# Factors Affecting Fertility Desires in the Philippines 

Clarissa C. David<br>University of the Philippines Diliman<br>Jenna Mae L. Atun<br>Ateneo de Manila University


#### Abstract

Factors affecting fertility desires in the Philippines were examined using data from a national survey and from individual and group qualitative interviews involving 143 respondents. Fertility goals usually range from two to three children, but evidence suggests that they are dynamic and may change over a person's lifetime. Qualitative interviews reveal that when negotiating about family size, it is the partner who wants more children that will be followed. A strong demand for gender balance among offspring creates a willingness to have more children than originally desired. Fertility goals increase over time among women. While those who start childbirth at a very young age successfully space their children, they tend to want larger families than those who start late. Initial fertility goals among women are generally low but may increase because of higher fertility desires among men, a demand for gender balance in children, and the desire for babies once their children have grown.


Keywords: Family planning, contraceptive use, population, Philippines

The Philippines continues to struggle in finding effective approaches to manage its "runaway" population growth. While fertility rates had rapidly declined during the 1960s and 1970s, these plateaued beginning in the 1990s. From 20 million in 1950, the Philippines's population ballooned to 75 million in 2000. In the 2010 census, estimates pegged the population at 92 million. The lack of improvements in poverty alleviation and the worldwide food crisis have pushed the population issue back near the top of the national agenda after having been neglected for several years. Reviews of evidence linking poverty with population show clear associations, and the persistently high fertility rate has become a major cause for concern (Orbeta, 2002b). The country's total fertility rate (TFR) was 3.6 in the early 1990s, decreasing only slightly in the 2000s. The World Bank (2011) estimated the country's TFR at 3.1 for 2011. In comparison, the TFRs of neighboring Thailand and Indonesia were only 1.4 and 2.4, respectively.

Even when the vast majority of countries around the world have successfully managed their populations, policymakers in the Philippines continue to work at making the empirical case that population growth and large family sizes are linked causally to poverty (World Bank, 2008). Effective family planning programs remain elusive in the face of strong objections from politically influential interest groups. In December 2012, Congress passed the Reproductive Health (RH) Act, one of the most contentious bills ever to be debated on the floor of the House of Representatives and the Senate. Resistance had continued for over a year as conservative groups that questioned the RH law's constitutionality elevated the matter to the Supreme Court (SC). In the end the SC declared the law "not unconstitutional", allowing it to be implemented but struck down eight provisions. The debate about RH is clearly not over as the struggle has moved from policy to the public, as people individually make decisions on their own fertility and reproductive options. Thus, research and advocacy relating to population growth and family planning remain critical in this country. Generating a comprehensive understanding of the sources of population growth is necessary to inform policies that will make a successful population management program. Analyses by Herrin and Costello (1996), using estimates for 2020 which is 25 years after the base year of 1995, illustrate that of the multiple sources of population increase in the Philippines, 16 percent can be attributed to unwanted fertility and 18 percent from wanted fertility. The authors proposed that wanted fertility or demand for large families can be addressed by modifying fertility preferences toward smaller family sizes and by creating social and economic conditions that favor small families and greater human capital investments for every child. Such broadly defined recommendations can become operational only if program planners understand the nature and origins of current fertility desires and their associated factors. This study seeks to contribute to such understanding.

Local literature infrequently deals directly with predictors of fertility demand, analyses of which appear mostly as part of broader investigations of population growth and its determinants. Social, economic, and cultural predictors of "fertility desires" identified in existing research include marital status, use of contraception, postpartum behavior, changes in child survival, price or cost of children, and taste for children (Orbeta, 2002a). Household socioeconomic determinants of larger family size (not fertility desires) include education, labor force participation of parents (particularly the mother), and income. Proximate determinants of fertility include marriage patterns and desire for children. Lanzona (2004) argues that individual decisions to have many children can be understood as a quantity over quality decision - that with each additional child, parents sacrifice inevitably on
quality of children because of the resulting decreases in available investments toward human capital. Whether individuals truly understand such a decision in this way remains to be thoroughly investigated.

Orbeta (2005) suggests that the understanding of the determinants of fertility demand remains incomplete and that further investigation into the factors that drive demand is necessary. While studies commonly indicate that poorer and more rural households prefer larger family sizes, Orbeta found that a closer look at intentions to have another child yields evidence to the contrary. It is in fact the number of children ever born that is consistently larger among poor families; their demand for additional children is lower after taking into account the number of children they already have, and their contraceptive practice is poorer. Nevertheless, national data presented in this paper show that overall desired family sizes are indeed larger among the poorest Filipinos.

