

# SOCIAL AND PSYCHOLOGICAL FACTORS AFFECTING FERTILITY

## X. FERTILITY PLANNING AND FERTILITY RATES BY RELIGIOUS INTEREST AND DENOMINATION<sup>1</sup>

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THIS paper is a report on the investigation of the following hypothesis: "The greater the interest in religion, the lower the proportion of couples practicing contraception effectively and the larger the planned families." This is one of a series of hypotheses being tested in the Study of Social and Psychological Factors Affecting Fertility.

A number of previous investigations have been made of certain aspects of the relationship of religious affiliation and fertility. Another study in the present series<sup>2</sup> has found marked differences between the fertility rates of Catholics, Protestants, and Jews in Indianapolis. Similar results have been reported in other places.<sup>3</sup> A recent investigation in England<sup>4</sup> reported systematic differences in the family limitation practices of Catholics, Protestants, and Jews. A study<sup>5</sup> of the families of a group of Air-Corps officers found that while reported ideal family size was not related to religious denomination (Catholic

<sup>1</sup> This is the tenth of a series of reports on a study conducted by the Committee on Social and Psychological Factors Affecting Fertility, sponsored by the Milbank Memorial Fund with grants from the Carnegie Corporation of New York. The committee consists of Lowell J. Reed, Chairman; Daniel Katz; E. Lowell Kelly; Clyde V. Kiser; Frank Lorimer; Frank W. Notestein; Frederick Osborn; S. A. Switzer; Warren S. Thompson; and P. K. Whelpton.

<sup>2</sup> Whelpton, P. K. and Kiser, Clyde V.: *Social and Psychological Factors Affecting Fertility. I. Differential Fertility Among 41,498 Native-White Couples in Indianapolis*. The Milbank Memorial Fund *Quarterly*, July, 1943, xxi, No. 3, pp. 221-280. (Reprint pp. 1-60).

<sup>3</sup> *e.g.*, Charles Enid: *THE CHANGING SIZE OF THE FAMILY IN CANADA*. Census Monograph No. 1, Eighth Census of Canada, 1941. Ottawa, Dominion Bureau of Statistics, 1948, Ch. IV; also Notestein, Frank W. and Kiser, Clyde V., *Factors Affecting Variations in Human Fertility*. *Social Forces*, Oct., 1935, 14, No. 1, pp. 32-41.

<sup>4</sup> Lewis, Fanning, E.: *Report on an Inquiry Into Family Limitation and Its Influence on Human Fertility During the Past Fifty Years*. *Papers of the Royal Commission on Population*, Vol. I. London, His Majesty's Stationary Office, 1949.

<sup>5</sup> Flanagan, John C.: *A Study of Factors Determining Family Size in a Selected Professional Group*. *Genetic Psychology Monographs*, Feb., 1943, Vol. 25, pp. 3-101.

or Protestant), it was related to the extent of early religious training of the wife and the church attendance of the husband. However, a study of Catholic families in a Florida diocese found that degree of faithfulness in religious observances was not related to fertility, except that couples married by a priest had higher fertility rates than those who were not.<sup>6</sup> Finally, a number of scholars have stressed the possible importance of religion in maintaining high fertility rates in the Far East and other pre-industrial areas.<sup>7</sup>

The present study deals with the relationship of religious interest and reproductive behavior among a sample of urban Protestants. This is a relatively homogeneous group and is representative of a large part of the American population.

An important theoretical basis for the hypothesis is that degree of religious interest and participation may be considered to be negatively an index of rationalism and positively an index of the acceptance of traditional values. "Rationalism" as used here refers to the critical examination of alternative courses of action with a view to choosing among them. This is in polar contrast to the unquestioning acceptance of the traditional course of action. Religious interest and participation frequently are believed to minimize the area of rational calculation and planning, since they are connected with accepting on *faith* certain standards of conduct, among other things. A distinguished student of population has described the historical influence of the growth of rationalism on the practice of family limitation as follows: There has been

. . . an increasing disposition to weigh rationally the motives and actions in ones own life. Even if all reasons for having or not having children remain the same, people in an industrialized as compared with a pre-industrial society develop the habit of

<sup>6</sup> Coogan, Thomas F.: Catholic Fertility in Florida, The Catholic University of America, *Studies in Sociology*, Vol. 20. Washington, D. C., The Catholic University Press, 1946, p. 83.

