

**Religion and Reproduction in Philippine Society:
A New Test of the Minority-Group Status Hypothesis***

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ABSTRACT

Most previous tests of the religious-minority-group status hypothesis have sought explanations of Catholic pronatalism in more developed countries settled by Europeans or European immigrants. The present pilot study departed from that tradition by focussing on Protestant antinatalism in a lesser developed country settled by Malaysian and Chinese immigrants. This study of 366 unmarried college students in the Central and Southern Philippines found that Protestant respondents came from higher socio-economic origins than did Catholic respondents. The Protestant men desired many fewer sons and daughters than did the Catholic men, even when these differences in origins were controlled. The Protestant women did not want many fewer sons but did want many fewer daughters than the Catholic women wanted. Protestant respondents were less likely than the Catholics to view the instrumental roles of sons and daughters as the most salient advantages of having children. Protestants were much more likely than Catholics to think a married couple should start contraception before the first birth and much less likely to think that artificial methods of family planning were against God's will. The results suggest that support for the religious-minority-group status hypothesis is not limited to minorities with explicitly pronatalist creeds or to religious groups in more developed nations or nations with an indigenous European culture.

Introduction

A major perspective explaining religious differentials in fertility is the minority-group status hypothesis. This perspective holds that the fertility of a religious minority group will be *depressed below* that of the religious majority group if three conditions hold for the minority: 1) if the minority has desired and attained acculturation; 2) if social and economic mobility has occurred or at least is desired; and 3) if no pronatalist ideology prohibits the use of artificial contraception (Goldscheider, 1971; 297). In other words, if structural conditions make upward mobility a realistic goal, minority couples are thought to postpone or curtail child-bearing to mobilize more resources against perceived social barriers to their economic achievement. The presence of these three conditions for Jews and the absence of the third condition for Catholics has been seen as explaining why Jews have lower and Catholics have higher fertility than Protestants in North America and Europe (Goldscheider, 1971). In places (e.g., Northern Ireland) where Catholics see themselves as a disadvantaged minority, a stricter observance of papal injunctions against artificial contraception and abortion may serve the useful purpose of identifying and maintaining the group's normative boundaries. Kennedy's (1973) study of Northern Ireland led him to conclude that when a religious minority has a politically and economically disadvantaged status and a creed banning artificial contraception, a belief that high fertility might turn them into a numerical majority can motivate closer observance of that creed. In these ways, religious-minority status can produce a fertility rate *inflated above* that of the religious majority.

Cross-national tests of the minority-group status hypothesis must take into account the conditional relationship between the level of living (lower, higher) and the national fertility rate (uncontrolled, controlled). No nation that has reached a high level of living has uncontrolled natality; thus, if a four-fold table is formed by cross-classifying the two variables, this cell would be empty. To control the conditional relationship between the two variables, Day (1968) examined only those nations at a high level of living (defined as a female illiteracy rate below 10%) and a high level of control over natality (defined as a total fertility rate of 4,500 or fewer births per 1,000 women by menopause). He found that the natality of Catholics in such countries where Catholics were a distinguishable *minority* (Australia, Canada, the Netherlands, New Zealand, Switzerland, the United Kingdom, and the United States) exceeded that of the Catholic *majorities* in Argentina, Austria, Belgium, Czechoslovakia, France, Hungary, and Luxembourg. Day (1968:45) concluded that the pronatalist teachings of the Catholic Church encourage a higher Catholic fertility rate in two contexts: when there is a higher level of economic development and when Catholics are a numerically and politically important but not dominant religious minority group.

The countries in Day's sample shared another characteristic: they were all predominantly European nations or nations settled primarily by European immigrants. Thus, it is impossible to judge whether support for the minority-group status hypothesis is bound to countries with a European cultural tradition and/or a relatively high level of economic development. Another problem is that most tests of the hypothesis have focussed on Jewish or Catholic minorities and have ignored Protestant minorities. Clearly, more research is needed to test the hypothesis with data from countries with an indigenous Eastern culture, with a lower level of economic development, and with a significant Protestant minority.

The Philippines is a country having all three characteristics. Although the Philippines endured over four hundred years of colonialism under Spain and the U.S., it is primarily inhabited by people of Malaysian or Chinese descent. Less than half the population can speak either Spanish or English. The rate of female illiteracy is 20% (United Nations, 1980), placing the Philippines in the category of "lesser developed" countries by Day's (1968) criterion. While Roman Catholics are the religious majority group (83% of total population), Protestants comprise a distinguishable minority (9%). (Because Muslims (5%) and Jews (less than 1%) are such small minority groups, they will not be considered here.) Philippine Protestants meet the three conditions identified by Goldscheider (1971) which would imply lower fertility rates than for the Roman Catholic majority. That is, Protestants are culturally assimilated into Philippine society, are relatively more advantaged economically than Catholics, and are not prohibited by religious creed from use of artificial contraception. Therefore, the Philippines is an ideal setting for a new test of the minority-group status hypothesis.

