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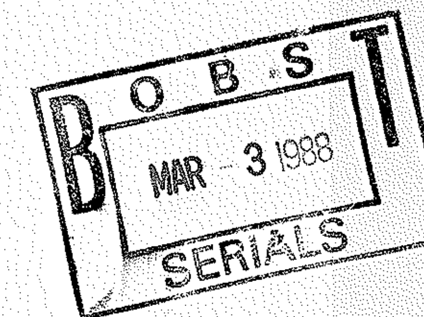

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Culture and the Management of Family Planning Programs

Donald P. Warwick

Integrating family planning programs with local cultures can increase or undermine their effectiveness. Program design and organization will be influenced by kinship and reproductive decision-making, which varies across regions, racial and communal divisions, and religions. Program implementation depends on four aspects of culture: (1) the understanding, acceptance, and continued practice of family planning by clients; (2) the climate in the organizations responsible for fieldwork, which affects the disposition to work and the tasks to be done; (3) the ability and willingness of field implementers to do their work; and (4) the communities in which clients live, including collective attitudes toward family planning and local pressures put on clients to participate. The Indonesian family planning program is a case in which these elements of culture are often positive. Other programs, such as that in Kenya, have a more negative environment for action. (STUDIES IN FAMILY PLANNING 1988; 19, 1: 1–18)

A major change in family planning research since the 1960s has been the movement away from assertions about near-universal demand for fertility control and toward an understanding of national and local situations. In the 1960s, advocates of population control often claimed pervasive demand for family planning services in the developing countries. It was present across countries and cultures and, where not significant, likely to become so. Aside from personal convictions, the basis for such assessments was often Knowledge–Attitude–Practice (KAP) surveys. Stycos expressed the views of many when he wrote: ". . . repeatedly, surveys demonstrate that couples want a moderate number of children, that they are convinced of the economic disadvantages of a large family, and that they are eager for information on what to do about it" (1964: 368). Others claimed that the results of KAP surveys could be fairly well predicted before the research was carried out (Berelson, 1964: 11), and that concern about the validity of responses was misplaced and possibly a deterrent to program effort (Freedman, 1966: 815). There were some early (Stephan, 1962) and later (Caldwell and Gaisie, 1971; Marino, 1971; Marshall, 1972; and Polgar, 1973) caveats about the methodology of KAP surveys, but they had little impact on the prevailing confidence about client demand (Warwick, 1983).

It is now hard to find one leading scholar who argues that the demand for family planning is nearly universal across cultures. Recent research has been more attentive to program contexts, more sensitive to the impact of culture, and more modest in its conclusions. If the dominant research paradigm in the 1960s emphasized the emergence of demand across societies, its counterpart in the 1980s shows multiple influences on the desire for children (see especially Bulatao and Lee, 1983).

Nowhere is the shift more obvious than in research on Kenya. In 1965 an advisory mission from the Population Council submitted a report to the government recommending a family planning program (Population Council, 1965). Citing KAP surveys done elsewhere, the report was optimistic about popular response to such a program in Kenya. This optimism was ill-founded. Not only has the family planning program met with little success, but total fertility in Kenya rose from approximately seven children per woman in 1962 to eight children in 1983 (Dow and Werner, 1983). Rather than assuming that the use of family planning services will rise and fertility will decline, scholars are now asking about the situationally specific influences on fertility in Kenya (Frank and McNicoll, 1987) and other countries in sub-Saharan Africa (Frank, 1987; Bongaarts et al., 1984; Page and Lesthaeghe, 1981).

This paper explores some links between culture and the management of family planning programs. Culture refers to "an historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and attitudes toward life" (Geertz, 1973: 89). It re-

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Religious Affiliation and Contraceptive Usage: Changing American Patterns, 1955–82

Calvin Goldscheider and William D. Mosher

This paper presents national estimates of contraceptive usage patterns among white women from 1955–82 for the major religious populations in the United States. Drawing on several surveys, the data show that in 1955 differences in contraceptive use between white Protestants and Catholics were very large and corresponded to the higher fertility levels among Catholics. By 1982, all the major religious groups had experienced downward changes in expected family size and all used effective contraceptive methods, including sterilization, the pill, and the IUD. Despite some convergence in the patterns of contraceptive usage over time, significant differences in contraceptive use styles remain among Catholics, Protestants, Jews, and those of no religious affiliation after multivariate controls eliminated socioeconomic and sociodemographic differences among these subpopulations. The evidence points to the multiple contraceptive paths to similar levels of low fertility. A series of hypotheses are proposed to account for these different contraceptive use styles that relate to religious communities, peer pressure and social norms, differential sex roles, male–female communication patterns, and the differential use of physician-based versus other sources of contraceptives. (STUDIES IN FAMILY PLANNING 1988; 19,1: 48–57.)

Over the last quarter of a century, fertility differences of the three major religious groups in the United States have narrowed. By 1982, the total number of births expected among white Protestant women aged 15–44 was 2.3, only 0.3 children fewer than among comparable Catholics and 0.2 greater than among Jews (see Table 1). These differences are even smaller when adjustments are made for Hispanic origin, education, marital status, and age (Table 1; see also Mosher et al., 1986; Jones and Westoff, 1979; Mosher and Bachrach, 1987). These relatively small differences in birth expectations among religious groups contrast sharply with research in the 1950s showing that religious affiliation was the most important determinant of birth expectations and family planning practices (Freedman et al., 1959; Westoff et al., 1961, 1963; Mosher et al., 1986). The process of convergence in fertility levels among religious groups has been the result of a general downward trend in fertility expectations for all groups from 1955 to 1982. This decline was sharper for Catholic couples than for Protestant and Jewish couples. As a result, the relative differences among these groups in the 1980s were significantly smaller than in the 1950s.