<sup>7</sup> e.g., Notestein, Frank W.: Problems of Policy in Relation to Areas of Heavy Population Pressure. *Demographic Studies of Selected Areas of Rapid Growth*. New York, The Milbank Memorial Fund, 1944.

trying to interfere rationally with the course of human events, thus giving more consideration to what these reasons are.<sup>8</sup>

Religious interest and participation may also be indications of the extent to which the individual is involved with groups and values which transcend his immediate, calculated self-interest. This is saying in another way that the individual may act with reference to his socially defined role in a larger unit rather than in terms of a deliberate calculation of alternatives. Identification with religious organizations may be considered to be inconsistent with an extreme individualism, or with separation from the traditional sanctions of group life. The conception of a sophisticated and mobile urban person, to whom nothing is sacred, who refers all questions to a narrow conception of self-interest, and to whom tradition and ritual have no value, is hardly consistent with extensive religious interest and participation. As a part of a general secularization, such an extreme urban type might be expected to plan family size, among other things. The size of family planned might also be expected to be small under the conditions of modern urban life, if the individual does not refer himself to larger groups and values.

The hypothesis may be justified also on a somewhat different basis. Non-participation in religious institutions need not necessarily involve a decrease in the control over behavior exercised by group norms. It may only involve the acceptance of norms of non-religious groups. Similarly, the "religious" person may practice contraception less frequently and may have a larger family, because these are the norms of the religious group to which he belongs rather than because of any greater adherence to social norms in general. The behavior of the person who plans his family size may differ from that of the "religious" person not because he is a "rational" and "emancipated" person but because he acts with reference to the norms of different groups. The requirements of the individual's position in the community may involve limitation of

<sup>8</sup> Myrdal, Alva: *NATION AND FAMILY*. New York: Harpers, 1942, p. 51.

family size to a certain level. These requirements may be set for him by the norms of the groups to which he belongs, whether these be religious or non-religious.

Although wider and wider areas of life have passed from the religious to the secular domain, even the most liberal religious denominations have continued to lay some stress on the sacred character of family relationships. Students of the family and of religious institutions have frequently emphasized the fact that the family as the basic reproductive unit has been less completely, and more recently, subject to the searching scrutiny of science than other human institutions. Even if we accept the view that there has been a great decrease in the proportion of families participating intensively in religious groups, it may be maintained that those participating will be most likely to accept traditional values about family practices. While many Protestant churches now advocate the practice of family limitation, and many others condone it, there are none which do not stress the value of children in family life. Furthermore, it is important to remember that most of the parents in this study grew up before acceptance of family limitation by the churches.

We have proposed two theoretical approaches to this hypothesis. The first emphasizes the loosening of group bonds and the growth of rational behavior and links these negatively with religious interest. The second emphasizes differential group membership and stresses the importance of the involvement of the "irreligious" person in groups with reproductive norms differing from those of the religious groups. The one emphasizes the method by which decisions are reached, the other emphasizes the content of the decision, assuming group determination in either case.

Serious questions may be raised about these theoretical approaches. With respect to the first, it may be argued that the "ethics of prudence and of rational calculation" have long been incorporated in Protestant religious values, either as an accommodation to or a forerunner of the requirements of a "free

enterprise" system. This is a common theme of a number of distinguished studies of the Protestant Ethic,<sup>9</sup> although there is disagreement whether such rationalism developed first in the church or in the economic system. However, a leading student of the Protestant denominations notes that the extension of rational prudence into church doctrine was associated with a strong emphasis on the sanctity of the family—at least in middle-class Protestant churches.<sup>10</sup> Whatever social units are considered to be sacred are likely to be less subject to explicit rational examination.