The Evidence

Very little research has probed the effects of religion on reproductive behavior in the Philippines. Among the few studies in existence is Madigan's (1972) analysis of a sample of 2,000 wives of childbearing age (15-59) interviewed in Cagayan de Oro City in the early 1960s. Using the age distribution of wives in the 1960 Census of Cagayan de Oro City as his standard population, Madigan computed standardized general fertility rates of 339.4 for Catholics and 339.7 for Protestants. Madigan concluded that the Catholic and Protestant Churches had not yet had a major impact in differentiating the fertility of Christian Cagayan wives in the early 1960s. However, he (Madigan, 1972: 137) contended that such an impact may have emerged by the early 1970s due to the increasing popularity of both natural and artificial methods of family planning.

To examine this idea, Lacar (1974) surveyed 2,280 Philippine students in four Protestant and eight Catholic colleges or universities in the early 1970s. He found that Catholics in Catholic colleges/universities and Protestants in Protestant colleges/universities had about the same ideal number of children (3.67 and 3.64, respectively). Likewise, Catholics going to Catholic colleges were as likely as Protestants going to Protestant colleges to intend to use contraceptives when they married (72.19% and 72.83%, respectively). These relationships were consistent with Ballweg's (1972) finding from a 1972 KAP survey that Catholic wives were no less likely than non-Catholic wives to be using IUDs or anovulant pills. Indeed, Ballweg found that the most frequently cited reason for nonuse of *any* method of family planning was a desire to become pregnant, not a concern for the "sinfulness" of family planning. Therefore, the studies by Lacar (1974) and Ballweg (1972) did not support Madigan's speculation that an important Protestant-Catholic differential in reproductive goals or contraceptive use could have emerged by the early 1970s.

The 1970s decade was one of important demographic and social change in the Philippines. The national family planning program officially began in 1971 in order to promote the artificial methods of birth control. In the early 1970s, the program vigorously promoted the anovulant pill; but emphasis shifted to the condom in the mid-1970s, when the program made greater efforts to influence rural couples living far from clinics. By the end of the decade, surgical sterilization had replaced pills and condoms as the method most favored by the family planning program (Laing, 1984: 49).

Ironically, however, the prevalence of the rhythm method grew during the decade (Laing, 1984); and the highest contraceptive-continuation rate was found for wives relying on a combination of *rhythm* and *withdrawal* (Laing, 1985: 141). This popular resistance to artificial birth control was not seen as resulting from religious causes. Indeed, 74% of Catholic wives responding to a 1980 Community Outreach Survey (COS) said they thought their church approved of such family-planning methods as pills, IUDs, condoms, and sterilizations (Laing, 1984). Instead, Laing (1984) argued that it represented a general cultural resistance to Western methods of modern contraception, a resistance also found in the largely non-Catholic popula-

tion of Sri Lanka, where rhythm is as prevalent as in the Philippines (Mamlouk, 1982: 15). Consequently, Laing concluded that as of the end of the 1970s, Catholicism still played no important role in initiation, choice, continuation, or failure of contraception in the Philippines.

Similarly, the 1978 Republic of the Philippines Fertility Survey (RPFS) suggested that Catholicism still played no important role in pregnancy rates (National Census and Statistics Office, 1979: 100). The average number of children born in 1973-78 per continuously married woman was about the same for Roman Catholics (1.2) as for non-Catholic Christians; such as, Protestants (1.2); Iglesia ni Kristo (1.2); Aglipayans (1.1); and others (1.2) (National Census and Statistics Office, 1979; Table 5.11). Because religion did not appear to be an important factor in contraception or pregnancy in the Philippines by the late 1970s, the 1983 National (Philippine) Demographic Survey dropped religion as an item on its questionnaire.

Total fertility rate in the Philippines moved from 6,710 in 1960 (Keyfitz and Flieger, 1971: 411) to 4,042 in 1983 (United Nations, 1985), a point low enough to signal the onset of fertility control, according to Day's (1968) standard. Thus, if control over fertility is a condition for the appearance of distinctively "Catholic" fertility (Day, 1968), then Protestant-Catholic differentials in reproductive orientations should have emerged by the 1980s. The emergence could result from a greater Catholic resistance to the messages of the national family planning program, a greater Protestant receptivity to such messages, or both at once. The surveys used by Lacar and Ballweg were conducted before 1972, too early to reflect any possible effect of the national family planning program on Protestant-Catholic orientations toward family planning. The 1978 RPFS and the 1980 COS, while gathered after the program began, contained very few respondents in any one of the non-Catholic groupings. For this reason, Laing (1985) lumped together such diverse groupings as Muslims and Protestants into one "non-Catholic" category. The small number of non-Catholic respondents to these various surveys may be an important methodological reason why clear-out religious differentials in reproductive orientations have been so hard to observe (Cabignon, 1983).

