka (2011) that changing norms on marriage, the gender division of housework, mothers' employment and the acceptability of childcare options for children below age 3 are most likely to affect fertility decisions.

4.6   In this respect, Singapore's marriage and parenthood initiatives (expressed through the M&P Package) may have to counter deep-rooted societal pressures, norms and traditions. As suggested by Sobotka (2011) and McDonald (2013), increasingly better educated women with career aspirations may be discouraged from family formation in societies where marriage is a pre-condition of child-bearing and traditional gender roles remain strong, as they may be unwilling to conform to these traditional role expectations about motherhood and household production.

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Policies that have the effect of helping women reconcile these conflicting expectations such as those facilitating a woman's return to the workforce after childbirth and access to quality childcare may hold the best prospect of impacting fertility decisions.

4.7   Finally, awareness of the measures in the M&P Package appears to have an impact on respondents' perceptions of the positive influence of the measures on couples' child-bearing decisions. Efforts to publicise the M&P Package, especially via channels most likely to be used by younger groups, may raise the awareness and therefore improve perceptions amongst those who should be the focal point of the M&P Package.

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APPENDIX 1: POPS(7) RESPONDENT CHARACTERISTICS Respondent characteristics

The profile of the 2,000 respondents in this survey is presented in the following section (and in Tables A1 to A9[6]). The proportions of gender, age, and ethnicity in this survey's sample were comparable to the proportions of married persons aged 21 to 49 years as set out in the Singapore Census 2010.

This study's sample group comprised 46.8%males and 53.2% females (Table 14), closely similar to the Census 2010's proportions. Respondents aged 21-19 years comprised 8.8% of the total sample while those aged 30-39 years and 40-49 years made up 42.5% and 48.8% respectively.

Table A1.   Age and gender

	Male		Female		Total	
	No.	%	No.	%	No.	%
Qn: S2. Which age group do you belong to?						
21 to 24 years	6	0.6%	13	1.2%	19	1.0%
25 to 29 years	63	6.7%	94	8.8%	157	7.9%
30 to 34 years	175	18.7%	198	18.6%	373	18.7%
35 to 39 years	225	24.0%	251	23.6%	476	23.8%
40 to 44 years	234	25.0%	241	22.7%	475	23.8%
45 to 49 years	233	24.9%	267	25.1%	500	25.0%
Total	936	100.0%	1064	100.0%	2000	100.0%

N=2,000 married respondents, age 21 to 49 years.

Overall, Chinese formed the largest ethnic group (70.7%) in the total sample size, followed by Malay and Indian, 13.3% and 12.7%, and lastly "Others" at 3.4% (Table A2).

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[6] Note: Individual percentage values for Tables 14 to 23 are rounded and may not total 100%.

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Table A2. **Ethnicity and gender**

	Male		Female		Total	
	No.	%	No.	%	No.	%
Qn: C9. Which racial group do you belong to?						
Chinese	666	71.2%	747	70.2%	1413	70.7%
Malay	128	13.7%	138	13.0%	266	13.3%
Indian	114	12.2%	139	13.1%	253	12.7%
Others	28	3.0%	40	3.8%	68	3.4%
Total	936	100.0%	1064	100.0%	2000	100.0%

N=2,000 married respondents, age 21 to 49 years.

More than half of the study's sample possessed tertiary-level qualification. More females had no formal qualification/Primary or Secondary qualification than males (Table A3). A larger proportion of males indicated Degree (36.4%) and Postgraduate (12.4%) as their highest attained education.

Table A3. **Educational attainment and gender**

	Male		Female		Total	
	No.	%	No.	%	No.	%
Qn: C3. What is your highest educational qualification attained?						
No formal qualification/ Primary	42	4.5%	64	6.0%	106	5.3%
Secondary	210	22.4%	380	35.7%	590	29.5%
Polytechnic Diploma	178	19.0%	181	17.0%	359	18.0%
Professional Qualification & Other Diploma	49	5.2%	60	5.6%	109	5.5%
Degree	341	36.4%	304	28.6%	645	32.3%
Postgraduate	116	12.4%	75	7.0%	191	9.6%
Total	936	100.0%	1064	100.00%	2000	100.0%

N=2,000 married respondents, age 21 to 49 years.