One potential factor of interest in predicting fertility goals is the desire for male or female children. Unlike in countries such as Nepal and China that have a clear and historical preference for boys over girls, such gender discrimination does not exist in the Philippines. The interest, rather, is in gender representativeness - something that has been alluded to briefly in existing research (NDHS, 2003). This paper provides a deeper analysis of the importance of gender representativeness among offspring to fertility goals, as informed by research conducted in Nepal on the effect of sex preferences on contraceptive use (Leone, Matthews, \& Zuanna, 2003).

The recent history of family planning programs show a growing realization of the important role that men play in fertility goals and contraceptive use. Information on the nature of this role remains limited, however. Where, when, and how do they exert their influence on their partners, and how much weight do their desires have on family size? A study by Mason and Smith (2000) examined the impact of husbands' higher fertility demands (compared with their wives') in five countries, including the Philippines. Their analyses suggest that men's fertility goals account for about one-fifth of the total unmet need among women in the country. This is a more conservative estimate than that of Casterline, Perez, and Biddlecom (1997), whose research found that men's fertility preferences explain half of total unmet need. If one were to follow either of these results, the implication remains the same: adjusting men's fertility goals can make a significant impact on the country's population growth. Clearly, men are important intervention targets. To formulate effective strategies to change fertility desires, however, one must first understand the underlying motivations for these desires. This paper addresses this concern.

Broadly, the paper aims to examine individual-level psychological factors that influence fertility desires of women and men through a combination of secondary analysis of national data and qualitative interviews. Much of the literature on which current knowledge of the determinants of fertility demand in the country is based uses cross-sectional national data with static measures of "fertility desire" (i.e., ideal number of children or desire to have an additional child), with little regard to differences in desires between partners and other (potentially heterogonous) factors that may determine individual desires for a particular family size. Of particular interest is the possibility that fertility desires are not stationary, that these may change over a person's lifetime depending on a variety of factors. If, for instance, desires for small families are driven largely by economic concerns-like being able to afford to pay for all their children's education-then couples who prosper economically may decide to have more children later in life. It is, therefore, important to explore the many potential determinants of desired family size in order to further examine intervening factors that would change fertility goals.

## METHODS

Data were drawn from two sources: the National Demographic and Health Survey (NDHS) of 2003 and qualitative interviews conducted for this study. The qualitative interviews were done through a combination of individual, couple, and group conversations; the respondents were the principal sources of knowledge, providing more in-depth information on motivations and reasons for ideal family sizes.

## National Demographic and Health Survey (NDHS)

In the Philippines, the National Statistics Office (NSO) conducts the NDHS, using its "master sample," a probability national sample of a large number of households used for various national surveys. Respondents for the 2003 survey were married and unmarried females between the ages 15 and 49, and married and unmarried males between the ages of 15 and 54. The NDHS 2003 is the only survey round that included a sample of men. Thus, even if 2008 NDHS and 2011 Family Health Survey (FHS) are available, this study relied on the older dataset. For the purposes of this study, only sexually active females between ages 15 and 34 were included in the analyses to improve comparability with the qualitative interviews. As for males, most of the analyses included all sexually active males between ages 15 and 54 ; in cases where an age effect may occur (in making comparisons with women), a subsample of males 15-34 years old was used. The age limitation applied to the survey data was based on the sampling design used in the qualitative sampling to
improve comparability of findings. Of a total sample size among women of 13,633, 37 percent ( $n=4,997$ ) were included in the analyses. Likewise, of a total sample among men of $4,766,73$ percent ( $n=3,496$ ) were included. In the analyses where the male subsample was restricted to ages $15-34,36$ percent ( $n=1,721$ ) were included. The female sample had an average age of 27 . Forty-six percent reached high school and 29 percent entered college. Less than a fourth ( $23 \%$ ) were among the poorest. Almost half ( $49 \%$ ) lived in rural areas. The male sample, on the other hand, had a mean age of 35 . Thirty-seven percent of them reached high school and 27 percent reached college. Twenty-one percent were among the poorest and 17 percent were among the richest. Just like the women sample, half of the sampled men lived in the rural areas.

## Qualitative Interviews and Analysis

The motivation for limiting family size is driven largely by economic factors. Much of existing research clearly identifies the poorest families as those who have, on average, larger family sizes. It is the very poor who suffer most from having large families because each additional child places pressure on the scarce resources available. Interventions to increase use of family planning (FP) methods should target poor families-those who are most in need-and those whose unmet needs for FP are highest. Following this reasoning, respondents selected for this study's qualitative interviews had to be among the poor or poorest segments of the population and those who did not have a college degree. Only those who are sexually active, whether they have had a child or not, were included in the sample because the interviews explored decision making on use or non-use of contraception.