The purpose of the present pilot study is to explore Catholic and Protestant differences in desired numbers of sons and daughters, in reasons underlying those desires, and in attitudes toward the initiation of contraception and toward specific natural and artificial methods of contraception in a Philippine sample. This investigation offers several advantages over its predecessors. One is that the sample was drawn fourteen years after the initiation of the Philippine national family planning program, long enough to reflect any programmatic impacts on attitudes. Another is that the effective sample contained a large number of Protestants. A third advantage is that all respondents were enrolled in urban colleges/universities, and most of these institutions were sectarian. Because the prevalence of contraception is greatest in urban and highly educated populations in the Philippines (Mamlouk, 1982), and because sectarian educational institutions can focus the religious controversy surrounding family planning, our sample was uniquely suited to reveal any nascent differentials in Christian fertility in the Philippines.

Procedures

Sampling Techniques

The present pilot study is based on data from an English-language questionnaire self-administered by college students in January-March, 1985.¹ Because most collegiate institutions in the Philippines are private, all institutions participating in this survey were private. Four of these institutions (two nonsectarian colleges, a Catholic woman's college, and a Jesuit university) were located in Cagayan de Oro City, the site of Madigan's original study. The instrument was pretested twice in Cagayan de Oro (at a private nonsectarian coeducational college and then at a Catholic woman's college) before the survey proper began. A listing of all course schedules was obtained from another nonsectarian college and the Jesuit university of Cagayan de Oro and became the sampling frame. Days of the week and hours of the day were randomly chosen, and then a random selection of classes meeting at that time of the week was made. The questionnaire was administered to all students attending a selected class. This procedure netted 99 respondents from the private nonsectarian college and 118 from the Jesuit university, but a preponderance of these were Catholics.

To boost the number of Protestant respondents, a convenience sample of non-Catholic Christians was gathered from the student body of a conservative Protestant university in Iloilo City and a liberal Protestant university in Dumaguete City. These two kinds of Protestant universities were chosen to capture a spectrum of Protestant influence. To net a sufficiently large number of Protestants, it was infeasible to sample randomly the classes at these two universities; for a majority of students even at Protestant institutions of higher learning in the Philippines are Roman Catholic. Therefore, a convenience sample was used to obtain 147 non-Catholic Christians from the liberal one.² Because combining the sample students from these Protestant universities with the others rendered the total sample nonrandom, we decided to include the 19 nonrandomly sampled students from the second pretest. The total sample size thus was 519 college students.

Independent Variables

Madigan (1972: 138) wrote that voluntary control over fertility must begin with the urban upper classes in the Philippines and gradually trickle down to the rural poor. Thus, we expected that our urban college students might be harbingers of future religious differentials in reproductive behavior. To gain insight into this issue, we asked: "What is your religion?" We retained in this analysis only those who were Catholic or Protestant.³ Following Lacar, we omitted any Catholic respondents from the two Protestant universities and any Protestant respondents from the two Catholic institutions of higher learning. Yet we retained all Catholic and Protestant respondents enrolled in the nonsectarian colleges participating in the survey proper.

Dependent Variables

One way of anticipating what fertility differentials might be produced by a sample of young college students is to ask: "How many sons would you like to have in all during your lifetime? . . . How many daughters would you like to have in all during your lifetime?" Some students stated a range of acceptable numbers; in these cases, we coded the midpoint of the range. Only seven of the original 519 respondents were unable to state any number of sons they desired, and only eight were unable to say how many daughters they wanted. The high rate of response to these two questions promoted confidence that the questions were meaningful. From the minority-group status hypothesis, we posited that Protestants would desire fewer sons and daughters than Catholics would.

As a way of understanding any religious differences in the numbers of sons and daughters desired, we asked the following open-ended questions: "What are the most important advantages of having sons? . . . What are the most important advantages of having daughters?" The advantages mentioned would tap the values attributed to having children of a particular sex.

Bulatao defined value salience as the readiness with which a particular value is brought up in normal conversation. Salient values are important because they represent "some subset of the cultural inventory," common notions of what having children means (Bulatao, 1975: 83). In the present analysis, we focussed on value salience by studying the advantage of sons and daughters mentioned *first* by each respondent. No questions about the disadvantages of children were posed.

Fertility differentials may arise not only because social groups desire different numbers of sons and daughters for different reasons but also because they adopt contraception at different points in their marriages. To obtain attitudes about the proper time to initiate contraception, we asked: "When a couple gets married, when should they start using family planning?" The response categories were: (1) never; (2) before first birth; (3) after first birth but before last wanted birth; (4) after last wanted birth; (5) don't know. The minority-status hypothesis implies that Protestants would advocate an earlier initiation of contraception by married couples.

Differentials in marital fertility may also develop because different religious groups elect different methods of contraception. We asked: "Are any of the following methods of family planning against the will of God? (CHECK ALL ANSWERS THAT APPLY)." A list of ten family planning methods was presented in alphabetical order with definitions in parentheses beside those methods that the pretest had indicated were less familiar. From the perspective of the minority-group status hypothesis, Protestants should be less likely to view the artificial methods of contraception as against divine will.

