

## The Two-Child Norm in the Philippines

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## 1 Introduction

Preferences for small families provide the motivation to practice contraception and are the key factor in the decline of fertility. Studies using Philippine and other country data point to the fact that when fertility desires are translated into actual practice of contraception, lower fertility inevitably results (Pullum et al, 1981; Palmore and Concepcion, 1980; Curtis and Westoff, 1996). An examination of data in 84 countries reveals that the percentage of women who want no more children and the total fertility rate are strongly and inversely associated (Westoff, 1990).

In Western countries, the shift to a two-child norm is well established. Whether the same shift will occur in other parts of the world in the near future is questionable. However, analysis of future trends in countries located in southern, southeastern and East Asia as well as Oceania point to a movement towards adoption of the two-child family norm (Concepcion, 1993).

In comparison to its Southeast Asian neighbors, the fertility level of the Philippines, while declining, has remained fairly high (NSO, DOH and MI, 1999). The 1998 Philippine total fertility rate (TFR) of 3.7 lags behind Malaysia (TFR 3.2) and Indonesia (TFR 2.8). Vietnam has recently registered a TFR of 2.3. Thailand has already reached replacement level (TFR 2.0) while Singapore has long outpaced all its Southeast Asian neighbors with 1.7 children per woman.

As shown in Figure 1, the Philippine total fertility rate is far from reaching the two-child family norm. A marked fertility decline was observed during the 1970s and 1980s, but the pace of the decline appears to have slowed during the 1990s. Given this trend, the most optimistic estimates now indicate that replacement fertility can only be achieved by 2010 (NSO, 1997). This assertion, however, hinges on the implementation of a vigorous population program.

Figure 1
Total Fertility Rates for Women 15-49, Philippines 1970-1996


Years
Source: NSO, DOH, and Macro International, 1999

The Philippine government throughout the years has recognized the need to curb population growth and counts fertility reduction as one of its strategies. Until the early 1990s, fertility reduction was an important objective of the Philippine Family Planning Program. Between 1994 and 1998, the TFR was to be reduced from 4.0 to 3.5. However, since 1994, the Philippine Family Planning Program has shifted its focus from fertility reduction to a "reproductive health" approach with an increasing emphasis on service delivery rather than the attainment of fertility targets.

While cognizant of the need to promote a small-family norm, no numerical objectives have been explicitly stated in the recent development plans and population programs of the country. For instance, the ICPD+5 Philippines Country Report (Commission on Population, 1999) simply states that the objective of the Philippine Population Management Program is the "rendering of assistance to couples and individuals in meeting their reproductive goals...through the reproductive health and family planning program." Moreover, in the current approach, there is no mention of the need to modify family size preferences.

The main objective of this analysis is to describe the characteristics of women who want to have no more than two children. Fertility has been declining significantly in the Philippines for several decades and, given the demographic significance of reaching replacement level, which will ultimately lead to population stabilization, it is important to determine whether a two-child norm is emerging and to characterize the women who are in the advance of this new trend. In brief, the analysis will distinguish between women who wish to stop at two children and those who prefer larger families. Are women who prefer small families more likely to live in cities, to be more educated, to be employed, to live in certain regions of the country, to have greater economic assets, to be more exposed to the mass media? By examining these and other possible covariates, it is hoped that the study will be able to develop a profile of the women at the leading edge of the fertility transition in the Philippines. The report will also document the trends of various measures of small-family preferences over the last decade.

## 2 The Data

The data for this analysis are based on the Philippine National Demographic and Health Surveys (NDHS) conducted in the Philippines in 1993 and 1998 and on the 1988 National Demographic Survey (NDS). The 1993 and the 1998 surveys conducted by the National Statistics Office and Macro International, Inc. were undertaken as part of the worldwide Demographic and Health Surveys (DHS) program. The 1988 NDS, while not a part of the DHS program, was conducted along the lines of a DHS survey and forms part of a series of quinquennial demographic surveys undertaken in the country since 1968. All three surveys are nationwide sample surveys designed to collect information on fertility, reproductive preferences, family planning, and maternal and child health.

A total of 15,029 and 13,983 women in the reproductive ages 15-49 were interviewed in 1993 and 1998, respectively. About two-thirds of the women in both surveys were ever-married women. This includes women who were currently married at the time of interview, widowed, divorced or separated, as well as those who were living in a consensual union. The 1988 survey, which was confined exclusively to ever-married women age $15-49$, yielded 13,716 respondents. The present analysis focuses on currently married women. All three surveys are used to evaluate trends in reproductive preferences, but only the most recent survey (1998) is used to analyze the covariates of the two-child norm.