Ten focus group discussions (FGDs) with 5-11 participants were conducted, as well as a total of 67 in-depth interviews. In all, 143 individuals were interviewed. Respondents were selected according to a predetermined set of criteria in order to represent the following profiles in combination: urban-rural, male-female, young ( $15-22$ years old) and old ( $23-35$ years old), and married-unmarried. ${ }^{1}$ Interviewees were invited from 12 barangays (smallest geographic unit, equivalent to a village) in the greater Metro Manila area. For the interviews in rural areas, field coordinators went to five provinces in Luzon to search for respondents.

In-depth interviews lasted around one hour, and FGDs from 1.5 to 2 hours. Interviewers followed a discussion guide, which included questions on fertility goals, beliefs, and attitudes about contraception, perceived social norms about family size and family planning, and the circumstances around first sexual encounters and
first pregnancies. Participation was voluntary and respondents were informed that they would be asked questions about family planning. Six interviewers in the communities conducted interviews in or around where respondents lived; participants were given around USD 3 (PhP 150) for their time.

The final sample of all participants had an average household income of PhP6,000 (USD 143) per month. Thirty-eight percent had some years of high school, 22 percent completed high school, 13 percent were elementary graduates, and the rest ( $27 \%$ ) did not complete their elementary education. The respondents had 0 to 8 children; the average age at first child of the women was 20.7. On the average, the men began cohabiting or got married at age 21 and the women, at age 19.

All interviews were digitally recorded, transcribed verbatim, and then coded into content categories by four people. The transcription data were used for openended coding and data reduction. Data reduction was conducted through three rounds of coding. First, raw transcripts were coded by three research assistants to isolate interview parts according to subject. This allowed for a systematic sorting of data for the first reduction through a worksheet program. Second, contents relevant to each subject were compiled for a first round of reduction, which entailed making descriptive notes for each interviewee, detailing the responses shared, and accompanying context and interpretation in a matrix. The notes were then organized according to groups and across content areas for a last round of reduction. This analysis entailed writing summative and analytical descriptions and interpretations of data within a given subgroup for each content area (e.g., beliefs about birth control pills, circumstances around the first pregnancy). Patterns emerged in the final reduction; outlier or extraordinary cases were excluded.

Whenever specific participants are referred to or directly quoted, pseudonyms are used to protect their anonymity.

## RESULTS

Some local research results suggest that the problem of wanted fertility is simply one of demand for large families (Orbeta, 2002b). Qualitative evidence of this study indicates that this demand is not a unidimensional phenomenon of wanting many children. In fact most couples in the study wanted only two or three children, directly stating that life is hard nowadays and it is prudent and responsible to limit one's children in order to have a better life. Table 1 presents the distribution of "ideal number of children" in the 2003 NDHS for sexually active women and men
between the ages of 15 and 34 (to reflect the sampling scheme of the qualitative interviews). There is still a significant proportion, particularly among men, who indicated wanting more than three children. The majority of both women ( $72 \%$ ) and men ( $65 \%$ ), however, wanted between zero and three children.

Table 1. Percentage distribution of sexually active men and women by their ideal number of children (2003 NDHS, Philippines)

| Ideal number <br> of children | Women <br> $15-34$ y/o | Men <br> $\mathbf{1 5 - 3 4} \mathbf{y} / \mathbf{0}$ |
| :---: | :---: | :---: |
| 0 or 1 | 5 | 4 |
| 2 | 36 | 25 |
| 3 | 31 | 37 |
| 4 | 19 | 20 |
| 5 or more | 9 | 15 |
| Total | 4973 | 1709 |

Note. All estimates presented are unweighted unless otherwise specified.

Clearly, both wanted and unwanted fertility are important intervention goals. On the other hand, the results of the qualitative interviews suggest that the desire to have larger families may have been underestimated. That is, some part of the "unmet demand" as measured in many studies of population in the Philippines can be attributed to other factors such as the husband's desire for more children or the dynamic nature of fertility goals, which may increase for some key reasons over a couple's lifetime.

## Determinants of Desired Family Size

Results of the individual and group interviews show that the felt need to limit one's number of children was commonly shared by the poor regardless of gender, age, status, and locale. A vast majority of the respondents wanted only two or three children, with "life is hard these days" being the most commonly cited reason. They understood that having a large family is irresponsible because they will not be able to provide for their children and to send them all to school.

The most often cited reason for wanting multiple children is to ensure care of parents in their old age. If a couple have only one child and that child becomes incapable of taking care of them, then they believe they will have difficulties in
their elder years. The lack of social services for the elderly and social programs that allow for elderly care in the Philippines is part of the reason why many rely on their children for their care needs when the time comes. Filipino culture also dictates that it is the responsibility and obligation of children to take care of their parents. Another main reason for having children expressed by women is personal happiness, which is closely associated with having children.