Control Variables

In order to estimate the net effects of religion on the desired number of sons and daughters, it was necessary to control the effects of other related social and eco-

conomic factors. For example, the 1978 RPFs showed that persons with lower levels of education and those living on farms desired larger numbers of children than did others (Kent and Larson, 1982: 12-13). In addition, the desired number of children has been related to the number of siblings (Guitarte, 1982). Therefore, we controlled the father's education, trichotomized as: (1) less than college; (2) college, 1-3 years; (3) college, 4 or more years. In addition, we controlled whether the respondent's parents now lived on a farm: (0) no; (1) yes. The number of the respondent's brothers was held constant when examining his/her desired number of sons; and the number of the respondent's sisters was controlled when investigating the desired number of daughters.

These family-background characteristics might be more weakly related to the reproductive orientations of upwardly mobile college students. To gain evidence of the respondent's status aspirations, we asked: "When you complete your college education, what is the first job you expect to take?" The answers were grouped into professional and nonprofessional occupations.⁴ Persons indicating they did not know what first job they would take were classified "nonprofessional." The working hypothesis was that both male and female respondents expecting to hold a professional job after college would desire fewer sons and daughters, *ceteris paribus*.

Age at marriage has a sharp negative effect on actual fertility in the Philippines (Cabignon, 1983: 133). Part of this effect is due to the lower biological capacity to beget children at older ages. Also, many persons (particularly women) who wed late have in the meantime acquired social roles which conflict with parenting. The respondents were asked: "In your opinion, what is the best age for a female to marry?" We reasoned that a respondent who said that someone of his/her own sex would do best to wed late would desire a smaller number of sons and daughters, *ceteris paribus*.

Another control variable was the respondent's age. Students (particularly the women) dropping out of colleges or universities in the Philippines would likely be the ones who idealize a larger number of sons and daughters. This is based on the fact that marriage is a reason for dropping out. Since dropout rates are generally highest for freshmen (National Economic and Development Authority, 1980: 615), older students could have lower desired numbers of children because of the selective effect of attrition on desired fertility. Consequently, the relationship between age and desired numbers of sons and daughters was controlled.

Finally, we held constant the respondent's degree of religiosity. Each was asked: "How religious would you describe yourself?" The two response categories in the present study were: (1) very religious; and (2) other. Religiosity measures the degree to which religious group membership is a focal point in the organization of personality and behavior.

Data Description

The present analysis was restricted to never-married Catholics and Protestants who were enrolled in a nonsectarian college or else were enrolled in a sectarian college or university of their own religion. In addition, we deleted those who did

not state their age or sex, who did not respond to questions about family background, about the expected first job after college, about religiosity, or about the dependent variables. These deletions brought the effective sample size to 366, of whom 197 (= 54%) were Protestants and 169 (= 46%) were Catholics. Protestants were far overrepresented in our sample relative to their share (9%) of the total Filipino population. Nevertheless, this overrepresentation afforded a large enough number of this religious minority grouping for meaningful comparisons to Catholics.

Table 1 describes this effective sample of 366 respondents. Sixty-six percent were women, a fact which reflects the greater enrollment of women than men in colleges/universities of the Philippines. Women respondents were also more likely than the men to arise from the lower classes. Within each religious grouping, the women were less likely than the men to have fathers with four or more years of college, more likely to come from large sibships, and less likely to expect professional jobs after completing their educations. Despite their lower socio-economic origins, the women desired fewer sons and fewer total children than the men did, relationships also found by Bulatao (1975: 149) and Guitarte (1982), respectively. The correspondence of these relationships with those obtained by the other two researchers enhanced our confidence in the quality of our data.⁵

Within each gender grouping, important differences among respondents were also found by religion (see Table 1). The Catholic respondents were less likely to have fathers with at least four years of college and were less likely to expect to hold professional jobs after completing their higher educations. The Catholics had a larger number of siblings than did their Protestant counterparts and desired a larger number of sons and daughters. An important question is whether the larger number of sons and daughters desired by the Catholic respondents was due wholly to their larger-sized sibships, lower socio-economic backgrounds, and lower occupational expectations or whether Catholicism had an independent pronatalist effect.

Findings

Religion and the Desired Numbers of Sons and Daughters

Since there were important socio-economic and demographic differences between Catholics and Protestants in the study, it was necessary to hold constant these differences when examining the relationship between religion and the desired number of sons or daughters. This need was met by computing partial correlation coefficients (Table 2). Thus, if the correlation between religion and the desired number of children of a certain sex remained large even after the covariation of both variables with other relevant socio-economic and demographic factors had been partialled out, then it would appear that the effect of religion was not a spurious one. Because the study respondents do not represent a random sample, tests of significance do not strictly apply. Nevertheless, these tests are presented as a way of judging whether the magnitudes of the partial correlations are large or small.