## 3 Measures of the Two-Child Norm

There are several different measures of the two-child preference that can be constructed from the 1998 NDHS data. For the purpose of this study, six indicators have been developed, all based on the responses of currently married women. The six indicators are:

Measure 1. The percentage of women with fewer than two children who report their ideal number as fewer than three children. In the Philippines in 1998, 45.8 percent of the women in this category wanted fewer than three children. (Table 1.) The ideal number of children is based on the number women would like to have if they were to start over again. These women tend to be young and recently married. The fact that nearly half of the women in this group want to stop before they have three children gives some indication that a two-child norm is developing.

Measure 2. The percentage of women with two living children (including women with one child who are currently pregnant) who say that they want no more children (or have been contraceptively sterilized). In the Philippines in 1998, such women comprised 54.1 percent of all married women with two children. This is another indication of the strength of the small-family norm.

Measure 3. An alternative measure of reproductive preferences can be derived from the question on ideal number of children. Following the same logic as in Measure 1, Measure 3 has been defined as the percentage of women with two children who report their ideal number as less than three children. A total of 38.6 percent of two-parity women are in this category. There is a considerable overlap between the second and third measure. The major difference between the two is that a significant proportion ( 22.5 percent) of twoparity women want no more children but report an ideal number greater than two.

Measure 4. Not all women control their fertility successfully; a significant proportion move to the next parity unintentionally. In the Philippines in 1998, 20.6 percent of women with three children reported that they had not wanted any more children after their second birth (this category includes currently pregnant two-parity women who were asked about the planning status of that pregnancy). This is an underestimate of the true proportion because information on the planning status of the last birth was collected only for births that occurred in the past five years. The measure distinguishes between women with three children who wanted that number and those who would have not had the third child if their preferences had prevailed.

Measure 5. The ideal number of children for all married women regardless of parity is a standard measure of reproductive norms. One-quarter of the women express a preference for fewer than three children. This measure is, of course, influenced by the preferences of older women who have had more than two children and who have long since rationalized those events.

Measure 6. A more behavioral measure of the two-child norm is the proportion of women who actually do stop at two and who can reasonably be considered to have completed their childbearing. This variable is defined as women $40-49$ years of age with fewer than three children ever born. Close to 20 percent of the women this age are in this category. Of course, some of these women will have another child either intentionally or unintentionally, but this should be a small fraction. Conversely, some of these older women are subfecund and might have had more than two children if it had been possible. This measure provides more of an historical perspective of the emergence of the small family norm than the other measures described here.

The first part of the analysis examines the trends in the six measures between 1988, 1993 and 1998. The second part describes the association of specific characteristics with each of these measures. This is then followed by a multivariate analysis that identifies those associations that persist in the presence of the other covariates.

| Table 1 Percent distribution of six measures of the twochild norm among currently married women, Philippines 1998 |  |
| :---: | :---: |
| Measure | Percent |
| Ideal number of children for women with less than two children |  |
| Fewer than three children | 45.8 |
| More than two children | 54.2 |
| Reproductive intentions of women with two children ${ }^{1}$ |  |
| Want more children | 40.1 |
| Undecided | 5.8 |
| Want no more children ${ }^{2}$ | 54.1 |
| Other | 1.8 |
| Ideal number of children for women with two children |  |
| Fewer than three children | 38.6 |
| More than two children | 61.4 |
| Wanted status of last child for women with three children |  |
| Wanted last birth | 79.4 |
| Last birth unwanted | 20.6 |
| Ideal number of children for all married women |  |
| Fewer than three children | 25.2 |
| More than two children | 74.8 |
| Children ever born to married women 40-49 |  |
| Fewer than three children | 19.5 |
| More than two children | 80.5 |
| Includes currently pregnant women with one living child ${ }^{2}$ Includes women who were sterilized for contraceptive reasons. |  |

## 4 Recent Trends in the Small Family Norm

Changes in the small family norm over the 1988-1998 period have been examined. Since the 1988 survey did not ask all of the relevant questions with the same phrasing as in the later surveys, not all of the measures can be included in the trend analysis.