Over eighty percent of the respondents were employed (Table A4). Nearly all males worked full-time while only 59% of females were employed likewise. The other female respondents were either working part-time or not in the labour force.

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Table A4.   Employment status and gender

	Male		Female		Total	
	No.	%	No.	%	No.	%
Qn: C4a. What is your current employment status?						
Working full-time	907	96.9%	629	59.1%	1536	76.8%
Working part-time	15	1.6%	118	11.1%	133	6.7%
Homemaker	0	0.0%	311	29.2%	311	15.6%
Others (Student, Full-time National Service, Retired, Unemployed)	3	1.5%	0	0.6%	3	1.0%
Total	936	100.0%	1064	100.0%	2000	100.0%

N=2,000 married respondents, age 21 to 49 years.

Nearly all (97.7%) of the female respondents indicated that their spouses were working compared to 72.6% of male respondents (Table A5).

Table A5.   Gender and spouse's employment status

	Male		Female		Total	
	No.	%	No.	%	No.	%
Qn: C2a. Is your spouse working?						
Spouse is working	680	72.6%	1039	97.7%	1719	86.0%
Spouse is not working	256	27.4%	25	2.3%	281	14.1%
Total	936	100.0%	1064	100.0%	2000	100.0%

N=2,000 married respondents, age 21 to 49 years.

About a fifth of the respondents (21.7%) were in the "$10,000 and above" household income group, with slightly more male than female respondents being in this income group (Table A6).

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Table A6. **Household income and gender**

	Male		Female		Total	
	No.	%	No.	%	No.	%
Qn: C6. What is the monthly income earned by all the people in your household?						
Less than $5,000	306	32.7%	384	36.1%	690	34.5%
$5,000 to $9,999	351	37.5%	391	36.7%	742	37.1%
$10,000 and above	230	24.6%	203	19.1%	433	21.7%
Refused	49	5.2%	86	8.1%	135	6.8%
Total	936	100.0%	1064	100.0%	2000	100.0%

N=2,000 married respondents, age 21 to 49 years.

Almost a third of this study's sample (31.8%) indicated Buddhism as their religion which is the largest group among the listed religions. Those who reported to have no religion or were free thinkers (20.7%) formed the next largest group (Table A7).

Table A7. **Gender and religion**

	Male		Female		Total	
	No.	%	No.	%	No.	%
Qn: C5. What is your religion?						
Buddhism	289	30.9%	347	32.6%	636	31.8%
Christianity (Catholic)	48	5.1%	59	5.5%	107	5.4%
Christianity (Non-Catholic)	122	13.0%	136	12.8%	258	12.9%
Hinduism	77	8.2%	106	10.0%	183	9.2%
Islam	148	15.8%	167	15.7%	315	15.8%
Sikhism	6	0.6%	2	0.2%	8	0.4%
Taoism	43	4.6%	36	3.4%	79	4.0%
No Religion/Free thinker	203	21.7%	211	19.8%	414	20.7%
Total	936	100.0%	1064	100.0%	2000	100.0%

N=2,000 married respondents, age 21 to 49 years.

Table A8 below presents the number of children the respondents had at the time of the survey. The two biggest groups are respondents with two children (39.9%), followed next by respondents with one child (26.4%). A notable proportion (13.3%) was without a child.

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Table A8.   Gender and number of children

	Male		Female		Total	
	No.	**%**	**No.**	**%**	**No.**	**%**
Qn: B1a. How many children do you have?						
0	149	15.9%	116	10.9%	265	13.3%
1	266	28.4%	261	24.5%	527	26.4%
2	352	37.6%	445	41.8%	797	39.9%
3 or more	169	18.1%	242	22.7%	411	20.6%
Total	936	100.0%	1064	100.0%	2000	100.0%

N=2,000 married respondents, age 21 to 49 years.

Table A9 was constructed using data provided by respondents on how many children they had (Survey question B1a) and how many children they intend to have (Survey question B3a). Respondents were identified as not having completed their families if the number of children they intended to have exceeded the number they had at the time of the survey. On the other hand, those whose intended family size are equal to or less than their actual family size are grouped as having completed their families.