Table 2 shows ordinary least squares (OLS) regression for the ideal number of children among sexually active men and women, using wealth index, urbanity, age, and education as predictors. All together these variables explain less than 10 percent of the variance in desired family size among men and women. A potential generational change was noted, as the younger individuals expressed wanting significantly fewer children than the older respondents. Poorer educated individuals also expressed a desire for larger families compared with better educated ones. With these controls in place, the magnitude of effect of an urban setting does not appear substantive. With the richest quintile variable excluded from the analyses, the results show that only the poorest quintile is significantly different, with its women and men wanting 0.41 and 0.96 more children, respectively, than their counterparts in the richest quintile. While urban versus rural residence yielded a statistically significant result, the beta coefficient is near zero, indicating that this relationship is not large enough to be meaningful.

Table 2. Summary table of ordinary least squares (OLS) regression predicting ideal number of children
of sexually active women ( $15-34 \mathrm{y} / \mathrm{o}$ ) and men ( $15-54 \mathrm{y} / \mathrm{o}$ )
(2003 NDHS, Philippines)

| Predictor | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | B | Beta ${ }^{\text {a }}$ | B | Beta ${ }^{\text {a }}$ |
| Poorest Quintile | 0.41 | 0.13 *** | 0.96 | 0.19 *** |
| Poorer Quintile | 0.07 | 0.02 | 0.23 | 0.04 |
| Middle Quintile | 0.01 | 0.002 | 0.08 | 0.01 |
| Richer Quintile | -0.14 | -0.04 | 0.03 | 0.005 |
| Urbanity | -0.17 | -0.06 *** | -0.22 | -0.05 |
| Age | 0.06 | 0.018 *** | 0.04 | $0.17{ }^{\text {*** }}$ |
| Education | -0.23 | -0.13 *** | -0.26 | -0.1 *** |
| $\mathrm{R}^{2}$ | 0.092 |  | 0.096 |  |
| N | 4,139 |  | 2,597 |  |

Note. a) ${ }^{*} \mathrm{p}<.05$; *** p <. 001

## Negotiating for a Smaller Family Size

Qualitative evidence shows that while some couples reached an agreement on ideal family size early in their relationship, they set aside some disagreements until they reached the point when one of them wanted another child. Whenever there were disagreements, these were usually over having one or two additional children.

It is more often the men who wanted more children than the women, a pattern that is reflected as well in the NDHS data. Table 3 shows mean and distribution differences in ideal number of children by gender, urbanity, and wealth index. Across all categories, men consistently wanted more children than women. In the interviews, women expressed that men were willing to have many children because they do not take care of the babies and thus have little appreciation for the work and hardship that childcare entails. Men, on the other hand, conveyed that since they are the ones providing for the family, their opinion on how many children there should be in the family should hold greater weight. For instance, one respondent, Jay, a young man who lives in an urban community, wanted three children while his wife wanted only one; she reasoned to him that she would have a hard time rearing children. He thinks there is nothing he can do if she does not want more. The other men in the group immediately kid him (in a chastising manner) about being whipped, saying he should have his way since he is the one making the babies. The other men said that their wives will have as many children as they want to have. Interviews with the women suggest that they would openly express disagreement with their husbands if they wanted fewer children, but ultimately their strong desire to please their partner and to not appear like they are being cruel would lead them to agree to have more children.

It appears that negotiating with a partner to have more children (regardless of whether it is the husband or the wife who wants more children) is easier than negotiating the opposite. To refuse one's spouse another child is viewed as being cruel and selfish, and the community is likely to feel sorry for the refused spouse. This means that the person who wants more children has more influence on the decision-making. Since it is usually the men who want more children, the women then bear the combined pressure (from the partner and the community) of bearing more children than they personally want.

Those who know very little about family planning and birth control view as moot the decision to limit their number of children. Although it is very rare, there are
still some women who seem ignorant about family planning. Maria's partner wants more children, but she does not; she thinks this is something which one has no control over. It is as if sex with no risk of getting pregnant is not a possibility.