Table 1. Descriptive Statistics for Respondents by Religion and Sex

Variables	Catholics		Protestants	
	Men	Women	Men	Women
7 with fathers who have at least 4 years of college	33.33	26.61	49.38	41.38
% with parents now living on farm	20.00	29.84	30.86	30.17
Ave. number of sisters	2.47	2.83	2.38	2.44
Ave. number of brothers	2.93	2.98	2.35	2.75
% expecting to hold professional job	35.56	32.26	71.60	55.17
Best age for female to marry (ave. in years)	—	24.99	-	25.00
Best age for male to marry (ave. in years)	27.73	—	27.73	—
Ave. age of respondent	19.78	19.25	21.12	19.76
% very religious	17.78	32.26	28.40	32.76
Ave. no. sons desired	2.67	2.01	2.30	1.88
Ave. no. daughters desired	2.08	1.94	1.65	1.73
Ave. no. of children desired	4.75	3.95	3.95	3.61
N	45.00	124.00	81.00	116.00

Table 2. Partial Correlation Between Desired Number of Children and Religion by Sex of Children and Sex of Respondent

Partial r Between Religion and Desired No. Children	Men	Women
Desired No. Sons	.12*	.05
Desired No. Sons	.12*	.05
Desired No. Daughters	.22***	.11**
N	126.00	240.00

*p-.10

**p-.05

***p-.01

Note: Seven variables have been partialled out of the correlation coefficients. For the correlation coefficient of religion with desired number of sons, the first six control variables were: father's education, whether parents now live on a farm, the respondent's number of brothers, expectations for a professional job as a first job after college, religiosity, and age. The seventh control variable was the best age for a female to marry (if the respondent was female) or the best age for a male to marry (if the respondent was a male). For the correlation coefficient of religion with the desired number of daughters, the same seven control variables were partialled out except that the respondent's number of sisters was substituted in place of the number of brothers. See text for explanation of these control variables.

Catholic men desired to have larger numbers of sons (partial $r = .12$, $p = .10$) and daughters (partial $r = .22$, $p = .01$) than did Protestant men. Catholic and Protestant women did not differ much in the number of sons they wanted (partial $r = .05$), but Catholic women did want more daughters (partial $r = .11$, $p = .05$). Catholicism had a stronger pronatalist effect on men than on women and a stronger effect on the number of daughters desired than on the number of sons hoped for. These relationships suggest that differences in sex-role expectations might explain why Catholicism affected the desired number of offsprings and why that effect differed by sex of respondent and by sex of offspring.

Religion and Perceived Advantages of Sons and Daughters

This idea can be examined more fully by focussing on the salient advantages perceived for sons (Table 3). The advantages of sons most frequently stated first by men was that sons preserve the family name or bloodline. However, Catholic men were less likely than Protestant men to mention this advantage first (28.9% and 37.0%, respectively). On the other hand, Catholic men were more likely to mention first that sons were a source of practical and financial help (17.8% and 12.3%, respectively), especially in old age (17.8% and 1.2%, respectively). Furthermore, Catholic men were less likely than Protestant men to state initially that sons added love, beauty, or psychological fulfillment to a home (2.2% and 9.9%, respectively). It appears that Catholic men were more likely than Protestant men to value the traditional, instrumental roles of sons as most salient.

The three most salient values of sons to the women were as perpetuators of the family name, providers of practical/financial aid, and companions or surrogates for the father (Table 3). Continuity of the family name and companionship to the father were more salient to Protestant women; but practical/financial aid from sons was more salient to Catholic women. All three of these values stress a sex segregation of social roles because daughters legally must surrender their birthnames at marriage and because daughters are less salient sources of practical/financial aid to their family or of companionship/help to their father (cf. Tables 3 and 4). Therefore, most women of this study, regardless of religion, emphasized the salience of sons as performers of sex-segregated tasks. Yet Protestant women emphasized a different set of sex-segregated tasks than did Catholic women.

The salient values of daughters were quite different from those of sons. Unlike sons, daughters were viewed as extremely important sources of help around the house and of companionship/substitution for the mother. Catholic men were more likely than Protestant men to cite the househelp of daughters first (33.3% and 18.5%, respectively, Table 4). Catholic women were as likely as Protestant women to view the househelp of daughters as a salient reason for having them (32.3% and 31.9%, respectively, Table 4) and only somewhat more likely to cite the companionship of daughters (23.4% and 18.1%, respectively). Yet Catholic women were much more likely than Protestant women to mention first that daughters are givers of practical/financial help. Since the Catholic men and women were born into larger sibships and desired to procreate larger sibships in contrast to the other Christians (see Tables 1 and 2), the Catholic emphasis on sons and daughters as practical/financial helpers may reflect the relief that child labor can provide from the consequences of high fertility. This interpretation is consistent with other recent research on childless Filipinos, which shows that nearly 48% expect to receive future support from their unborn children (Domingo, Flieger, and Madigan, 1984: 75).