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Since the mid-1950s the extent of contraceptive usage increased significantly and new effective contraceptives were introduced, particularly the pill and the intrauterine device (IUD). Although both the increase in contraceptive usage and the declines in fertility expectations were the result of broader social, family, and economic processes occurring in American society, changes in fertility and contraceptive usage were interrelated. Hence, the converging patterns of fertility by religious affiliation raise the question of how those fertility changes were achieved and the role of changes in contraceptive practices among religious groups in their converging levels of fertility. Second, as shown in Table 1, even when differences among religious groups in age, marital status, Hispanic origin, and education are eliminated statistically, the fertility expectations of Catholics, Protestants, and Jews, respectively, are ranked from high to low, a pattern consistent with the actual fertility behavior differences among religious groups documented for about a century in the United States. Thus, an additional question may be posed: Are there remaining differences in contraceptive practices among religious groups that can be linked to their residual differential fertility patterns?

Table 1 Total births expected for white women aged 15–44, by Hispanic origin and religious affiliation, United States, 1982

Religious affiliation	Total births expected			
	All origins		Non-Hispanic	
	Observed	Adjusted[a]	Observed	Adjusted[b]
Total[c]	2.36	—	2.32	—
Protestant	2.29	2.27	2.27	2.25
Catholic	2.57	2.57	2.52	2.54
Jewish	2.09	2.19	2.07	2.15
None	1.95	2.00	1.91	1.95

[a]Adjusted by multiple classification analysis for Hispanic origin, education, marital status, and age. [b]Adjusted by multiple classification analysis for education, marital status, and age. [c]Includes other religions, not shown separately.

The theoretical links between contraceptive usage and fertility are relatively straightforward. Most directly, patterns of contraceptive usage have been the most important of the "intermediate" variables (or proximate determinants) affecting birth spacing and family size limitation in the United States. Three general types of explanations have been offered by social scientists to account for the relationships between religion and fertility (Goldscheider, 1971: 270–298; Mosher and Goldscheider, 1984; Mosher et al., 1986; Chamie, 1977). One argues simply that religious differences are artifacts of socioeconomic differences, so that, when the socioeconomic characteristics of religious groups are controlled statistically, contraceptive patterns of religious groups will be identical. This "characteristics" hypothesis is inadequate to account for our findings. A second view suggests that norms of each religious group regarding family size, sex roles, and contraception determine contraceptive choice. This view is ambiguous because "norms" may refer to official church policy— for example, the Catholic church's positions on the pill and rhythm—or to norms of religious communities, which may have little to do with religious tenets. For example, it would be difficult to interpret the contraceptive usage patterns of any of the religious groups examined here in terms of specific religious beliefs or official policy. A third view is that minority group status has independent effects on contraceptive usage. Under certain conditions, minority status would encourage unusually effective contraceptive use; under other conditions, minority status would discourage efficient use.

Elements of these various hypotheses are combined as guidelines to the present analysis. We argue that religious differences in fertility may reflect particular norms about the timing of marriage and childbearing, family size ideals, and the types of contraceptives that are acceptable or preferable. Since religious groups may be viewed as communities, the methods of contraception differentially used by those who identify with these groups reflect several major features of communal life. These include the differential resources available in the community to purchase contraceptive services and information; the socioeconomic structure and life style of religious groups reflecting differential access to and preferences for contraceptives; and the relative equality of male and female roles and therefore the types of male or female contraceptive used. Contraceptive usage differences among religious groups, therefore, should reflect these factors in some combination; in turn, differential contraceptive use is likely to influence the timing of childbearing and family size patterns characterizing religious groups.

This paper continues research reported earlier comparing religious differences in contraceptive usage in 1955 and 1973/76, using nationally representative samples, with comparable measures of contraceptive usage and sterilization (Mosher and Goldscheider, 1984). In particular, the focus is on changes in contraceptive usage and sterilization from 1955 to 1982 among nationally representative samples of women classified by religious affiliation. Also examined are life cycle and educational variations in these patterns among religious groups. New US data on contraceptive usage at first intercourse are discussed in the context of changes over time among religious groups in contraceptive usage norms. Together, these data present a comprehensive picture of the changing relationship between religious affiliation and contraceptive usage in the United States over the last quarter of a century.

Earlier research demonstrated that there was an overall convergence in the contraceptive practices of white married couples of different religious groups in the two decades between the 1950s and 1970s. Yet, the pattern of method choice among religious groups remained different: Protestants were still more likely than others to be sterilized; Catholics were more likely to be nonusers of contraceptives and more likely to use rhythm; Jewish couples used the greatest variety of methods and along with those of no religion continued to have very high levels of contraceptive usage (Mosher and Goldscheider, 1984). We now ask whether these patterns of convergence among religious groups have continued into the 1980s; whether distinctive contraceptive and sterilization patterns among religious subpopulations are found for white women of all marital statuses (not just among married women); and whether religious groups have different patterns of contraceptive use at first intercourse as well as at date of interview.