The percentage of women with two children who report that they do not want to have more children has risen from 38 to 50 to 54 percent across the decade (Table 2). This measure points to the growing popularity of the two-child family. Although the trend is not supported by two of the ideal-family-size indicators (Measures 1 and 3 ), it is consistent with the remaining three indicators. The percentage of women with three children who reported their last child as unwanted rose from 16 to 21 percent in the five years between 1993 and 1998 (the question was not asked in 1988). The percentage of all married women who said their ideal number of children was less than three rose from 18 in 1988 to 24 in 1993 to 25 in 1998. And finally, among women 40-49 the percentage who have had two or fewer children has risen from 13 to 15 to 20 percent across the decade.

The 1993 and 1998 surveys included nevermarried women in the sample. In 1998, 46 percent of single women said their ideal number of children was less than three, up from 42 percent in 1993.

Most of the evidence thus seems to support a continuing trend toward the two-child norm even across the fairly limited period of ten years.

## 5 Characteristics of Women Who Want Two Children

Table 3 shows the six indicators of the two-child norm by residence, region, and ethnic group. Women living in urban areas are only slightly more likely to prefer two children than those in rural areas although they are twice as likely to have small families by the end of their reproductive years. Of course, their actual fertility reflects not only differences in preferences but also in their ability to control fertility successfully as well as their fecundity.

| Table 2 Recent trends in the two-child norm among currently married women, by selected measures, Philippines 1988, 1993, 1998 |  |  |  |
| :---: | :---: | :---: | :---: |
| Measure | $\begin{gathered} 1988 \\ \text { NDS } \\ (\%) \end{gathered}$ | 1993 NDHS (\%) | 1998 NDHS (\%) |
| Ideal number of children for women with less than two children |  |  |  |
| Fewer than three children | 49.0 | 45.8 | 45.8 |
| More than two children | 51.0 | 54.2 | 54.2 |
| Reproductive intentions of women with two children |  |  |  |
| Want more children | 62.3 | 40.8 | 40.1 |
| Undecided | - | 9.1 | 5.8 |
| Want no more children ${ }^{1}$ | 37.7 | 50.1 | 54.1 |
| Ideal number of children for women with two children |  |  |  |
| Fewer than three children | 36.3 | 44.2 | 38.6 |
| More than two children | 63.7 | 55.8 | 61.4 |
| Wanted status of last child for women with three children ${ }^{2}$ |  |  |  |
| Wanted last birth | U | 84.0 | 79.4 |
| Last birth unwanted | U | 16.0 | 20.6 |
| Ideal number of children for all married women |  |  |  |
| Fewer than three children | 17.6 | 23.9 | 25.2 |
| More than two children | 82.4 | 76.1 | 74.8 |
| Children ever born to married women 40-49 |  |  |  |
| Fewer than three children | 13.3 | 14.6 | 19.5 |
| More than two children | 86.7 | 85.4 | 80.5 |
| $\begin{array}{\|l} \hline \mathrm{U}=\text { Unknown (not available) } \\ { }^{1} \text { Includes women who were sterilized for contraceptive reasons. } \\ { }^{2} \text { Includes currently pregnant women with one living child. } \\ \hline \end{array}$ |  |  |  |

There is a substantial regional differential in each of the six measures. This is especially pronounced in the ideal family size measures and the wanted status of the last birth. For all measures, the Autonomous Region for Muslim Mindanao (ARMM) consistently exhibits the lowest proportions. Low proportions for five of the indicators are also found in the Cordillera Administrative Region. In general, women in Metro Manila, Western Visayas and Central Visayas tend to prefer smaller families.

The regional variations are also confirmed when ethnic group is used as a differentiating characteristic. For example, the high percentages displayed by Cebuano and Ilonggo women indicate a preference for fewer children. The former are found in Central Visayas while the latter are in Western Visayas. The same is true for Tagalogs, a large proportion of whom reside in Metro Manila. Kapampangans, along with women in the composite category of "other ethnic groups", show tendencies in the opposite direction.