Table 3. Advantages of Sons First Mentioned by Religion and Sex of Respondents

Advantage	Men		Women	
	Catholic	Protestant	Catholic	Protestant
Help around house	0.0%	1.2%	0.8%	1.7%
Practical/financial help	17.8	12.3	33.9	15.5
Companion, helper, or substitute for father	15.6	6.2	12.1	19.8
Companion, helper, or substitute for mother	0.0	0.0	2.4	.9
Companionship to brothers	0.0	1.2	.8	.0
Companionship to sisters	0.0	0.0	4.0	5.2
Completion of family, strengthening marital bond	0.0	3.7	2.4	2.6
Help in old age	17.8	1.2	5.6	5.2
Continuity of family name or blood	28.9	37.0	18.5	28.4
Fulfillment of religious or social obligations	0.0	3.7	0.0	1.7
Ease of discipline	2.2	3.7	1.6	0.0
Love, beauty	2.2	9.9	6.5	4.3
Play, fun	0.0	0.0	0.0	1.7
Living through sons	2.2	3.7	2.4	.9
Character development of parent	8.9	1.2	1.6	.9
Proof of manhood/womanhood of parent	2.2	0.0	0.0	0.0
Incentive to succeed	0.0	0.0	0.0	.9
Other	0.0	2.5	4.0	2.6
No response	0.0	12.3	2.4	4.3
Don't Know	2.2	0.0	.8	3.4
Total				
N	100.0%	99.8%	99.8%	100.0%
	45.0	81.0	124.0	116.0

Note: Column totals may not add up to 100% due to rounding.

Table 4. Advantages of Daughters First Mentioned By Religion and Sex of Respondents

Advantage	Men		Women	
	Catholic	Protestant	Catholic	Protestant
Help around house	33.3%	18.5%	32.3%	31.9%
Practical/financial	8.9	3.7	15.3	5.2
Companion, helper, or substitute for father	2.2	0.0	0.0	.9
Companion, helper, or substitute for mother	20.0	16.0	23.4	18.1
Companionship to brothers	2.2	2.5	1.6	.9
Companionship to sisters	0.0	0.0	1.6	.9
Completion of family	2.2	12.3	2.4	.9
Help in old age	6.7	6.2	5.6	10.3
Continuity of family name or blood	2.2	2.5	0.0	0.0
Fulfillment of religious or social obligations	0.0	1.2	0.0	2.6
Ease of discipline	0.0	0.0	0.8	3.4
Love, beauty	13.3	12.3	8.9	10.3
Play, fun	0.0	1.2	0.0	1.7
Living through daughters	0.0	0.0	1.6	1.7
Character development of parent	2.2	0.0	0.8	0.0
Proof of manhood/womanhood of parent	0.0	0.0	0.0	0.0
Incentive to succeed	0.0	0.0	0.0	1.7
Other	0.0	4.9	3.2	1.7
No response	2.2	14.8	1.6	6.0
Don't know	4.4	3.7	.8	1.7
Total	99.8%	99.8%	99.9%	99.9%
N	45.0	81.0	124.0	116.0

Note: Column totals may not add up to 100% due to rounding.

Religion and Attitudes Toward the Initiation of Contraception

Desires for certain numbers of sons and daughters will be only loosely related to actual numbers of births unless married couples make effective use of contraception. A small minority of college students in this survey thought family planning should never be used at all. Protestant men were more likely than Catholic men to think that married couples should start using family planning methods before the first birth (40.74% and 26.67%, respectively, Table 5). A majority (56.90%) of Protestant women advocated marital contraception before the first birth, and their proportion far exceeded that for Catholic women (33.87%). Research in the U.S. and Great Britain shows that couples who use contraception early in their marriage to space births have longer interbirth intervals and smaller final numbers of children ever born (Glass and Grebenik, 1954; Westoff *et al.*, 1963; Whelpton *et al.*, 1966). Consequently, it is logical to predict that in contrast to the Catholics, the Protestants in this study will have lower actual completed fertility, if the respondents follow their own advice about when married couples should begin family planning.

Table 5. Attitudes About When Married Couples Should Start Using Family Planning by Religion and Sex of Respondent

Timing of First Use of Family Planning by Married Couples	Men		Women	
	Catholic	Protestant	Catholic	Protestant
Never	4.44%	0.00%	2.42%	0.00%
Before First Birth	26.67	40.74	33.87	56.90
After First Birth But Before Last Wanted Birth	22.2	16.05	31.45	21.55
After Last Wanted Birth	31.11	30.86	17.74	13.79
Don't Know	15.56	12.35	14.52	7.76
Total	100.00%	100.00%	100.00%	100.00%
N	45.00	81.00	124.00	116.00

Note: For men respondents, $X^2 = 6.03$, which at 4 degrees of freedom is not statistically significant. For women respondents, $X^2 = 15.09$, which at 4 degrees of freedom is statistically significant at $p = .01$.

Religion and Attitude Toward Methods of Contraception

Even if the Catholic students initiate contraception later in their marriages, they could still have a completed fertility rate like that of the Protestants if both religious groupings make similar use of artificial contraception. Table 6, however, suggests that the Catholics are more likely to consider artificial contraception as being against God's will. While both religious groupings state a strong moral aversion to abortion, the Catholics are more likely than Protestants to view diaphragms, IUDS, pills, condoms, and surgical sterilizations as contradictory to divine will. Because such methods are the most "fail-safe," the Catholics are likely to conclude childbearing at higher parities than Protestants, if these attitudes serve as a guide to actual contraceptive behavior.