Data

This analysis is based on the 1955 *Growth of American Families* (GAF) study, the combined 1973 and 1976 National Surveys of Family Growth (NSFG), and the 1982 NSFG. All of these surveys were based on nationally representative samples of women.[1] The questionnaires all obtained marital, pregnancy, and contraceptive histories as well as information about religious affiliation. The 1955 GAF study was based on interviews with 2,713 currently married white women aged 18–39, and our analyses of trends are limited to this group. In order to

allow detailed study of smaller religious groups (Jewish, other, none, and religious groups among black couples), the 1973 and 1976 NSFGs were combined to yield a sample of 14,048 currently married women, 8,390 of whom were white and 18–39 years of age (see Mosher and Goldscheider, 1984). The 1982 NSFG survey was based on interviews with 7,969 women aged 15–44, including 1,944 who were white, currently married, and 18–39 years of age. Sample sizes are not adequate in 1982 to permit studies of religious groups among black couples. Thus, this analysis is limited to white women. Appropriate caution is necessary when interpreting small differences, especially for the smaller religious groups.

As a rough guide to reliability, the number of sample cases is indicated in the tables, but all results are based on weighted data and are therefore national estimates. These surveys were based on complex area probability samples, not simple random samples, so sampling errors and significance tests cannot be computed assuming that simple random sampling was used. Sampling errors for the 1955 study were published in the monograph on that study (Freedman et al., 1959: 455, Table C-8). Sampling errors for the three cycles of the NSFG were estimated by balanced half-sample replication (Bachrach et al., 1985: 17–20; Pratt et al., 1984; French, 1978). Using standard errors estimated by this technique, we performed t-tests on many of the differences in our tables, and the results are shown in notes to the tables. The methods and procedures of the NSFG study have been described in detail elsewhere (Pratt et al., 1984; Bachrach et al., 1985).

It was possible to obtain comparable data on current contraceptive status from all the surveys, but the 1955 GAF survey did not include questions that asked wives or their husbands about the contraceptive intent of sterilizing operations or the type of surgery involved. Thus, surgical sterilizations cannot be classified by intent or estimated from the type of female surgery, but can be classified by gender. Although changes over time in the extent of abortion are of interest, these data were not collected in 1955. The reporting on abortion in 1973 and 1982 was poor and we do not have data to estimate differential reporting by religious affiliation. Hence, it is not possible to know whether differences over time are substantive or reflect differences in reporting.

The religious affiliation of the respondent was obtained by a straightforward question on self identification: "Are you Protestant, Catholic, Jewish, or something else?" Those who answered "none" or "no religion" have expressed no religious affiliation and were treated separately in the analysis.

Findings

As a first step in the analysis of contraceptive usage patterns, current contraceptive usage is examined in cross-sectional form among white women 15–44 years of age who identify themselves as Protestant, Catholic, Jewish, or of no religion (Table 2). Married and single women are included for this analysis in order to generalize to all women. In general, the findings about religious differences in contraceptive usage are similar regardless of marital status. When the patterns vary, special note is made. To limit the overall discussion, however, to married women would seriously reduce sample size (cutting the number of cases by about half overall) and would eliminate the possibility of presenting data on Jewish women and those of no religious affiliation.

Overall, the data show significantly higher rates of sterilization among Protestants than Catholics, Jews, and those of no religion. By 1982, the proportion surgically sterile among white Protestants was nearly as high as the percent using a nonsurgical method ("method users"). This was not the case among any of the other groups: among white Catholic women, the proportion using nonsurgical methods was double the proportion sterilized; among Jewish women and those of no religion this proportion was about three times higher.

Among current method users, the pill ranks highest for Protestants, Catholics, and women of no religion (at least 38 percent in each group). Ranking next among Protestants and Catholics is the condom (around 20 percent), followed by the diaphragm and IUD (around 10 percent each), with the rhythm method the least used. The pill is by far the leading method among never-married Protestant and Catholic women. Since a larger proportion of Catholics than Protestants are never married (Mosher et al., 1986), the focus of these data on the total sample, married and single, picks up a disproportionate number of the never married pill users among Catholics. This pattern changes, therefore, when we exclude the nonmarried and only examine the contraceptive use patterns of married women.

Table 2 Percent distribution of white women 15–44 years of age by current contraceptive status and method, and religious affiliation, United States, 1982

	Percent distribution				
Variable	Total[a]	Protestant	Catholic	Jewish	None
Sample n	4,577	2,598	1,544	131	249
Total %	100.0	100.0	100.0	100.0	100.0
Surgically sterile	26.1	32.2	19.3[b]	16.1[b]	18.3
Female	18.8	23.0	14.1[b]	13.2[d]	12.4
Male	7.3	9.2	5.2[c]	2.9[c]	5.8
Nonsurgically sterile	1.6	1.8	1.4	2.1	0.9
Pregnant or postpartum	4.8	5.4	4.2	1.6[d]	5.0
Seeking pregnancy	4.0	3.7	4.9	3.1	2.9
Other nonuser	26.2	23.2	30.9[b]	26.4	25.2
Method users	37.3	33.7	39.3	50.7	47.7
All method users	100.0	100.0	100.0	100.0	100.0
Pill	40.6	45.5	37.7[d]	18.8[b]	41.3
IUD	10.5	10.0	9.5	21.0[c]	11.5
Diaphragm	13.4	9.9	12.6	26.3[d]	27.7[c]
Condom	19.3	18.2	21.9	20.3	13.5
Rhythm	6.0	5.2	8.3[e]	1.4[e]	1.9[d]
Other	10.2	11.3	10.0	12.2	4.1[d]

Note: All percents and means are based on weighted data.
[a] Includes other religions, not shown separately. [b] Difference between Protestant and this category is significant at the .001 level (one-tailed test).
[c] Difference between Protestant and this category is significant at the .01 level.
[d] Difference between Protestant and this category is significant at the .05 level.
[e] Difference between Protestant and this category is significant at the .10 level.