With respect to the second theory, at least two questions may be raised. One is the factual question of whether the norms of Protestant religious groups are those required by the hypothesis, so that participants in these groups are in contact with norms unfavorable to family limitation. Unfortunately, apart from the data of this study, we have very little reliable knowledge with which to answer this question. It is true that the Federal Council of Churches and a number of individual denominations have issued statements favorable to the practice of family limitation under certain conditions.<sup>11</sup> However, the fragmentary evidence available indicates that religious groups have come to this position relatively recently. Further, there is no doubt that they continue to stress the sanctity and significance of family life. While this emphasis is by no means inconsistent with the practice of family limitation, it is probably less likely to encourage such practice than a purely secular—if not a cynical—view. The religious view gives much greater weight to the family as an institution with values transcending the individual.

Another important question is whether even those persons

<sup>9</sup> Weber, Max: *THE PROTESTANT ETHIC AND THE SPIRIT OF CAPITALISM*. (trans. by Talcott Parsons.) New York: Scribners, 1930; Tawney, Richard, H.: *RELIGION AND THE RISE OF CAPITALISM*. New York: Harcourt Brace, 1926; Robertson, Hector, M.: *ASPECTS OF THE RISE OF ECONOMIC INDIVIDUALISM*. Cambridge: University Press, 1933.

<sup>10</sup> Niebuhr, H. Richard: *THE SOCIAL SOURCES OF DENOMINATIONALISM*. New York: Henry Holt, 1929, p. 86.

<sup>11</sup> Committee on Marriage and the Home of the Federal Council of the Churches of Christ in America: *MORAL ASPECTS OF BIRTH CONTROL*, New York, 1938.

with relatively great religious interest may not be strongly influenced in their reproductive pattern by their participation in institutions in which their roles demand behavior different from that prescribed by their religious groups. Again here, the fundamental difficulty is that our reliable knowledge of the relative social influence of the Protestant Church is so meagre that interpretation is difficult. One of the contributions of this study, incidental to its principal purpose, may be to widen our knowledge of the religious behavior of an adequate sample of Protestants in one community.

Another consideration is that part of the relationship between fertility and religious interest may run from the former to the latter. Parents may become interested in religious activities for the sake of their children. In any study, such as this one, in which degree of religious interest is reported after the fertility experience covered in the study, it is difficult to determine the direction of the influence. It is possible that the relationship may run in different directions at various stages in the history of a family.

Although the wider background and significance of the findings may be controversial, the "religious" hypothesis appears to be sufficiently plausible to justify a detailed examination of the relationship between variation in religious interest and variation in reproductive behavior.

Since there is evidence that religious interest and denomination are a function of social class membership, it is important to consider this fact in investigating the hypothesis. Kiser and Whelpton have demonstrated a marked relationship between socio-economic status and reproductive behavior for the sample of this study.<sup>12</sup> Therefore, any relationship found between religious interest and reproductive behavior may be a result of a joint relationship to socio-economic status rather than any intrinsic connection. Although the relationship found

<sup>12</sup> Kiser, Clyde V. and Whelpton, P. K.: *Social and Psychological Factors Affecting Fertility*, IX. *Fertility Planning and Fertility Rates by Socio Economic Status*. Milbank Memorial Fund *Quarterly*, April, 1949, xxvii, No. 2, pp. 188-244. (Reprint pp. 360-415.)

between socio-economic status and planning status is a substantial one, there remains a very considerable variation in planning status within relatively homogeneous socio-economic status groups. Explanation of the variation within formal socio-economic categories may also be a clue to the meaning of the variation between such categories. In view of these considerations, socio-economic status is used wherever possible as a control in this study.

### THE DATA

Previous reports in this series have described in detail the methods of collecting data and the nature of the data.<sup>13</sup> This report deals only with the "relatively fecund" couples. All tabulations are based on the "inflated" sample of 1,444 for this group. However, in the application of chi-square tests of significance it does not appear to be appropriate to use the inflated sample without modification, since this would underestimate the sampling error. Therefore, the procedure followed has been to test each distribution on the assumption that the proportional entries in each cell are correct but that the *numbers* in each cell should be proportionately deflated to yield a total of 860 cases—the size of the sample actually interviewed.