Table 3 Percentage of currently married women indicating a preference for the two-child norm, by background characteristics, Philippines 1998

| Background characteristic | CMW with < 2 children | CMW with 2 children |  | CMW with 3 children | All CMW | CMW 40-49 years old |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \% \text { with ideal } \\ \text { family size < } 3 \\ \hline \end{gathered}$ | \% who want no more children | $\begin{gathered} \hline \% \text { with ideal } \\ \text { family size } \\ <3 \\ \hline \end{gathered}$ | $\%$ who did not want last birth | $\begin{gathered} \% \text { with ideal } \\ \text { family size < } 3 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \% \text { with } \\ \text { children ever } \\ \text { born < } 3 \\ \hline \end{gathered}$ |
| Residence |  |  |  |  |  |  |
| Urban | 47.1 | 55.5 | 39.9 | 21.6 | 28.3 | 26.0 |
| Rural | 44.0 | 52.4 | 36.9 | 19.7 | 22.0 | 12.4 |
| Region |  |  |  |  |  |  |
| Metro Manila | 48.9 | 51.9 | 42.1 | 25.6 | 31.6 | 34.5 |
| Cordillera Admin. Region | 31.0 | 44.6 | 42.1 | 9.4 | 14.8 | 7.1 |
| Ilocos | 47.4 | 50.0 | 33.7 | 14.7 | 23.0 | 18.9 |
| Cagayan Valley | 43.2 | 57.7 | 36.7 | 21.1 | 20.3 | 16.9 |
| Central Luzon | 42.6 | 51.3 | 25.0 | 13.9 | 20.7 | 17.3 |
| Southern Tagalog | 43.3 | 61.7 | 39.1 | 22.6 | 22.8 | 22.4 |
| Bicol | 50.0 | 48.3 | 30.3 | 20.3 | 21.8 | 8.3 |
| Western Visayas | 41.4 | 65.0 | 50.4 | 22.6 | 28.0 | 20.9 |
| Central Visayas | 57.5 | 50.8 | 44.9 | 35.0 | 30.2 | 16.8 |
| Eastern Visayas | 42.0 | 50.6 | 37.0 | 38.6 | 19.5 | 9.2 |
| Western Mindanao | 39.3 | 47.3 | 38.1 | 21.3 | 24.6 | 15.2 |
| Northern Mindanao | 62.7 | 51.7 | 40.4 | 17.9 | 29.9 | 9.2 |
| Southern Mindanao | 50.6 | 52.0 | 40.6 | 24.1 | 32.2 | 21.3 |
| Central Mindanao | 47.0 | 66.7 | 51.5 | 7.8 | 29.7 | 14.3 |
| ARMM | 6.1 | 10.9 | 5.8 | 3.8 | 3.8 | 11.1 |
| CARAGA | 54.3 | 64.0 | 33.3 | 26.5 | 26.1 | 15.7 |
| Ethnic group |  |  |  |  |  |  |
| Tagalog | 47.0 | 55.4 | 38.4 | 20.3 | 26.4 | 25.9 |
| Cebuano | 54.8 | 53.7 | 44.8 | 23.6 | 30.5 | 16.1 |
| Ilocano | 43.5 | 50.2 | 34.3 | 18.4 | 23.4 | 23.6 |
| Ilonggo | 50.2 | 66.4 | 47.6 | 25.6 | 30.1 | 19.2 |
| Bicolano | 47.4 | 55.5 | 34.7 | 21.4 | 22.2 | 14.3 |
| Waray | 40.0 | 57.6 | 44.7 | 27.1 | 23.3 | 10.0 |
| Kapampangan | 16.7 | 48.2 | 9.9 | 0.0 | 8.9 | 18.4 |
| Other | 35.3 | 43.7 | 30.6 | 17.3 | 17.6 | 15.9 |
| Number of women | 1,779 | 1,702 | 1,702 | 1,694 | 8,327 | 2,203 |
| CMW = Currently married women |  |  |  |  |  |  |

The associations between preferences for a small family and various socio-demographic characteristics are shown in Table 4. The percent of two-parity women who want no more children increases with the age of the woman although those still in their teenage years who have already had two children are just as averse to the idea of more children as women in their thirties. The association with age is weaker for the ideal number in the two-parity group but for women at all parities the two-child ideal is stronger among younger women. This is probably both a sign of the transition to preferences for smaller families in the younger generation as well as a reflection of the longer exposure to childbearing of the older women.