There were some differences in the current contraceptive use pattern of Protestants and Catholics: Protestants were more likely than Catholics to use the pill and less likely than Catholics to use rhythm or the condom. These differences, however, appear minor and the general picture emerging is the remarkable similarity of Protestants and Catholics in the extent and relative ranking of contraceptive methods used. These patterns are consistent with the overall similarity in fertility noted earlier as well as the trends in contraceptive use from 1955 to 1973/76.

In contrast to the Protestant–Catholic pattern, Jews were most distinctive in their lower levels of pill use, their higher levels of IUD and diaphragm use, and significantly lower proportions using rhythm. Indeed, the distinguishing feature of the Jewish pattern of contraceptive usage is the more even spread among methods, rather than the concentration in a particular method. Those who had no religious affiliation were similar to Protestants and Catholics in their heavy reliance on the pill, but similar to Jews in their greater use of diaphragm and their avoidance, even more than Protestants, of rhythm.

While these contraceptive usage data are consistent with the fertility expectations data among religious groups, they are limited to one point in time. To address the issue of convergence directly, the dynamics of these patterns need to be studied. Thus, we ask: Are these contraceptive patterns of Protestants and Catholics recent? Have there been changes in the patterns of contraception and sterilization that may be linked to the fertility changes identified earlier? To answer these questions and identify systematically the changes in contraceptive usage over the last quarter of a century, the 1982 survey is compared with previous combined surveys of 1973/76 and to an earlier nationwide survey carried out in 1955, the Growth of American Families survey (see Mosher and Goldscheider, 1984, for a discussion of these surveys in the context of contraceptive usage among religious groups). The comparison is restricted to currently married white women aged 18–39 (Table 3), because the 1955 survey was limited to that group.

These data reveal the following major changes in contraceptive use:

1 Between 1955 and 1982 the proportion sterilized more than tripled from 9 percent to 33 percent. This increase was more rapid for Catholics. The proportion sterilized increased three-fold among Protestants (11 to 37 percent) and five-fold among Catholics (5 to 28 percent). Between the mid-1950s and the mid-1970s the proportion sterilized more than doubled for Protestants and more than tripled for Catholics. From the mid-1970s to 1982, the percent sterilized further increased by 42 percent for Protestants and by 62 percent for Catholics. Thus, in the 27 years to 1982 the difference between the proportion sterilized among Protestants and Catholics declined from

Table 3 Percentage distribution of current contraceptive status of currently married white women aged 18–39, by religious affiliation, 1955, combined 1973/1976, and 1982

	Total[a]			Protestant			Catholic		
	1955	1973/1976	1982	1955	1973/1976	1982	1955	1973/1976	1982
Estimated population (thousands)	—	20,128	20,742	—	12,550	12,446	—	6,024	6,649
Number of cases	2,638	8,390	1,944	1,764	5,373	1,214	772	2,410	591
Current contraceptive status (%)									
Surgically sterile	9.3	22.3	33.1	11.2[b]	25.9[f]	36.9[d]	5.0	17.5[b,f]	28.4[c,e]
Female	8.4	13.6	22.4	10.1	15.7	24.6[d]	4.5	10.8[b]	19.8[e]
Male	0.9	8.7	10.7	1.1	10.2	12.3	0.5	6.6[b]	8.7
Nonsurgically sterile	1.2	1.0	1.9	1.2	1.0	2.0	1.0	0.9	2.1
Pregnant or postpartum	12.9	8.2	8.2	11.6	8.0	8.7	15.9	9.0	6.9
Seeking pregnancy	4.7	7.3	7.7	5.2	7.1	6.5	3.6	8.0	10.5
Other nonuser	22.4	6.4	4.4	18.7	5.7[f]	4.1	32.0	7.7[c,f]	4.5[e]
Method user	49.5	54.7	44.6	52.2[b]	52.6	41.7[d]	42.4	56.8[b]	47.5
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Pill	na	49.2	36.0	na	52.3	42.4[e]	na	45.0[b]	29.8[c,e]
IUD	na	13.5	11.5	na	13.3	10.9	na	13.2	10.4
Diaphragm	24.5	4.9	11.5	28.4[b]	4.4[f]	9.3[e]	12.2	4.2[f]	10.9[e]
Condom	32.1	15.0	23.4	34.9[b]	14.3[f]	20.1	19.6	15.8	28.5[e]
Rhythm	22.3	5.3	7.6	12.8[b]	3.8[f]	5.7	52.0	9.0[b,f]	11.2
Other	21.1	12.1	10.0	23.9	12.0	11.6	16.2	13.0	9.2

Note: All percents are based on weighted data. Not applicable: na. A dash indicates unavailable.
[a] Total includes Jewish, other religions, and no religion, not shown separately. [b] Protestant–Catholic difference is significant at the .01 level or better (one-tailed test). [c] Protestant–Catholic difference is significant at the .05 level. [d] 1970s vs. 1982 difference is significant at the .001 level. [e] 1970s vs. 1982 difference is significant at the .05 level. 1955 vs. 1970s difference is significant at the .001 level or better (two-tailed test).

a relative difference of 55 percent (11.2 percent versus 5.0 percent) to 23 percent (36.9 percent versus 28.4 percent). The Protestant–Catholic gap was reduced even more sharply over time when female sterilization is examined.