If it is only up to me, I think I don't want to have another child yet. But....we cannot really control it. Since we live together, I have a partner, it is inevitable [to have sex]. But right now, I don't want to have one yet. (23, unmarried female, 1 child, non-user of contraception)

Table 3. Percentage distribution of sexually active women (15-34 y/o) and men ( $15-54 \mathrm{y} / \mathrm{o}$ ) by ideal number of children, and mean ideal number of children, according to wealth index and urbanity (2003 NDHS, Philippines)


## Importance of Gender Representativeness among Offspring

When asked how many children they would like, most interviewees give a number and an ideal distribution across genders (e.g., one girl and two boys, one girl and one boy). Interviews reveal that the strong desire for gender representativeness often trumps the desired family size in a couples' decision-making. The behavior of "running after a male or female offspring" can lead to larger-than-planned families. Atoy and his wife who reside in a rural community have eight children, even if their ideal number was three. The couple shared their story in a group discussion. Before they had their first child they wanted to have two boys and a girl. They had three successive girls. The husband wanted a son, however, so they tried again and got a boy. This encouraged them to try to have another boy, but instead had three more girls. It was not until they had eight children that they decided to stop. This scenario is played out, not all to this extreme a point, repeatedly in other couples interviewed.

The demand for gender balance among Filipino couples influences the dynamics of their fertility desires. Thus, it is important to understand the relative weight of gender balance against family size in determining fertility goals. What follows is an examination of the driving forces behind the preferences for each gender, which may provide directions for interventions geared toward moderating the demand for gender balance.

Table 4 shows the distribution of the ideal number of boy and girl offspring by gender in the 2003 NDHS. An equal preference for boys and girls was observed among women: around half wanted one boy and half wanted one girl. The men indicated a slight preference for boys. Half of the men wanted one girl and 31 percent wanted two girls. Moreover, 44 percent wanted two boys, 9 percent wanted three, and the rest wanted more than three.

Table 4. Percentage distribution of sexually active men and women, 15-34 years old, by their ideal number of male and female offspring (2003 NDHS, Philippines)

|  | Boy/s |  | Girl/s |  |
| :---: | :---: | :---: | :---: | :---: |
| Ideal number | Women <br> $(n=4972)$ | Men <br> $(n=1721)$ | Women <br> $(n=4972)$ | Men <br> $(n=1721)$ |
| 0 | 10 | 7 | 9 | 9 |
| 1 | 52 | 35 | 49 | 51 |
| 2 | 32 | 44 | 35 | 31 |
| 3 | 5 | 9 | 6 | 6 |
| More than 3 | 1 | 5 | 1 | 3 |

Table 5 shows the distribution of men and women who wanted to have another child or were undecided about whether they will stop having children, crossed with the number and gender distribution of children they currently have. Further, the table reports how these percentages break down under a control for the number of desired children, since those who desire more children than they already have are more likely to want another child regardless of the gender representativeness of their children. Among women with two children, 44 percent said they wanted to have another child or have not decided to stop childbearing. Among those whose two children are a boy and a girl, only 39 percent wanted another child, compared with 51 percent among those who have not achieved gender representativeness. Among women who expressed they only wanted two or fewer children, 26 percent of those with 2 boys or 2 girls wanted another child, while only 10 percent among those who have one girl and one boy indicated the same desire. This pattern repeats itself among women with three children and also among the men interviewed. These national data show that Filipinos are willing to have more children than they originally wanted in order to achieve gender representativeness among their children.

Table 5. Percentage distribution of sexually active men (15-54 y/o) and women ( $15-49 \mathrm{y} / \mathrm{o}$ ) with only 2 and 3 children and who want to have an additional child or are undecided, by sex of children, according to the ideal number of children
(2003 NDHS, Philippines)

| Gender distribution of current children | Women |  |  | Men |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% |  | Ideal no. of children | \% | $\begin{aligned} & \text { Idea } \\ & \text { of ch } \end{aligned}$ | no. dren |
|  | 2 or less |  |  |  | 2 or less |  |
| With 2 children | 44 |  | 16 | 53 | 20 |  |
| $N$ | 1776 |  | 778 | 547 | 167 |  |
| 1 boy, 1 girl | 39 |  | 10 | 50 | 16 |  |
| $n$ | 949 |  | 475 | 289 | 107 |  |
| 2 boys/2 girls | 51 |  | 26 | 56 | (28) |  |
| $n$ | 830 |  | 303 | 258 | 60 |  |
|  | \% | 3 | 4 or more |  | 3 | 4 or more |
| With 3 children | 25 | 12 | 48 | 35 | 16 | 55 |
| $N$ | 1346 | 584 | 46 | 470 | 189 | 221 |
| 1 boy, 2 girls/1 girl, |  |  |  |  |  |  |
| 2 boys | 21 | 9 | 44 | 33 | 14 | 55 |
| $n$ | 1003 | 447 | 344 | 355 | 148 | 161 |
| 3 boys /3 girls | 36 | 24 | 58 | 42 | (24) | (57) |
| $n$ | 343 | 137 | 119 | 115 | 41 | 60 |

In the qualitative interviews, while both men and women indicated gender preference for their children, the willingness to add children seems stronger among men who are trying to have sons because they want their family name to be carried on. While men had a clear reason for why they want to have boys, women found it difficult to explain their desire for gender balance. They refer to vague concepts such as "completeness," that one should have at least one of each in order to achieve completeness - that is, not having a boy and a girl is a state of incompleteness.