Table 6. Attitudes Toward Particular Methods of Contraception As "Against the Will of God" by Religion and Sex of Respondent

Method of Contraception	Percent "Yes"					
	Men			Women		
	Catholic	Protestants	X ²	Catholic	Protestants	X ²
Abortion	91.1	96.3	1.48	93.5	94.8	0.18
Abstinence	26.7	24.7	.06	23.4	19.0	.70
Diaphragm	37.8	19.8	4.86*	33.9	15.5	10.76***
Herbs	33.3	18.5	3.50	27.4	14.7	5.83*
IUD	37.8	17.3	6.55**	42.7	17.2	18.41***
Pill	40.0	27.2	2.20	45.2	17.2	21.59***
Rhythm	11.1	3.7	2.67	7.3	6.0	.14
Condom	37.8	14.8	8.61**	40.3	14.7	19.62***
Tubal Ligation	48.9	25.9	6.79**	47.6	17.2	24.98***
Vasectomy	44.4	25.9	4.52*	46.0	18.1	21.21***
N	45.0	81.0		124.0	116.0	

*p—0.05

**p—0.01

***p—0.001

Note: All chi-squares presented above are based on four-fold tables comparing yes/no answers made by Catholics and Protestants of the same gender. Thus, each-chi-square is associated with one degree of freedom.

Discussion

Previous research has not detected a consistent Protestant-Catholic differential in actual fertility rates, desired numbers of children, or contraceptive choices among Filipinos. However, these studies either were based on data gathered before the family planning program got underway in 1971 or else were composed of so few non-Catholics that such disparate groups as Muslims and Protestants were pooled.

The present pilot study overcame the methodological limitations of earlier work by drawing a sample of Protestants large enough (54% of total) to afford contrasts with the Catholics and late enough (in 1985) to reveal any impacts of the national family planning program in creating religious differentials in attitudes toward reproductive issues. The analysis showed that Catholic men desired larger numbers of children (both sons and daughters) than did their Protestant counterparts, *ceteris paribus*. Although Catholic women wanted only slightly more sons than did Protestant women, the former wanted much larger numbers of daughters. The Catholic respondents were more likely than the Protestants to view the instrumental roles of sons and daughters as the most salient advantages of having children. Perhaps partly for this reason, the Catholics will have higher completed fertility than will the Protestants, if the respondents produce exactly the number of sons and daughters they say they want.

The attitudes expressed by the Catholic respondents toward the initiation of family planning and toward the compatibility of different family planning methods with divine will were consistent with their larger family-size desires. Although the majority of all respondents thought that a married couple should start family planning before the last wanted birth, Catholics were much less likely than Protestants to think it should be started before the first birth. Moreover, while the majority of respondents did not think that the artificial methods of family planning (except for abortion) were against God's will, Catholics were much less likely than Protestants to express this view. The consistency with which Catholicism was associated with larger desired numbers of sons and daughters and with attitudes favoring the later timing of family planning and discouraging the artificial methods of family planning argues that the religious differentials uncovered in this study are not spurious.

Previous research in the Philippines has shown that female education is related to a greater current use of contraception (both artificial and natural methods), an earlier initiation of contraception after marriage, a larger array of methods ever used, and a smaller number of actual births (Bulatao, 1975; Mamlouk, 1982; Cabignon, 1983). It appears that the college-educated population of the Philippines is the subgroup most receptive to the messages of the national family planning program, as Madigan (1972) anticipated. As a result, religious differentials in actual contraceptive choices and actual fertility might well emerge later on among our never-married college-student respondents. This emergence would create a second generation in which important religious differentials in reproductive behavior exist, since Catholic participants in our survey came from larger sibships than did Protestant participants. Thus, the failure of previous studies to uncover such religious differentials may have resulted from the small number of Protestants included in earlier surveys and from

the small segment of the Filipino population comprised of college-educated people.⁶

The present study cannot reject the hypothesis that the greater antinatalist attitudes of the Protestants than that of the Catholics in our sample resulted from the former's status as a religious minority group. However, the fertility of Protestants is lower than that of Catholics in a number of countries (e.g., the U.S.) where Protestants are not a minority. As such, we must consider whether the Protestant antinatalism uncovered in this investigation arose from the experience of minority status or from Protestantism per se.

A way to isolate the separate effects of minority status and religion on fertility attitudes would be to compare the attitudes: 1) of Protestants enrolled in Protestant educational institutions to Protestants in non-sectarian institutions; and 2) of Catholics enrolled in Catholic educational institutions to Catholics in nonsectarian school systems. Each of the two sets of comparisons (Protestant cf. Protestant and Catholic cf. Catholic) would hold constant the effect of religious minority and majority status, respectively, while varying the degree of exposure to the respective religious institution (yes, sectarian vs. no, non-sectarian). Data favoring a "pure" effect of religion on fertility attitudes would be a difference between those educated in sectarian and non-sectarian systems but no difference between Protestants and Catholics. Evidence supporting a "pure" effect of minority status on fertility attitudes would be a difference between Protestants and Catholics but no difference within these groups according to sectarian/nonsectarian schooling. The indicator of an "interactive effect" between minority status and religion would be an effect of sectarian/non-sectarian schooling which varies between Catholics and Protestants. The latter result was found among college-educated women in Australia and the U.S., where Catholics have higher fertility than Protestants and where sectarian education is associated with even higher fertility for the minority Catholics but has no effect for the majority Protestants (Caldwell, 1980; Johnson, 1982). Consequently, both minority status and religion have pronatalist effects on Catholics in Australia and the U.S.