2. The proportion not practicing any contraception (and not sterile, not pregnant, or not seeking to become pregnant) declined sharply for both Protestants and Catholics between 1955 and 1982. In 1955, 22 percent of the married women not seeking to become pregnant ("other nonuser") were not using some form of contraception compared to 4 percent in 1982. The decline among Catholics was even sharper (from 32 percent in 1955 to 4.5 percent in 1982) and the 1982 level of nonuse among Catholics was not significantly higher than for Protestants.
3. The contraceptive shift for both Protestants and Catholics between 1955 and the 1970s was toward the pill and IUD, which accounted for over 60 percent of method users in the 1970s. The change for Protestants was clearly away from using the diaphragm and the condom. Among Catholics, rhythm accounted for 52 percent of method users in 1955 and only 9 percent in the 1970s; rhythm was replaced by the pill, condom, and IUD in the 1970s. Comparing patterns for the 1970s and 1982 shows declines in the use of the pill and IUD among Protestant and Catholic women and significant increases in diaphragm and condom use, particularly among Catholics. Among Protestants who were using contraceptives in 1982, the pill was the leading method, with 42 percent of method users, twice as high as the next method (condom, with 20 percent) and four times as high as the third highest ranked method (IUD, 11 percent). In contrast, the Catholic pattern was an almost equal distribution between use of the pill and condom (nearly 30 percent), and the remainder about equally divided among users of the IUD, diaphragm, rhythm, or other methods.

These findings suggest that the decline in the fertility of Protestants and Catholics is reflected in their greater tendency toward either sterilization or use of some method of contraception. Unlike in the 1950s, women in the 1980s not wanting to become pregnant, and who are not sterilized, are very unlikely to be contraceptively unprotected from pregnancy. Contraceptives for married Protestant women in the 1980s is likely to mean the pill; for Catholics it is likely to mean the use of condoms as well. The major differences between the contraceptives used by married Protestant and Catholic women in the 1980s are the higher levels of pill use by Protestants than Catholics and the higher levels of condom use and rhythm among Catholics than Protestants.

The number of cases of currently married Jewish women in the 1982 survey was too small to analyze with acceptable reliability. An examination of the data (not shown in tabular form) suggests that trends among Jews were similar to those for Protestant and Catholic women. Female sterilization increased sharply between the 1970s and 1982, while the use of the pill declined.

Life Cycle and Educational Factors associated with Sterilization and Contraception

What are the sociodemographic characteristics of the sterilized and of those using the pill and condom? Are there patterns by age, education, and marital status to suggest that a life cycle pattern is operating, that the more educated have particular contraceptive preferences, or that contraceptive usage changes with marriage? Moreover, do the religious differences in contraceptive usage that were documented in general characterize the various sociodemographic subgroups within religious groups and are they reduced when the differences in demographic and social characteristics are controlled? To answer these questions we examine the data on sterilization and contraceptive use by age and by education.

Age

The data in Table 4 show that the dramatic increase between 1955 and 1982 in voluntary sterilization characterizes both age groups among Protestants and Catholics. For those 30–39 years of age in 1982, the proportion sterilized among Protestants was almost three and a half times higher than in 1955; the increase in sterilization among older Catholics was even sharper (an increase of six and a half times the 1955 level). In 1982, however, Protestants still had a higher proportion sterilized than Catholics, especially among those in their 30s: 57 percent of older Protestants compared to only 43 percent of older Catholics were surgically sterilized in 1982. Older Protestant couples were one-third more likely to be sterilized than Catholic couples in 1982. Also, older Catholics made up that difference by being much more likely to use nonsurgical methods: 40 percent of older Catholics and only 27 percent of older Protestants were using nonsurgical methods in 1982.

The sharp decline in the proportion of "other nonusers" also characterizes both age groups. Among younger Catholics, the proportion not using declined from 29 percent to 6 percent, 1955–82, while for comparably-aged Protestants the decline was from 17 percent to 4 percent. Among those aged 30–39, the proportion not using any method was the same for Catholics (3 percent) and Protestants (4 percent) in 1982, although the proportion had been much higher for Catholics (34 percent) than for Protestants (20 percent) in 1955. In 1955, one-third of the Catholic wives aged 30–39 were not practicing any contraception; by 1982, that proportion declined to 3 percent.

The age pattern also sharpens our understanding of the differences in contraceptive methods used by Protestant and Catholic couples. First, as expected, pill use characterizes younger wives, where 54 percent of the Protestant method users and 41 percent of the Catholic method users were using the pill in 1982. For those aged 30–39, pill use was reduced to 20 percent and 16 percent for Protestant and Catholic method users, respectively. Moreover, use of the condom declined very sharply and significantly between 1955 and 1982 among young Protestants (from 40 percent to 15 percent), while among Catholics there was no significant change in condom use, remaining at slightly over 20 percent. Among older Protestants, about 30 percent used the condom in both 1955 and 1982; for Catholics the proportion using the condom more than doubled, from 17 percent in 1955 to 38 percent in 1982. Hence, the proportion of older couples using the condom was higher among Catholics (38 percent) than Protestants (30 percent) in 1982.