The categories of fertility planning status used in this study

<sup>13</sup> The following brief summary is repeated from one of the previous studies:

Briefly stated, short schedules were filled out for 41,498 native-white couples with wife under 45 in a Household Survey of Indianapolis. The Intensive Study was restricted to 2,589 native-white Protestant couples whose marriages were contracted during 1927-1929, and were unbroken at the time of the interview in 1941. Additional requirements for inclusion were: the wife was under 30 and the husband under 40 at marriage, neither had been previously married, the couple had resided in a large city most of the time since marriage, and both husband and wife had at least completed grammar school.

At the conclusion of the field work long schedules had been completed for 860 "relatively fecund" couples and briefer ones for 220 "relatively sterile" couples, a total of 1,080. The adjusted or "inflated" sample consists of 1,444 "relatively fecund" and 533 "relatively sterile" couples, a total of 1,977. Couples refusing to cooperate in the Study comprise about 11 per cent of those contacted. Despite their absence, the inflated sample is quite similar to the original universe of 2,589 eligible couples not only with respect to the distribution by number of live births but also with respect to such distributions as dwelling units by rental value and husbands and wives by age and educational attainment.

*Ibid.*, p. 192 (Reprint p. 363).

have been described in detail in previous studies of the series.<sup>14</sup>

Fifteen questions more or less directly related to the religion hypothesis were asked of each husband and wife. They may be grouped as follows:

- a. Eight questions referring directly to the religious interest or activity of the couples or their children.<sup>15</sup>
- b. Six questions intended to elicit the positive "reasons" for whatever level of religious interest the respondent professed.
- c. One question regarding religious preference.<sup>16</sup>

<sup>14</sup> The following excerpt from a previous study defines the four categories used in this study:

In general, the detailed pregnancy and contraceptive histories, including data on outcome of pregnancies and attitudes toward each pregnancy, constitute the criteria for the classifications by planning status. The categories used, in descending degree of success in planning family size, are described below.

*Number and Spacing of Pregnancies Planned.* The 408 couples in this group exhibit the most complete planning of fertility in that they had no pregnancies that were not deliberately planned by stopping contraception in order to conceive. The group consists of two major subdivisions: (a) 121 couples practicing contraception regularly and continuously and having no pregnancy, and (b) 282 couples whose every pregnancy was deliberately planned by interrupting contraception in order to conceive.

*Number Planned.* This group of 205 couples consists mainly of those whose last pregnancy was deliberately planned by stopping contraception in order to conceive but who had one or more previous pregnancies under other circumstances. Because of this, the couples are regarded as having planned the number but not the spacing of their pregnancies.

For couples not classified as "number and spacing planned" or as "number planned" the previously mentioned criteria regarding attitudes of husband and wife to each pregnancy constituted the bases for classification.

*Quasi-Planned.* This group includes 454 couples who did not deliberately plan the last pregnancy in the manner described above but who either wanted the last pregnancy or wanted another pregnancy.

*Excess Fertility.* This group is composed of 382 couples classified as least successful in planning size of family because they neither wanted the last pregnancy nor another.

*Ibid.*, p. 210-211 (Reprint pp. 381-2).

<sup>15</sup> The questions referred to in *a* and *b* are listed in the stubs of Tables 1 to 3 and in Appendix 3.

<sup>16</sup> Religious preference was reported by the wife for her husband and herself. All other religious interest items were reported separately by husband and wife. The denominational preferences are reported in Table 4.

Since the sample includes only a few cases of some of the smaller denominations, it was necessary either to omit them or to combine them into larger groups for Table 4. The latter procedure was felt to be more desirable. In grouping denominations, two principles were followed as closely as possible: (1) to combine only groups roughly similar with respect to the variables considered, (2) to combine groups roughly similar with respect to socio-economic status and the "liberal"—"fundamentalist" distinctions. It is obvious that in each grouping there is variation and none is completely homogeneous.