|  | CMW with < 2 children | CMW with | 2 children | CMW with 3 children | All CMW | CMW 40-49 <br> years old |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Socio-demographic characteristic | \% with ideal family size < 3 | \% who want no more children | \% with ideal family size < 3 | \% who did not want last birth | $\begin{gathered} \% \text { with ideal } \\ \text { family size < } 3 \\ \hline \end{gathered}$ | \% with children ever born < 3 |
| Age |  |  |  |  |  |  |
| 15-19 | 42.6 | 52.7 | 42.8 | (0.0) | 41.9 | NA |
| 20-24 | 46.4 | 44.1 | 38.9 | 17.7 | 38.6 | NA |
| 25-29 | 47.0 | 46.7 | 37.7 | 20.1 | 31.4 | NA |
| 30-34 | 50.1 | 47.2 | 36.1 | 19.5 | 23.4 | NA |
| 35-39 | 45.8 | 66.7 | 43.3 | 29.1 | 20.9 | NA |
| 40-44 | 42.6 | 71.9 | 32.3 | 18.5 | 17.4 | NA |
| 45-49 | 33.2 | 83.0 | 45.0 | 0.0 | 17.4 | NA |
| Age at first marriage |  |  |  |  |  |  |
| <20 | 45.0 | 46.9 | 34.9 | 20.4 | 21.2 | 8.0 |
| 20-24 | 44.6 | 55.2 | 40.5 | 22.3 | 25.3 | 16.0 |
| 25+ | 48.0 | 62.8 | 40.5 | 17.2 | 34.2 | 44.0 |
| Woman's education |  |  |  |  |  |  |
| No education or elementary | 44.7 | 54.0 | 39.9 | 20.0 | 19.2 | 11.7 |
| High school | 45.2 | 52.0 | 39.7 | 21.4 | 27.1 | 17.6 |
| College or higher | 47.0 | 56.5 | 36.6 | 20.2 | 30.0 | 35.3 |
| Husband's education |  |  |  |  |  |  |
| No education or elementary | 46.4 | 55.4 | 39.7 | 21.6 | 20.9 | 12.3 |
| High school | 48.0 | 52.7 | 38.9 | 19.1 | 26.6 | 20.0 |
| College or higher | 43.5 | 54.9 | 37.5 | 20.9 | 28.8 | 31.7 |
| Woman's employment |  |  |  |  |  |  |
| Not working | 45.7 | 50.8 | 39.2 | 21.7 | 25.8 | 17.9 |
| Works away | 45.5 | 55.9 | 39.8 | 20.8 | 25.6 | 20.6 |
| Works at home | 48.2 | 60.5 | 34.7 | 18.9 | 23.1 | 20.6 |
| Husband's occupation |  |  |  |  |  |  |
| Not working | 37.8 | (65.0) | (24.4) | (10.0) | 26.5 | 14.0 |
| Professional | 46.1 | 54.6 | 34.4 | 22.2 | 29.1 | 32.3 |
| Clerical | 42.3 | 44.6 | 38.3 | 12.2 | 28.1 | 28.5 |
| Sales | 43.3 | 56.7 | 37.8 | 24.0 | 24.3 | 27.4 |
| Agriculture | 50.6 | 49.7 | 35.1 | 19.0 | 20.6 | 11.9 |
| Services | 43.9 | 55.7 | 42.8 | 23.4 | 29.3 | 24.3 |
| Skilled manual | 44.1 | 57.6 | 40.7 | 20.9 | 26.8 | 21.1 |
| Notes: Figures in parentheses are based on less than 20 unweighted cases. <br> CMW = Currently married women <br> NA = Not applicable |  |  |  |  |  |  |

Women who marry at later ages tend to prefer fewer children. Among women 40-49, there is a strong negative association between age at marriage and the number of children ever born.

Education of both women and their husbands is associated with ideal family size (for all women) and with the number of children ever born (for older women who have presumably completed their childbearing). Neither husband's occupation nor women's employment status show any clear patterns of association.

Table 5 shows the relationships of the two-child preference with selected socioeconomic characteristics including the presence of electricity in the household and ownership of a radio, television, refrigerator or freezer, bicycle, and automobile. The material possessions are viewed as rough proxies for wealth. In general, the possession of an item is associated with slightly higher proportions of women who prefer smaller families, but the associations are not consistent for all indicators and are generally very weak.