Table A9 shows that 37.4% of the sample group had not completed their families. A higher proportion of male respondents (42.4%) than females (33.1%) had not completed their families.

Table A9.   Family formation stage (family completed/not yet completed) and gender

	Male		Female		Total	
	No.	**%**	**No.**	**%**	**No.**	**%**
Family not yet completed	396	42.4%	352	33.1%	748	37.4%
Family completed	539	57.6%	712	66.9%	1251	62.6%
Total	935	100.0%	1064	100.0%	1999	100.0%

N=1,999 married respondents, age 21 to 49 years.

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APPENDIX 2: REGRESSION ANALYSIS

The POPS(7) study of the perceptions of the conduciveness of the M&P Package in affecting child-bearing decisions, specifically for the respondent and his/her spouse, provides a picture of the possible effectiveness of the package on fertility outcomes. We conducted regression analysis to identify the main determinants of respondent perceptions, and how they could explain respondents' perceived conduciveness of the M&P Package for the respondent and spouse to have children. The findings of the regression analysis are summarised in this Appendix. Regression analyses were also performed on other dependent variables such as the conduciveness of the package in general, as well as respondents' perceptions of the adequacy of the package. The results of these other analyses are not presented here as they do not provide any significant additional insights on the determinants of respondent perceptions towards the package.

In all analyses, the dependent variable is the perceived conduciveness of the package for the respondent and spouse (Qn A7: On the whole, has the most recent Marriage & Parenthood Package made it conducive for you and your spouse to have children?). Correlations and Chi-square tests of association were performed to determine if there is a relationship between any of the demographic variables surveyed and perceived conduciveness for the respondent and spouse. Demographic variables which have statistically significant association with the dependent variable were used as independent variables in simple ordinary least squares regression analyses. The summarised regression model results are set out in Table A10 below. Standardised coefficients are reported as indication of the predictors' importance in their contribution to the models. Model 10 is the final regression model built step by step from Model 1 by including independent variables one at a time. Variables that do not contribute to improving the variance (Adjusted R^2) or are not statistically significant predictors were removed.

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Table A10 Regression model results

Dependent Variable: M&P Package conducive for you and your spouse to have children?					
Independent Variables	Model 1	Model 2	Model 3	Model 4	Model 5
Age group	-0.18***	-0.21***	-0.17***	-0.17***	-0.17***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Family formation stage (Family completed)	-0.21***		-0.21***	-0.21***	-0.21***
	(0.02)		(0.02)	(0.02)	(0.02)
Actual number of children		-0.12***			
		(0.01)			
Accessed information			0.07***	0.09***	0.09***
			(0.02)	(0.02)	(0.02)
Household income				-0.09***	-0.1***
				(0.01)	(0.02)
Education level					0.03
					(0.01)
Self/ Spouse currently pregnant					
Number of measures respondent is aware of					
Gender (Female)					
Employment status (Working part-time)					
Employment status (Homemaker)					
Race (Malay)					
Race (Indian)					
Race (Others)					
Adjusted R^2	0.101	0.074	0.106	0.11	0.11
F-statistic	113.7***	80.38***	80.29***	58.6***	47.15***
Number of observations	1999	1999	1999	1864[#]	1864[#]

Note: The numbers in parentheses are standard errors. The statistical significance of coefficients at 5% or 1% or 0.1% levels is highlighted by one, two, or three asterisks.

[#] Respondents who did not provide information on their household income (i.e.: "Refused") were excluded from the respective regression model.

Table A10 Regression model results (continued)