In 1955, about half of the Catholic women of both age groups used rhythm as their method of contraception. By 1982, rhythm use characterized only 9 percent of the younger Catholics and 15 percent of the older Catholics. Younger Catholics were not significantly more likely than younger Protestants to use rhythm as their method of contraception.

Finally, it is important to reiterate that despite radical changes in contraceptive patterns and remarkable trends toward convergence in some measures, continued Protestant–Catholic differences in sterilization and contraceptive usage characterize both age groups. There is no indication from these data that the convergence patterns or the remaining differences in the 1980s between Protestants and Catholics are a simple function of life-cycle or age factors.

Table 4 Current contraceptive status of currently married white women aged 18–39, by religious affiliation and age, 1955 and 1982

Contraceptive status	Protestant				Catholic			
	18–29 years		30–39 years		18–29 years		30–39 years	
	1955	1982	1955	1982	1955	1982	1955	1982
Number of cases	830	619	984	595	348	288	439	303
	Percent distribution							
Surgically sterile	4.8[d]	15.7	16.6[c,d]	57.1	3.5[d]	12.4	6.3[d]	42.7[a]
Female	4.2	10.3	15.0[c,d]	38.2	2.6	7.9	6.1	30.4
Male	0.6	5.4	1.6	18.9	0.9	4.6	0.2	12.3[b]
Nonsurgically sterile	0.5	1.9	1.8	2.1	0.3	0.7	1.6	3.3
Pregnant or postpartum	19.0	12.4	5.3	5.2	25.4	11.6	8.4	2.8
Seeking pregnancy	6.0	9.2	4.5	3.9	2.9	12.7	4.2	8.5
Other nonuser	17.4[c,d]	3.8	19.8[c,d]	4.4	29.2	6.0	34.3[d]	3.2
Method users	52.2[c,d]	56.9	52.1[a]	27.2	38.7	56.5	45.2	39.5[a]
All method users	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Pill	na	53.7	na	19.9	na	40.9[b]	na	15.6
IUD	na	9.5	na	13.7	na	6.1	na	15.8
Diaphragm	27.1[c,d]	8.4	29.4[c,d]	11.1	11.3	13.2	12.9	7.9
Condom	39.7[c,d]	15.2	31.4[c]	29.7	23.3	21.0	17.0[d]	38.2
Rhythm	12.4[c,d]	4.6	13.4[c]	7.9	50.4	8.7	53.1[d]	14.5
Other	20.8	8.6	25.8	17.6	15.0	10.0	17.0	8.1

Note: All percents are based on weighted data.
[a] Protestant–Catholic difference is significant at the .05 level or better (one-tailed test). [b] Protestant–Catholic difference is significant at the .10 level (one-tailed test). [c] Protestant–Catholic difference is significant at the .001 level or better (one-tailed test). [d] Change between 1955 and 1982 is significant at the .05 level or better (one-tailed test).

Education

The education of the wife may be viewed as an indicator of her socioeconomic status generally and in relation to her husband. It may reflect the degree of control she has over her life, her health, and access to medical care. Table 5 permits us to address whether the effects of religion persist after controlling for education and whether the effect of religion was similar at both high and low levels of education. We are able as well to determine whether the trends in method use within religious groups were concentrated among higher or lower status groups.

In the mid-1950s and in 1982, Protestants with a higher level of education were significantly more likely than less educated Protestants to use the diaphragm; better educated Catholics were significantly more likely than the less educated to use rhythm in the 1950s, but in 1982 Catholics with a better education were more likely to use the diaphragm and condom, as well as rhythm. As a result of the different methods used by the better educated in the 1950s, there were significant differences between the distributions of contraceptive methods used by Protestants and Catholics within both educational categories. Catholics with a higher level of education were much less likely than their Protestant counterparts to use the pill and much more likely to use the condom and rhythm method. Catholics with a lower level of education were more likely than their Protestant counterparts to use the IUD but significantly less likely to use the diaphragm (Table 5). Almost all these differences by education are small and not statistically significant. Since the sample size is small, we need a multivariate statistical

Table 5 Percent distribution of currently married white contraceptive users aged 18–39, by religious affiliation and education, United States, 1955 and 1982

Contraceptive method	0–11 years				12 or more years			
	1955		1982		1955		1982	
	Protestant	Catholic	Protestant	Catholic	Protestant	Catholic	Protestant	Catholic
Sample n	298	124	75	43	622	203	438	243
	Percent distribution							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Pill	na	na	46.2	38.7	na	na	41.7[a]	28.4
IUD	na	na	11.5	22.7	na	na	10.9	8.5
Diaphragm	21.1[a,d]	12.9[d]	3.1	0.4	31.8[a,c,d]	11.8	10.3	12.5
Condom	35.6	26.6	22.6	19.5	34.6[a,d]	15.3[d]	19.7[b]	29.9
Rhythm	13.1[a]	38.7[d]	5.7	6.5	12.7[a,d]	60.1[c,d]	5.7[b]	12.0
Other	30.2	21.8	10.9	12.2	20.9	12.8	11.7	8.7

Note: All percents and means are based on weighted data. Not applicable: na.
[a] Protestant–Catholic difference is significant at the .05 level or better (one-tailed test). [b] Protestant–Catholic difference is significant at the .10 level (one-tailed test). [c] Difference by education is significant at the .01 level or better (two-tailed test).
[d] Change between 1955 and 1982 is significant at the .05 level or better (two-tailed test).

technique that allows us to examine the effects of age, education, and marital status simultaneously. Such an analysis is shown in Table 6.