(Continued on page 303)



Table 1. The relation of fertility-planning status of "relatively fecund" couples to statements by wives and husbands indicating degree of religious interest.

DEGREE OF RELIGIOUS INTEREST <sup>b</sup>	PER CENT DISTRIBUTION BY PLANNING STATUS FOR STATEMENTS BY WIVES <sup>a</sup>					PER CENT DISTRIBUTION BY PLANNING STATUS FOR STATEMENTS BY HUSBANDS <sup>a</sup>				
	Total	No. and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility	Total	No. and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility
	ALL COUPLES	100	27.9	14.2	31.4	26.5	100	27.9	14.2	31.4
<i>Extent Last Child Encouraged by Religious Duty*</i>										
Very Little	100	22.4	15.0	32.9	29.7	100	23.0	16.7	33.0	27.2
Little	100	29.6	11.9	31.3	27.2	100	24.3	14.1	31.1	30.6
Some	100	22.9	17.9	32.7	26.5	100	23.8	15.8	35.0	25.4
Much	100	21.9	17.2	31.2	29.7	100	20.0	10.0	45.6	24.4
Very Much	100	19.2	14.4	43.3	23.1	100	28.4	6.9	24.5	40.2
<i>Interest in Religion:</i>										
<i>Since Marriage</i>										
Very Little	100	38.1	5.8	23.7	32.4	100	31.6	15.3	20.4	32.7
Little	100	33.8	16.9	25.7	23.6	100	19.7	14.2	39.5	26.6
Some	100	25.0	12.9	34.0	28.1	100	28.8	13.5	32.4	25.3
Much	100	24.2	15.3	35.2	25.3	100	32.3	12.5	34.9	20.3
Very Much	100	29.5	18.7	29.1	22.7	100	23.2	17.4	31.9	27.5
<i>As a Child</i>										
Very Little	100	31.0	20.7	24.1	24.1	100	27.7	17.6	25.2	29.6
Little	100	29.3	19.6	26.1	25.0	100	29.5	10.6	33.2	26.7
Some	100	29.3	12.2	35.4	23.0	100	27.8	12.4	31.7	28.1
Much	100	28.4	12.4	28.9	30.3	100	27.7	14.7	35.1	22.4
Very Much	100	24.7	16.5	30.8	28.0	100	26.9	20.5	26.9	25.7
<i>Church Attendance as a Child</i>										
Seldom or Very Seldom	100	24.4	22.0	34.1	19.5	100	24.8	14.0	31.4	29.8
Sometimes	100	22.5	14.2	36.6	26.7	100	22.7	16.4	33.6	27.3
Often	100	29.0	12.4	28.7	29.9	100	28.0	11.6	30.0	30.4
Regularly	100	28.5	14.6	31.3	25.6	100	30.0	15.0	31.6	23.3
<i>Are Week-Day Activities All Right on Sunday Too?</i>										
Definitely Yes	100	29.4	16.1	31.4	23.1	100	27.9	15.6	26.2	30.3
Probably Yes	100	29.1	13.3	32.0	25.6	100	29.4	14.2	33.5	22.8
Doubtful	100	23.5	12.9	35.6	28.0	100	23.3	10.4	38.0	28.3
Probably No	100	23.6	12.5	32.3	31.6	100	28.4	15.9	29.7	25.9
Definitely No	100	35.4	18.2	22.7	23.8	100	30.6	15.0	30.6	23.8

<sup>a</sup> For numerical distributions see Appendix 2, Table 17. <sup>b</sup> See Appendix 3 for precise questions to which statements are replies.  
<sup>c</sup> Forty-seven childless couples planning to have a child answered this question. Eighty-eight childless couples did not reply.