The desire for girls is also driven by two expectations. One, girls help carry out household chores, such as cleaning and doing the laundry. Two, they are more dependable and do better in school compared with boys. The parents also believed that girls are easier to raise than boys because girls do not have vices and do not grow up to become drunks.

The desire for boys is driven primarily by men's felt need for their family name to be carried on. Men wanted at least one boy so that their surnames would spread or live on beyond their lives. Their view is that having only female offspring leads to the disappearance of their names later, since women adopt their husband's surname when they marry and the resulting children carry the surname of their father. A distant second reason for wanting boys is to have a "man in the house" if something were to happen to the father. The respondents' ideal is to have a boy for a firstborn so they can look after their siblings and defend them should it become necessary. Boys can also help the father in his work; since boys work at an earlier age than girls, they can help with the family's finances.

## Effect of Initiating Childbearing at a Young Age

Interviews with mothers reveal their strong desire for "babies." Once their children are no longer babies (e.g., beyond nine years old), they begin entertaining the idea of having another child. It is therefore reasonable to expect that the age at which women have their first child affects their fertility goals, since they have a longer window of time to adjust their desired number of children. The following discussion explores the possible contributing factors to the relationship between age at first child and total fertility.

Existing studies find empirical evidence that the age at which women have their first child is a significant determinant of lifetime fertility. This may be a result of several factors, a primary one being that the childbearing age is longer for those who had their first child at an early age. Once a young woman gets pregnant unintentionally, her options for directions in life are constrained to varying degrees.

Situational changes present new sets of behavioral determinants that affect women's abilities to limit and space their children. The following analyses are limited to women who are sexually active, married or unmarried, between the ages of 25 and 49 (very young women have not had time to bear many children). Controlling for level of education and age, there is a -0.44 ( $p<.001$ ) partial correlation between age at first birth and number of living children. This suggests that for every year that first birth is delayed, a woman will have 0.44 less children, holding all other factors constant. Figure 1 charts the average number of living children along age at first birth within subgroups of age. For each year that the onset of childbearing is delayed, a woman will have significantly fewer children over her lifetime.Among women who are currently between the ages of 25 and 29, the correlation is 0.52 ( $p<.0005$ ), suggesting that women who started childbearing at an early age have significantly more children than those who started late. Those who had their first child before or when they were 16 years old would have on average 3.7 children, while those who started at age 24 would have only 1.4 children.


Figure 1. Mean number of living children by age at first birth, according to age subgroups of women 25 years old and over (2003 NDHS, Philippines)

Slopes of the relationship vary slightly by age group, with the youngest age group exhibiting the strongest relationship, followed by the 30-34-year olds and the 3539 -year-old groups. Women's diminishing odds of conceiving as they age may explain the decreasing magnitude of relationships (however, the subgroup analysis controls this to some extent). Thus, the next potential explanation is that women who begin
childbearing during their teenage years are not as successful at spacing. The mean difference analysis (see Table 6) shows that in fact the relationship is reversed. The average number of years from the first to the second child is higher among those who had their first child at 16 or younger, and progressively gets lower as the age at first birth increases. Those who began having children at 26 or older had children in quicker succession, probably because the chances of conception decrease with age.

Table 6. Mean number of years between first and second child and mean number of children at first use of family planning, by age at first birth of women, 15-34 years old (2003 NDHS, Philippines)

| Age at <br> first birth | Average years between <br> 1st \& 2nd child | $\boldsymbol{N}$ | Mean no. of children <br> at first use of FP | $\boldsymbol{N}$ |
| :--- | :---: | :---: | :---: | :---: |
| 16 or younger | 3.07 | 266 | 2.28 | 226 |
| 17 | 2.98 | 237 | 2.01 | 221 |
| 18 | 2.93 | 366 | 1.97 | 332 |
| 19 | 2.94 | 383 | 1.66 | 423 |
| 20 | 2.80 | 393 | 1.73 | 401 |
| 21 | 2.78 | 336 | 1.59 | 373 |
| 22 | 2.8 | 269 | 1.54 | 292 |
| 23 | 2.84 | 214 | 1.41 | 255 |
| 24 | 2.81 | 147 | 1.37 | 178 |
| 25 | 2.66 | 122 | 1.28 | 147 |
| 26 or older | 2.26 | 223 | 1.20 | 319 |
| Total | 2.83 | 2956 | 1.65 | 3167 |