The data point to the continuing differences over the 27-year observation period between the types of contraceptives used by Protestants and Catholics within broad educational categories. Convergences over time in contraceptive usage have not occurred between these groups, despite the radical changes in contraceptive usage characterizing both religious subpopulations. Moreover, since differences in the specific contraceptive methods used within broad educational categories remain, it is unlikely that educational differences between Protestants and Catholics account for their differing contraceptive usage patterns.

Indeed, 1982 data on the types of contraceptives currently used by Protestant, Catholic, Jewish, and nonaffiliated women, of all marital statuses, adjusting for educational level, age, marital status, and Hispanic origin, affirm the continued salience of religious affiliation as a factor in contraceptive patterns. These data (Table 6) show that, after statistical adjustment for differences in the above characteristics, Protestants were more likely than other groups to be using the pill, with the largest difference between Protestant and Jewish women. Before and after adjustment, Jewish women were significantly more likely to use the IUD than Protestants. After adjustment, 20 percent of the Jewish women and 26 percent of women who were not religiously affiliated used the diaphragm, compared to 10 percent of the Protestant women. Thus, differences in the contraceptive usage pattern among religious groups cannot be attributed to these background characteristics. Similar patterns appear when currently married women ages 15–44 or ages 18–39 are examined.

Table 6 Observed and adjusted percentage of white nonsurgical method users 15–44 years of age currently using selected methods, by religious affiliation, United States, 1982

Religious affiliation	Percent					
	Pill		IUD		Diaphragm	
	Obs.	Adj.[a]	Obs.	Adj.[a]	Obs.	Adj.[a]
Total[b]	41	—	11	—	13	—
Protestant	46	45	10	12	10	10
Catholic	38[c]	38[c]	10	8[c]	12	13
Jewish	19[d]	31[e]	21[e]	21	26[c]	20[e]
None	42	37	12	14	27[d]	26[d]

Note: All percents are based on weighted data.
[a] Adjusted by multiple classification analysis for Hispanic origin, marital status, and single years of age and education. [b] Includes other religions, not shown separately. [c] Difference between "Protestant" and this category is significant at the .05 level. [d] Difference between "Protestant" and this category is significant at the .01 level (one-tailed test). [e] Difference between "Protestant" and this category is significant at the .10 level.

Changes in Contraceptive Use at First Intercourse

Differences among religious groups in contraceptive patterns extend beyond "current" use and are not limited to married women. In 1982, for the first time, the NSFG asked a sample of women of all marital statuses the month and year of first sexual intercourse, their first method ever used, and when they used it. These data reveal that variations in the type of contraceptive used among religious groups are not solely to be understood in the context of the fertility of married persons but are an integral feature of group life defined along religious communal lines.

These data enable us to describe contraceptive patterns among religious groups at a common point in the life cycle. Contraceptive use at first intercourse may be a better measure than current use of the norms of religious communities, since current use is more likely to be affected by a variety of additional family, economic, and normative pressures shared by all religious groups.

The proportion of women using some method of contraception at first intercourse varied from 73 percent among Jewish women to only 22 percent among Hispanic Catholics; 49 percent of the Protestants and 45 percent of non-Hispanic Catholics used a method of contraception at first intercourse. The examination of the specific method of contraception used at first intercourse also shows striking similarities between Protestants and non-Hispanic Catholics, with the major difference in the significantly higher proportion of Protestant women who use the pill at first intercourse. Jews were also distinctive in the method of contraception selected (54 percent used the condom at first intercourse compared to 35 percent of Protestants). Those reporting no religion were twice as likely as Hispanic Catholics to use some method of contraception at first intercourse, but among those using some method, the specific contraceptive used was very similar among those with no religious affiliation and Hispanic Catholics. These patterns apply to women regardless of whether their first intercourse was premarital or postmarital.

This pattern has been changing since the 1960s. Data not shown in tabular form reveal that among those having first intercourse 1960–69, Protestants were significantly more likely than Catholics to use some method of contraception; by the mid-1970s, the proportions were similar among Protestants and Catholics; by 1980–82, 60 percent of the Catholics but 55 percent of the Protestants used some contraceptive at first intercourse. In other words, the Catholic level of contraceptive use at first intercourse nearly doubled between the 1960s and the 1980s (from 32 percent to 60 percent); the Protestant proportion increased from 45 percent to 55 percent, a 22 percent increase.

What have been the changes in contraceptive methods used at first intercourse among those using some method? The use of the pill as the method for first intercourse increased for both Protestants and Catholics, reaching its peak in the 1970s, and then declined from the 1970s to the early 1980s. Condom use increased partly in conjunction with the decrease in the use of the pill. For the 1980–82 cohort, Catholics were more likely than Protestants to use the condom at first intercourse and Protestants were more likely than Catholics to use the pill. These patterns emerge as well among women whose first intercourse was before marriage and when the Catholic population is limited to non-Hispanics.

Conclusions

What do these various patterns suggest about the role of contraceptive change in the decline in fertility over the last quarter of a century and the fertility convergences between Protestants and Catholics? The data are consistent with the argument that the contraceptive revolution among Catholics and Protestants was largely responsible for the decline in fertility (see also Bongaarts, 1978). The evidence suggests further that the current similarity in fertility levels among Protestants and non-Hispanic Catholics (Mosher et al., 1986) is reflected in the similar levels of contraceptive methods used. On the other hand, it is clear that contraceptive patterns remain distinctive among religious groups and total convergence in these patterns is not likely. The difference in contraceptive use patterns is sustained by the data showing continual differential methods of contraception, among both more and less educated Protestants and Catholics and controlling for other background characteristics using multivariate techniques.