The present pilot study could not determine directly whether the effect of sectarian/non-sectarian college educations on fertility attitudes was similar or not between Catholics and Protestants in the Philippines. (The number of Protestant respondents from the non-sectarian college was too small.) However, Catholic respondents in Catholic and non-sectarian institutions of higher learning desired similar numbers of children (Table 7). Perhaps Catholic sectarian education is pronatalist only in countries (e.g., Australia, the U.S.) where Catholics are a religious minority. This possibility would suggest that the impact of religious institutions on fertility orientations depends on the minority status of that religious group.

An extension of these relationships from Catholics to Protestants implies that both religion and minority status should have antinatalist effects on Protestant Filipinos. In other words, not only should Protestants have greater antinatalist attitudes about fertility and contraception than Catholics have but also Protestants from Protestant colleges/universities should have greater antinatalist attitudes than do Protestants from other institutions of higher learning. The former relationship was obtained in the present investigation, and the latter finding was reported by

Lacar (1974). The present study clarifies the conceptual difference between the effects of religion and minority status on fertility attitudes, presents a methodology for disentangling these two effects empirically, and illustrates the importance of comparing those effects in more developed and less developed countries.

Table 7. Desired Number of Children by Sex of Children, Sex of Catholic Respondent, and Type of College/University

Desired Number of Sons				
	Catholic Men		Catholic Women	
	Sectarian	Nonsectarian	Sectarian	Nonsectarian
Mean	2.62	2.74	1.93	2.13
Standard deviation	.94	1.11	.66	1.10
N	26.00	19.00	75.00	49.00
t	-.40		-1.26	

Desired Number of Daughters				
	Catholic Men		Catholic Women	
	Sectarian	Nonsectarian	Sectarian	Nonsectarian
Mean	2.29	1.79	1.86	2.05
Standard deviation	1.58	.86	.61	.86
N	26.00	19.00	75.00	49.00
t	1.25		-1.45	

Note: The t-statistic was calculated under the assumption that the two populations (sectarian and non-sectarian Catholic students) had equal but unknown variances in number of sons (or daughters) desired. The sizes and observed variances from the sample of the two populations were used to compute a pooled estimate of the true population variance. For the formula for the pooled variance and the t-statistic, see: Remington, Richard M., and M. Anthony Schork. 1970. *Statistics with Applications to the Biological and Health Sciences*. Englewood Cliffs, N.D.: Prentice-Hall Inc.

FOOTNOTES

¹The use of English should not have impaired the quality of data collected. According to law, English is the language of instruction beginning in the third grade of elementary school. As such, all the college students in this survey had been listening to lectures and taking written examinations in English for a minimum of eight years. As a precaution, however, the questionnaire was reviewed by two Filipinos prior to the first pretest and edited to remove unfamiliar word usages.

²Classrooms at the two Protestant universities were visited on a non-randomized basis. Non-Catholic Christian students were asked to identify themselves and to fill out the questionnaire. Those only nominally affiliated with a non-Catholic Christian religion may have been less likely to respond to this request. This possibility may have increased the likelihood of our finding a Protestant-Catholic differential in reproductive orientations.

³The excluded religious groupings were as follows: Aglipayans (N=26), Buddhists (N=4), Iglesia ni Kristos (N=7), Mormons (N=2), Muslims (N=4), and Seventh Day Adventists (N=11).

⁴The following occupations were classified as professional: architects, engineers, surveyors, chemists, pharmacists, natural and agricultural scientists, professors and other teachers, physicians, surgeons, dentists, nurses, professional medical workers (except midwives), medical technicians, lawyers and jurists, clergy, charitable and social welfare workers, accountants, social scientists, artists, writers, musicians and music teachers, engineering technicians, laboratory and research technicians, draftsmen, cartographers, research analysts, and taxidermists.

⁵The average number of children (sons plus daughters) desired by our respondents was much larger than the average obtained by Lacar (1974.) One possible reason for this discrepancy might be differences in geographical coverage. Metro Manila has the highest level of economic development and the lowest rate of cumulative fertility in the Philippines (National Census and Statistics Office, 1979: 86); and, thus, the number of children desired by Filipinos would probably be lowest in Manila. Due to financial constraints, the present survey was unable to query college students enrolled in the Manila area. Future investigations based on a national random sample can clarify whether our results are generalizable to all regions of the Philippines.

⁶According to the 1980 Census of the Philippines, college-degree holders comprise 4.7% of the total population. Those who have attended but not yet graduated from a college or university comprise an additional 7.2% of the total population.

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