Table 6 explores the connections between preferences for the two-child family and exposure to the mass media, including general exposure to radio, television, and the print media, as well as exposure to messages about family planning. There is some weak evidence that general exposure to newspapers and magazines and especially to television is associated with preferences for smaller families. Exposure to these media has been summed into a scale ranging from zero (no exposure to any of the three) to a score of 3 (exposure to all three media). The index tends to show a more consistent positive association with preferences for a two-child family.

| Table 6 Percentage of currently married women indicating a preference for the two-child norm, by exposure to mass media, Philippines 1998 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CMW with < 2 children | CMW with | 2 children | CMW with 3 children | All CMW | CMW 40-49 <br> years old |
| Exposure to mass media | $\begin{gathered} \% \text { with ideal } \\ \text { family size < } 3 \\ \hline \end{gathered}$ | \% who want no more children | $\begin{gathered} \hline \% \text { with ideal } \\ \text { family size } \\ <3 \\ \hline \end{gathered}$ | $\%$ who did not want last birth | $\begin{gathered} \% \text { with ideal } \\ \text { family size < } 3 \\ \hline \end{gathered}$ |  |
| Mass media index ${ }^{1}$ |  |  |  |  |  |  |
| 0 | 40.6 | 45.1 | 33.8 | 20.3 | 14.8 | 10.3 |
| 1 | 45.7 | 52.3 | 35.1 | 19.5 | 22.2 | 13.7 |
| 2 | 46.5 | 55.3 | 39.4 | 20.2 | 25.9 | 17.4 |
| 3 | 46.0 | 55.0 | 39.9 | 22.0 | 27.9 | 25.2 |
| Reads newspaper or magazine at least once a week |  |  |  |  |  |  |
| Yes | 46.3 | 54.6 | 39.8 | 22.8 | 27.6 | 23.9 |
| No | 44.9 | 53.4 | 36.6 | 18.1 | 22.1 | 14.0 |
| Watches TV at least once a week |  |  |  |  |  |  |
| Yes | 46.4 | 55.5 | 39.5 | 20.6 | 27.0 | 22.2 |
| No | 43.7 | 48.7 | 35.0 | 20.9 | 20.0 | 11.2 |
| Listens to radio every day |  |  |  |  |  |  |
| Yes | 45.5 | 54.3 | 38.7 | 20.2 | 25.6 | 20.2 |
| No | 47.2 | 53.5 | 38.0 | 22.2 | 23.7 | 17.3 |
| Heard family planning message on radio in the last few months |  |  |  |  |  |  |
| Yes | 47.2 | 54.2 | 39.4 | 22.4 | 25.8 | 18.9 |
| No | 43.0 | 53.6 | 36.1 | 16.8 | 23.6 | 20.4 |
| Heard family planning message on television in the last few months |  |  |  |  |  |  |
| Yes | 47.7 | 55.1 | 40.4 | 21.1 | 27.1 | 21.3 |
| No | 41.4 | 51.2 | 33.3 | 19.6 | 21.0 | 15.5 |
| Read about family planning in newspaper or magazine in the last few months |  |  |  |  |  |  |
| Yes | 48.0 | 55.6 | 41.9 | 23.7 | 28.4 | 24.0 |
| No | 43.8 | 52.7 | 35.5 | 18.7 | 22.7 | 15.6 |
| ${ }^{1}$ The mass media index indicates exposure to mass media: from no exposure to radio, television, or the print media to exposure to one, two, or three types of media. <br> CMW = Currently married women |  |  |  |  |  |  |

Exposure to specific messages about family planning also shows a tendency to be associated with a small family preference.

## 6 Multivariate Perspectives

In order to estimate the simultaneous effects of various covariates on the six measures, logistic regressions for each of the measures were performed. The six measures are treated as dependent variables and are dichotomized. For instance, women were categorized as having an ideal family size of either less than three or at least three children. All of the covariates considered in the previous bivariate analyses, except for the specific questions on exposure to radio, television and print media, were included in the models. The composite mass media index is included. To facilitate interpretation of the results, a few variables were transformed. Age at first marriage was transformed into a continuous variable and educational levels were likewise converted into number of years of schooling.

The reduced form model that excludes variables that failed to show statistically significant association with any of the measures is shown in Table 7. Table 7 shows the odds ratios for significant effects for each of the six measures. Odds ratios essentially estimate the likelihood or probability of the occurrence of a particular event compared with the likelihood of its non-occurrence. For variables with more than one category, a reference category is designated and the ratios are interpreted in relation to that category. Hence, ratios lower than 1 signify a lesser likelihood of the event occurring in that category compared with the reference category. In contrast, odds ratios exceeding 1 denote a greater likelihood relative to the reference category. Associations that fall short of the .10 significance level are not shown in the table.

Age shows strong effects on two of the measures of the two-child norm. Among women with two children, the likelihood of wanting no more increases sharply beginning at age 35 . Women who are at the end of their childbearing years are six times more likely to want no more children than the youngest women. The direction of this association seems straightforward. On the other hand, among women of all parities, increasing age diminishes the likelihood of idealizing a small family. This is probably due to the fact that older women have had more children and therefore are more likely either to have wanted that number or to have rationalized unwanted births.