It appears, then, that spacing is not the culprit. The data support a different explanation- that women who start having children at an early age actually desire larger family sizes than those who start at a later age. Figure 2 shows a negative relationship between ideal number of children and age at first birth for all sexually active women between the ages 15 and 34 ( $r=-0.22, p .<.0005, n=4321$ controlling for current age), with the slope slightly steeper for rural women than urban women. This suggests that women who had their first child in their teenage years have longer spaced children, but they tended to want more children than those who start childbearing in their mid-20s. Assuming that most teenage pregnancies are unintended, why then would young mothers want more children? Young mothers have more freedom to add to their fertility goals as they grow older. If they started having children at a young age, they have a longer window of time to increase their fertility desires over their lifetimes.


Figure 2. Mean ideal number of children by age at first birth of women 15-34 years old and by locale (2003 NDHS, Philippines)

Teenage mothers tended to have longer birth spacing from their first to second child than mothers who started childbirth in their mid-20s. Does this mean that teenage mothers are successfully using modern contraception to achieve the ideal spacing? Not necessarily. Table 6 presents the mean number of children a woman has before she begins using a family planning method. It shows that age at first birth is negatively associated with number of children upon initial use of FP. A typical 16 -year-old girl who has one child will not begin using contraception until after her second or third child. It is highly likely, then, that many young mothers will abstain from sex after the birth of their first child, explaining the long space between the first and second child.

## DISCUSSION AND IMPLICATIONS

With a clearer understanding of the factors that influence fertility demand and the nature of that demand, interventions can include targeted strategies to help reduce demand overall. Reduction of fertility desires is a challenging goal, one that some interest groups may find objectionable. Initial fertility desires are generally quite low. The challenge is its dynamism over a person's lifetime and the apparent willingness of many couples to adjust their total fertility goals for some reasons, such as gender balance.

When a couple does not agree on the number of children to be had, they do not attempt to resolve the matter until the time that they reach the fertility goal of one of them. The negotiation to have another child is postponed until the other partner expresses the desire to add another child. The interviews show that it is much more difficult to negotiate one's self out of having another child than to go for another child. For any given couple, then, chances are that the fertility desires of the one who wants a larger family will be followed. Short of teaching couples negotiation skills, a promising way to deal with this situation is by addressing the men's desire for large families and male offspring.

The traditional roles for girls and boys remain widely adopted in the socialization of children by parents and schools. Changing these norms - while it may take several years or even decades - could eventually lead to decreasing demand for gender representativeness among one's offspring. Men's strong desire for boys in order to "spread their breed or name" requires further exploration; its cultural roots and causes remain poorly understood, but it is potentially a significant predictor of family size. Some research has shown that, unlike in many other developing countries, the Philippines does not have a strong preference for sons over daughters (Arnold, 1997; Arnold \& Kuo, 1984). Filipino parents ascribe positive traits to children of both genders (Bautista, 1988). Sons are valued for their potential to generate income earlier in their lives; daughters are valued for the help they are able to offer in household tasks. Daughters also have a long-term economic value as they are perceived to be able to extend financial help to their parents even when already married since women traditionally hold the purse in single-income households (Bautista, 1988).

One way to address the desire for gender balance is to inform men and women who are planning on having their first or second child on ways to increase the chances of conceiving a boy or a girl based on scientific knowledge in reproductive medicine (i.e., day of conception in the ovulation cycle) (Weinberg, Baird, \& Wilcox, 1995). One might also be able to suppress the demand for gender balance by cultivating a social norm wherein sacrificing ideal family size for gender balance becomes undesirable. Media advocacy in news and, more importantly, entertainment programming is a promising manner of intervention. The literature on media effects suggests that community norms can be influenced directly and indirectly through social learning processes stimulated by media content (Cooper, Burgoon, \& Roter, 2001). This approach can also be used to create a norm against men's need to spread their name, in the hopes of decreasing its importance or weight as a factor that determines the demand for boys.

Communication and policy interventions to increase the age at which women have their first child require different strategies. Existing policies of local health centers capture and educate women about FP after they have had their first child. This is, of course, important; ultimately what matters is the total number of children they have during their lifetime. Even with this in place, however, it is still important to delay the age at which a woman has her first child for reasons beyond the health risks for both the mother and the baby. Young unprepared mothers have to stop school to take care of their baby, a circumstance that often propels their lives toward a different direction. Interventions to reach those who have not become pregnant for the first time are thus critical. It is a vulnerable time because young men and women have limited avenues to seek birth control given the local culture's strict normative expectations about sexual activity prior to marriage or cohabitation.