Independent Variables	Model 6	Model 7	Model 8	Model 9	Model 10
Age group	-0.17***	-0.16***	-0.17***	-0.17***	-0.16***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Family formation stage	-0.22***	-0.21***	-0.2***	-0.21***	-0.21***
(Family completed)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Actual number of children					
Accessed information	0.09***	0.06*	0.06*	0.06*	0.05*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Household income	-0.09***	-0.1***	-0.1***	-0.1***	-0.1***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Education level					
Self/ Spouse currently	-0.04				
pregnant	(0.05)				
Number of measures		0.12***	0.12***	0.12***	0.12***
respondent is aware of		(0.002)	(0.002)	(0.002)	(0.002)
Gender (Female)			-0.05*	-0.06*	-0.05*
			(0.02)	(0.02)	(0.02)
Employment status				-0.003	
(Working part-time)				(0.05)	
Employment status				0.04	
(Homemaker)				(0.03)	
Race (Malay)					0.02
					(0.03)
Race (Indian)					0.09***
					(0.03)
Race (Others)					0.04
					(0.06)
Adjusted R^2	0.111	0.122	0.124	0.126	0.131
F-statistic	47.69***	52.77***	44.91***	34.19***	32.09***
Number of observations	1864[#]	1864[#]	1864[#]	1845[# ^]	1864[#]

Note: The numbers in parentheses are standard errors. The statistical significance of coefficients at 5% or 1% or 0.1% levels is highlighted by one, two, or three asterisks.

[#] Respondents who did not provide information on their household income (i.e.: Refused) were excluded from the respective regression model.

[^] Respondents whose employment status was not either "working full-time", "working part-time", or "homemakers" were excluded from Model 9.

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Significant predictors of the regression model

Age group is highly associated with perceived conduciveness and is the second most important contributor (after family formation stage – see below) to the regression model. The negative sign of its coefficient value indicated that an individual in an older age group will generally perceive the M&P package as not conducive. This inverse relationship may be explained by older individuals discounting their chances of conceiving children due to their age, and perhaps it would take more inducements (as compared with their younger counterparts) from the package for them to consider having a(nother) child.

Likewise, an individual whose family is completed will also likely view the package as not conducive compared to someone whose family is yet to be completed. The similarity in the direction that the family formation stage variable has with age group can be explained by the higher likelihood of an older person to have completed his family while a younger individual is more likely to have not achieved his/her intended number of children. Among the predictors, family formation stage is the largest contributor to the model.

The inverse relationship between household income with perceived conduciveness implied that those in the higher income group are more likely to indicate that the package is not conducive. Individuals who indicated awareness of a higher number of measures tend to perceive the package as conducive, likely due to familiarity with the measures and perhaps even having benefited from them. Respondents of Indian ethnicity were also found to be more likely to view the package as conducive compared to the Chinese. The negative sign for the gender (female) variable indicated that women, compared to men, generally perceived the package as not conducive although it is one of the weaker predictors.

Possessing better knowledge of some/all measures, through accessing information to find out more, allows one to make a better decision on whether the package can influence him/her to have children. The reported positive coefficient implied that those who have accessed information perceive the package as conducive. However, as shown in Model 10, it has a smaller coefficient value (0.05) than most of the other predictors, indicating its minor contribution to the overall model.

Notwithstanding the fact that the final model (Model 10) is an improvement from Model 1, age group and family formation stage remains the most important predictors, explaining for 10.1% (Model 1) of the variance in perceived conduciveness by themselves. The regression results suggest that the M&P Package is likely conducive to an individual who belongs to the younger age group (either in the 20s or 30s) and has not completed his/her family formation.

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APPENDIX 3: SUMMARY OF MARRIAGE & PARENTHOOD PACKAGE 2013

MEASURES RELATING TO SETTING UP A HOME

a.	**Housing Schemes & Grants** ✓ Priority is given to first-timer applicants in the purchase of new HDB flats. ✓ First-timers may also apply for CPF Housing Grants to help them finance their flat purchase. ✓ Parents with 3 or more children are given priority allocation for new HDB flats	Existing
b.	**Parenthood Priority Scheme** First-timer married couples with children (including those expecting a child) are given priority allocation for their HDB flats.	New in 2013
c.	**Parenthood Provisional Housing Scheme** First-timer married couples can rent a flat from HDB at an affordable rental rate while awaiting the completion of their new flats.	New in 2013