Urban residence increases the odds of a two-child preference for three of the indicators. For married women with fewer than two children, living in urban areas increases the likelihood of favoring small families by 26 percent. This is less evident among all married women; married urban residents are 15 percent more likely to want fewer children than their rural counterparts. Urban women who are nearing the end of their reproductive years show the strongest association at 46 percent.

Metro Manila, which is not shown in the table, is considered the reference category for the regional analysis-which means the odds ratios are interpreted by comparing the other regions to Metro Manila. Relative to residents of the capital region, women living in other regions are less likely to want smaller families. The pattern seen in the bivariate analysis persists here. In particular, women in the predominantly Muslim region of ARMM are less likely to prefer fewer children than Metro Manila women. This can be discerned from the very low ratios for five of the six measures. Only the last measure (which provides a historical perspective since the sample here consists of women who have largely completed their fertility) fails to produce a significant association.

Tagalog women are considered the reference category for ethnic group. With the exception of Kapampangans, women belonging to other ethnic groups are predisposed to having more children. The three ideal family size measures emerged as significant among Cebuana women. In comparison with Tagalog women, married Cebuanas with fewer than two children are 47 percent more likely to want to stop at two children. This probability is slightly higher (53 percent) among parity-two Cebuanas. If no distinction is made with regard to the number of children, the odds of having a two-child norm is 37 percent greater for Cebuanas than Tagalog women.

| Variable | CMW with < 2 children | CMW with 2 children |  | CMW with 3 children | All CMW | CMW 40-49 <br> years old |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% with ideal family size < 3 | \% who want no more children | \% with ideal family size < 3 | \% who did not want last birth | \% with ideal family size < 3 | \% with children ever born < 3 |
| Age |  |  |  |  |  |  |
| 20-24 |  |  |  |  | 0.73 | NA |
| 25-29 |  |  |  |  | 0.41 | NA |
| 30-34 |  |  |  |  | 0.24 | NA |
| 35-39 |  | 2.17 |  |  | 0.20 | NA |
| 40-44 |  | 2.92 |  |  | 0.16 | NA |
| 45-49 | 0.40 | 5.73 |  |  | 0.15 | NA |
| Urban residence | 1.26 |  |  |  | 1.15 | 1.46 |
| Region |  |  |  |  |  |  |
| Cordillera Admin. Region | 0.38 |  |  |  | 0.54 | 0.17 |
| Ilocos |  |  |  |  |  |  |
| Cagayan Valley |  |  |  | 0.26 |  |  |
| Central Luzon |  |  | 0.57 |  | 0.79 | 0.52 |
| Southern Tagalog |  |  |  |  | 0.77 | 0.63 |
| Bicol |  |  |  | 0.37 |  | 0.38 |
| Western Visayas | 0.47 |  |  |  |  |  |
| Central Visayas |  |  |  |  |  |  |
| Central VisayasEastern Visayas |  |  |  |  | 0.60 |  |
| Western Mindanao | 0.55 |  |  |  |  |  |
| Northern Mindanao |  |  |  |  |  | 0.35 |
| Central Mindanao |  |  |  |  |  |  |
| Southern Mindanao |  |  |  |  |  |  |
| ARMM | 0.05 | 0.07 | 0.11 | 0.13 | 0.14 |  |
| CARAGA ${ }^{\text {a }}$ |  |  |  |  |  |  |
| Ethnic group |  |  |  |  |  |  |
| Cebuano | 1.47 |  | 1.53 |  | 1.37 |  |
| Ilocano |  |  |  |  |  | 1.77 |
| Ilonggo | 1.66 |  |  | 2.22 |  |  |
| Bicolano |  |  |  | 1.99 |  |  |
| Waray |  |  |  |  |  |  |
| Kapampangan | 0.20 |  | 0.23 |  | 0.25 |  |
| Other |  |  |  |  |  |  |
| Age at first marriage | 1.04 |  |  | 0.92 | 1.10 | 1.21 |
| Woman's years of schooling |  |  | 0.96 |  |  |  |
| Husband's years of schooling | 0.96 |  |  |  |  |  |
| Woman's employment |  |  |  |  |  |  |
| Works away |  |  |  |  |  |  |
| Works at home |  |  | 0.69 |  |  |  |
| Husband's occupation |  |  |  |  |  |  |
| Professional |  |  |  |  |  |  |
| Clerical |  |  |  |  |  |  |
| Sales |  |  |  |  |  |  |
| Agriculture 2.15 |  |  |  |  |  |  |
| Services |  |  |  |  |  |  |
| Skilled manual |  |  |  |  |  |  |
| Has electricity |  |  |  |  |  | 0.61 |
| Has television |  | 0.71 |  |  |  |  |
| Has refrigerator or freezer |  |  |  |  | 1.15 | 2.20 |
| Has bicycle |  | 0.77 | 0.64 |  |  | 0.72 |
| Heard family planning message on radio |  |  |  | 1.66 |  |  |
| Read about family planning message in newspapers |  |  |  | 1.16 |  |  |
| $\mathbf{R}^{\mathbf{2}}$ Number of women | $\begin{gathered} 0.106 \\ (1,605) \end{gathered}$ | $\begin{gathered} 0.162 \\ (1,450) \end{gathered}$ | $\begin{gathered} 0.098 \\ (1,559) \end{gathered}$ | $\begin{gathered} 0.146 \\ (886) \end{gathered}$ | $\begin{gathered} 0.133 \\ (8,000) \end{gathered}$ | $\begin{array}{r} 0.301 \\ (2,135) \end{array}$ |
| $\begin{aligned} & \text { Notes: Variables are significant at alpha }=.10 . \\ & \text { CMW = Currently married women } \\ & \text { NA = Not applicable } \\ & \hline \end{aligned}$ |  |  |  |  |  |  |