Interventions aimed at changing the demand or desire for large families or certain features of families (e.g., gender representativeness) promise to be immensely challenging. Such programs will take longer than more directed behavior-change interventions, such as increasing the prevalence of modern contraceptive use, because these are deeply ingrained cultural beliefs that are infrequently questioned or even understood. However, given the substantial effect that wanted fertility will continue to have on population growth in the Philippines, programs directed toward shifting normative expectations of family size to smaller sizes will continue to play critical roles in long-term population management in the country.

## ACKNOWLEDGMENT

This study was conducted through the support of the University of the Philippines College of Mass Communication Foundation, Inc. (UPCMCFI) and the Philippine Center for Population and Development (PCPD). Views expressed herein are of the authors alone and do not represent those of UPCMCFI and PCPD.

## ENDNOTE

1 "Married" respondents included those who have been cohabiting with their partner for at least 6 months. This is because a significant portion of couples, particularly in poor areas, in the Philippines are not legally married but are considered to be married by their communities since they live together and have a child or children together.

## REFERENCES

Arnold, F. (1997). Gender preferences for children. Demographic and health surveys comparative studies, No. 23. Calverton, MA: Macro International.

Arnold, F., \& Kuo, E.C.Y. (1984). The value of daughters and sons: A comparative study of the gender preferences of parents. Journal of Comparative Family Studies, 15(2), 299-318.

Balisacan, A., \& Tubianosa, C. (2004). The population-poverty nexus: The Philippines in comparative East Asian context. Final Report. Taguig City: Philippine Center for Population and Development. Retrieved February 15, 2011 from http://www.pcpd.ph/ publications/67APPC1.pdf

Bautista, M.L.F. (1988). Historical influences on gender preference in the Philippines. Journal of Comparative Family Studies, 14(1), 143-152.

Casterline, J.B., Perez, A.E., \& Biddlecom, A.E. (1997). Factors underlying unmet need for family planning in the Philippines. Studies on Family Planning, 28(3), 173-191.

Cooper, P., Burgoon, M., \& Roter, D. (2001). An expectancy-value analysis of viewer interest in television prevention news stories. Health Communication, 13(3), 227-240.

Herrin, A., \& Costello, M.(1996). Sources of future population growth in the Philippines and implications for public policy. New York: The Population Council.

Lanzona, L. (2004).Population and the economic value of human capital: Further exposition on the quality vs. quantity choice. In A. Balisacan \& C. Tubianosa (Eds.), Populationpoverty nexus: The Philippines in comparative East Asian context, Final Report (pp. 73-82). Taguig City: Philippine Center for Population and Development. Retrieved February 15, 2011 from http://www.pcpd.ph/publications/67APPC1.pdf

Leone, T., Matthews, Z., \& Zuanna, G.D. (2003). Impacts and determinants of sex preference in Nepal. International Family Planning Perspectives, 29(2), 69-74.

Mason, K.O., \& Smith, H.L. (2000). Husbands' versus wives' fertility goals and use of contraception: The influence of gender context in five Asian countries. Demography, 37(3), 299-311.

Orbeta, A. (2002a). A review of research on population-related issues: 1980-2002. Discussion paper series No. 2002-17. Makati City: Philippine Institute for Development Studies.

Orbeta, A. (2002b). Population and poverty: A review of the links: Evidence and implications for the Philippines. Discussion paper series No. 2002-21. Makati City: Philippine Institute of Development Studies.

Orbeta, A. (2005).Poverty, fertility preferences, and family planning practice in the Philippines. Discussion paper series No. 2005-22. Makati City: Philippine Institute for Development Studies.

NDHS (National Demographic and Health Surveys) 2003, Final Report, National Statistics Office, Quezon City, Philippines.

Weinberg, C.R., Baird, D.D., \& Wilcox, A.J. (1995). The sex of the baby may be related to the length of the follicular phase in the conception cycle. Human Reproduction, 10(2), 304-307.

World Bank. (2008). The World Bank HNPStats. Retrieved May 30, 2008, from http:// go.worldbank.org/ITAWZNXT1

World Bank. (2011). Fertility rate. Retrieved 10 October 2014, from http://data.worldbank.org/ indicator/SP.DYN.TFRT.IN

Clarissa David, PhD [clarissa.david@gmail.com](mailto:clarissa.david@gmail.com) is an Assistant Professor at the College of Mass Communication, University of the Philippines, Diliman, Quezon City.

Jenna Mae Atun [jenna.atun@gmail.com](mailto:jenna.atun@gmail.com) is a lecturer at the Ateneo de Manila University, Loyola Heights, Quezon City, and a graduate student at the School of Economics, University of the Philippines, Diliman, Quezon City.