MEASURES RELATING TO HAVING CHILDREN

a.	**Medisave Maternity Package** Medisave can be used to help pay for delivery and pre-delivery expenses.	Existing
b.	**Medisave for Assisted Conception Procedures** Couples can withdraw up to $6,000, $5,000 and $4,000 from Medisave for their 1st, 2nd and 3rd withdrawals for Assisted Conception Procedures respectively.	Existing
c.	**Enhanced Co-Funding for Assisted Reproduction Technology (ART) Treatment** The Government co-funds up to 75% of the cost of each ART treatment received at public hospitals. Couples with more than one child now eligible for co-funding.	Enhanced in 2013
d.	**Delivery Fees for Higher Order Births** Delivery fees in public hospitals are the same regardless of birth order.	Enhanced in 2013

MEASURES RELATING TO RAISING AND CARING FOR CHILDREN

a.	**Enhanced Baby Bonus Cash Gift** Parents receive an enhanced cash gift of $6,000 - $8,000 each for their 1st to 4th child. The cash gift is fully disbursed earlier, within 12 months of the child's birth instead of the current 18 months.	Enhanced in 2013
b.	**Baby Bonus Child Development Account** Savings to a child's Child Development Account (CDA) are matched dollar-for-dollar by the Government. Parents can continue to save into the CDA and use CDA funds for their children until they turn 12.	Enhanced in 2013
c.	**Medisave Grant for Newborns** Each citizen newborn has a CPF Medisave account opened for him/her, with a Medisave grant of $3,000 deposited.	New in 2013

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d.	**MediShield Coverage for Congenital & Neonatal Conditions** Newborns are covered under MediShield from birth with no underwriting, including for congenital and neonatal conditions.	New in 2013
e.	**Parenthood Tax Rebate** Working parents can claim income tax rebates of $5,000 - $20,000 depending on birth order of child.	Existing
f.	**Qualifying Child Relief and Handicapped Child Relief** Working parents can claim income tax relief of $4,000 per child or $5,500 per handicapped child.	Existing
g.	**Working Mother's Child Relief** Working mothers can claim tax relief of 15%-25% of their earned income depending on birth order of the child.	Existing
h.	**Grandparent Caregiver Relief** Working mothers whose children aged 12 or younger are cared for by their parents or parents-in-law can claim income tax relief of $3,000.	Existing
i.	**Enhanced Subsidies for Centre-Based Infant & Childcare** Parents enjoy monthly subsidy of up to $600 for centre-based infant care and up to $300 for centre-based child care. Families with monthly household income of $7,500 and below are eligible for an Additional Subsidy.	Enhanced in 2013
j.	**Enhanced Foreign Domestic Worker Levy Concession** Parents with a child aged below 12 can enjoy a $145 (up from $95) foreign domestic worker levy concession.	Enhanced in 2013

MEASURES SUPPORTING WORK-LIFE HARMONY

a.	**Maternity Leave** Working mothers are eligible for 16 weeks of paid maternity leave.	Existing
b.	**Extended Child Care Leave** Working parents with child(ren) below age 7 have 6 paid child care leave per year per parent. Those with child(ren) aged 7-12 years have 2 paid child care leave. The total paid child care leave is a maximum of 6 days per year.	Enhanced in 2013
c.	**Unpaid Infant Care Leave** Working parents with child below 2 years have 6 days unpaid infant care leave per year per parent.	Existing
d.	**Adoption Leave** Adoptive mothers with an adopted infant aged below 12 months are eligible for 4 weeks of paid adoption leave.	New
e.	**Enhanced Maternity Protection for Pregnant Employees** Working mothers will be eligible for maternity leave benefits if they are dismissed without sufficient cause or retrenched within the full duration of their pregnancy.	Enhanced in 2013

f.	**Government-Paid Maternity Benefit** Working mothers who are not eligible for maternity leave may apply to receive the Government-Paid Maternity Benefit, as long as they have been in employment for a total of at least 90 days in the 12 months leading up to childbirth.	New in 2013
g.	**Work-Life Grant** The Work-Life Grant provides support to employers to implement work-life strategies, in particular flexible work arrangements to enable their employees to balance work and family commitments.	Enhanced in 2013
	MEASURES ENCOURAGING SHARED PARENTAL RESPONSIBILITY	
a.	**Paternity Leave** Working fathers are eligible for 1 week of paid paternity leave.	New in 2013
b.	**Shared Parental Leave** Working fathers are eligible to share 1 week of the 16 weeks of maternity leave, subject to the agreement of the mother.	New in 2013