The likelihood of Ilocano women age 40-49 having less than three children is 77 percent greater than for their Tagalog counterparts. Ilonggas and Bicolanas with three children are more than twice as likely to consider their last birth unwanted as the Tagalog reference group. This is quite revealing considering that Bicolano women have the highest fertility in the country. This finding is consistent with the high level of unmet need for family planning in this group. Kapampangan women behave in the opposite manner. They are about 75 to 80 percent less likely to favor small families.

The older women are at the time of marriage, the more likely they are to prefer smaller families and to have had fewer children by the end of their childbearing years. The likelihood of having an unwanted birth is lower for women who marry at later ages.

By and large, education shows surprisingly little association with a two-child preference. For the 12 comparisons (six measures and wife's and husband's education) only two show any significant effects and these are opposite the direction expected. This finding should be interpreted with caution, however, since there is a relative lack of variability in the educational attainment of Filipino women, i.e., the overwhelming majority have reached the secondary level.

Neither women's employment nor husband's occupation appear to relate to the two-child norm in the multivariate analysis, which is consistent with their performance in the earlier bivariate analyses.

In the 24 tests with various possessions, only 7 show significant effects and there is no clear pattern to these effects.

Exposure to family planning media messages shows little if any effect on the adoption of a small-family norm. Television messages showed no significant impacts while having heard a radio message on family planning associates only with having had an unwanted third child. Having read about family planning in the press shows only a modest increase in the likelihood of preferring fewer than three children. The index of exposure to the mass media in general does not show any significant effects on the two-child preference when considered simultaneously with all of the other variables.

## 7 Summary and Conclusions

This study defined six measures of the small-family preference. Examination of these measures from the three most recent demographic surveys in the Philippines indicates a trend toward small family size, specifically the emergence of a two-child family norm. Analyses reveal that a significant proportion of Filipino women have started to appreciate the importance of having smaller families and have acted on achieving their preferences. Women who appear to be in the forefront of this development include those living in urban areas (notably Metro Manila residents), certain ethnic groups such as Cebuano, Ilonggo and Ilocano, and women who delayed marriage. Education and female employment as well as exposure to mass media showed little effect in the presence of other variables.

Such limited findings from the multivariate analysis call for further exploration. Consideration of the role of husbands in reproductive decision-making may reveal new insights into family size ideals. While the study incorporated a few characteristics of husbands (e.g., educational attainment and occupation), a more thorough exploration of Filipino males' attitudes and fertility aspirations might shed more light on the emergence of the two-child norm. In several local studies, Filipino males were found to desire more children than their wives, and the husband's opinion tends to prevail when disagreement over fertility preferences arises (Perez, 1997; Perez et al, 1995). Future nationwide demographic surveys in the Philippines should perhaps take a closer look at this issue and include males as respondents in order to identify their fertility aspirations, attitudes towards contraception, and views on other issues.

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