Additional research is needed to account for these findings and explore them in greater depth. Studies of representative and larger samples of religious groups should focus on the community contexts of contraceptive usage. These include an analysis of community norms and measures of access to contraceptives, physicians, and sterilization; they might incorporate perceptions of norms regarding premarital sex, contraception, family size, and the timing of childbearing. Since the surveys reported here do not include these variables, we can only suggest a series of reasonable hypotheses that the data suggest as potential avenues of future investigations.

One example relates to contraceptive practices among Catholics. It is likely that the somewhat greater tendency among Catholics toward condom use and rhythm does not relate primarily to the Catholic church's theology on contraception. Are these patterns related to peer pressure within the Catholic community toward the use of particular forms of contraception that are easily accessible without physician contact? Similarly, it may be that changes in contraceptive usage among Catholics do not simply reflect changes in the Catholic church's position regarding contraceptives, but the changing ways in which American Catholic communities respond to the informal pressures toward small family size. In general, the 1950s was a period when the major mechanism of family planning among Catholics was rhythm. During the 1970s, Catholic family planning shifted to the pill and IUD; in the 1980s, pill use declined and the disparity between pill and condom use lessened among Catholics. Does the tendency toward increased condom use as pill use declined reflect the greater anonymity associated with condom purchases, and the fact that condom use does not require physician intervention, as do the IUD or the diaphragm? Is it a move toward male-oriented contraceptives, and does it connect to the shifting sex role orientations of Catholics? These processes need to be studied more closely and with different data sets than currently available. Nevertheless, whatever the specific factors involved, they are likely to be more related to the changing nature of the American Catholic community and less tied to the specific theology of the church.

The data are also consistent with the argument that the pressure toward reduced family size may be similar among groups but the specific contraceptive paths chosen among groups toward these similar family size goals may be very different. These different paths may be associated with normative and structural features of groups

that are reflected in part by religious affiliation. In this regard, there are clearly multiple contraceptive paths to similar (if not identical) family size levels among Protestants, Catholics, and Jews. For Jews, for example, there is a very wide dispersion in the types of contraception used. This "cafeteria" style of contraceptive use suggests the hypothesis that different segments of the Jewish population select contraceptives according to how they define their needs and what is appropriate for them without group constraints or norms for particular methods or religious prohibitions on the use of specific contraceptives. These patterns have indeed characterized the Jews for several decades (see Goldscheider, 1985; Goldscheider, 1986a; Goldscheider 1986b). Their greater access to physicians through occupational and family networks may account for their greater reliance on contraceptives that require physician intervention (i.e., IUD, diaphragm, and the pill). This pattern contrasts with the greater emphasis on one or two methods, primarily the pill and condom, among American Catholics. Protestants follow a pattern similar to Catholics except for their significantly higher levels of voluntary sterilization.

These differential contraceptive styles among religious groups may have major linkages to differential husband–wife communication patterns, egalitarian sex roles, public–private and male–female types of contraceptives, and physician versus consumer-defined contraceptives. Systematic studies need to be designed to capture in-depth the factors underlying the changing relationship between religious affiliation and contraceptive usage over the life cycle. The data presented here reveal that significant differences exist in contraceptive usage and sterilization among religious groups in the United States, that these patterns have radically changed over the last several decades, and that simple explanations of these patterns among religious groups are inadequate.

Patterns of contraceptive use and sterilization among religious groups are likely to have implications for the timing and tempo of childbearing. As more couples delay marriage and have premarital sexual intercourse (Bachrach and Horn, 1985), the use of differential contraceptive styles is likely to characterize the various religious groups. Differential use patterns may have an effect on premarital pregnancy differentials among religious groups.

A final observation relates to the changes we noted in IUD and condom use. Jewish women and older women were disproportionately using the IUD in 1982. Will the temporary withdrawal of the IUD from the American market affect the patterns that are emerging in the late 1980s? Which methods will substitute for the IUD, among those women who stop using it? Will religious and ethnic groups respond differentially to these changes? Similarly, the growing concerns about sexually transmitted diseases have resulted in public education campaigns to increase condom use. Our data already show that by the early 1980s increases had occurred in condom use. How religious subpopulations respond to these changes will be monitored carefully in future research.

Yet, the overriding conclusion emerging from an analysis of changes in contraceptive practices among religious groups in the United States over the last quarter of a century is the growing similarity between Protestants and Catholics. Most Protestants, Catholics, Jews, and those of no religion use a variety of contraceptives to attain similar small family size goals, efficiently and effectively. Increasingly it appears that white non-Hispanic persons of all religions, engaged in nonmarital and marital sexual intercourse, are using contraceptives. These are revolutionary changes that have occurred in American society since the 1950s and reflect, as well as influence, demographic and social patterns of individuals, families, and communities. As marriage and family formation patterns change in the future, and as sex roles are altered, new contraceptive use styles are likely to emerge. To the extent that religious groups in America continue to differ in family formation, fertility, and child spacing patterns, they are likely to continue to differ in their contraceptive styles as well.

Notes

1 We did not include the 1965 National Fertility Study data since they would have added to the logistic problems of multiple comparisons over time without adding substantively to the analysis of contraceptive change.

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