Three of the eight questions in *a* relate to the religious experience of the children. Since none of the children were older than fourteen at the time of the Study, it is assumed initially that their religious activity is an index of one kind of parental religious interest. The remaining five questions refer directly to the religious interest of the couples. One of these is a straightforward query about the hypothesis, asking how important a sense of religious duty was as a reason for having the last child. In an auxiliary question the respondents were asked to indicate the most important among ten reasons from which choice was possible. The alternative reasons are shown in Table 5. Although many persons will not be able to make "real" motivation explicit, reference to religious duty as a "reason" may be indicative of those for whom religious norms are of conscious concern.

The written instructions asked each respondent to answer the six questions in *b* even though religious interest was low. The intention was to differentiate those for whom reasons for religious interest were essentially secular or practical (e.g., churches provide social life) and those for whom the reasons had a sacred or theological character (e.g., religion prepares one for eternal life). An examination of the responses indicates that the respondents did not interpret this set of questions as intended. The pattern of responses suggests that these questions may have meant to the respondents: How important is each of the following functions of religion? There is a marked positive correlation between the responses on the "sacred" and on the "secular" alternatives. For example, of the 243 wives who attributed "great importance" to "churches provide social life" 90.9 per cent also attached "great importance" to "religion prepares one for eternal life." Contingency

The "Miscellaneous" grouping had already been constructed in the coding. It consists of the following denominations and sects: Spiritualist, Reformed, 2nd Reformed, Seventh Day Adventist, Dunkard, Bethel Interdenominational, Pilgrim Holiness, Christian Protestant, Swedish Mission Covenant, Unity Truth Center, Christian Disciple, Holiness League. The Moravian denomination was later added to this group. The three other combinations of denominations shown in the tables were constructed by the author on the basis of the criteria outlined above.

Table 2. The relation of fertility-planning status of "relatively fecund" couples to statements by wives and husbands about reasons for religious interest.

ANSWERS TO QUESTION: HOW IMPORTANT IS EACH OF THESE BELIEFS IN ACCOUNTING FOR YOUR INTEREST IN RELIGION OR CHURCH ACTIVITIES?	PER CENT DISTRIBUTION BY PLANNING STATUS FOR STATEMENTS BY WIVES <sup>a</sup>					PER CENT DISTRIBUTION BY PLANNING STATUS FOR STATEMENTS BY HUSBANDS <sup>a</sup>				
	Total	No. and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total	No. and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
<b>ALL COUPLES</b>	100	27.9	14.2	31.4	26.5	100	27.9	14.2	31.4	26.5
<i>Churches Provide Social Life</i>										
No Importance	100	40.3	8.8	24.9	26.0	100	29.3	13.6	32.1	25.0
Little Importance	100	26.8	17.4	32.4	23.4	100	22.7	16.2	32.8	28.3
Some Importance	100	28.2	16.5	29.9	25.4	100	27.5	15.4	31.2	25.9
Much Importance	100	23.7	11.2	30.9	34.2	100	32.9	12.6	31.1	23.4
Great Importance	100	23.5	12.3	39.9	24.3	100	26.5	11.3	30.9	31.3
<i>Churches are Centers of Useful Activity</i>										
No Importance	100	38.1	15.9	19.0	27.0	100	25.6	21.8	21.8	30.8
Little Importance	100	33.1	16.5	31.4	19.0	100	26.8	11.0	33.9	28.3
Some Importance	100	31.1	16.8	26.9	25.3	100	25.9	14.2	33.0	26.9
Much Importance	100	23.9	11.2	35.6	29.2	100	29.0	14.8	33.8	22.4
Great Importance	100	24.6	12.8	35.0	27.6	100	31.4	12.8	27.0	28.7
<i>Religion Helps One Lead a Better Life</i>										
No Importance	100	36.4	18.2	36.4	9.1	100	34.6	23.1	25.0	17.3
Little Importance	100	47.4	18.4	21.1	13.2	100	29.3	9.8	23.9	37.0
Some Importance	100	34.6	13.4	25.8	26.3	100	26.3	17.1	27.3	29.4
Much Importance	100	26.7	11.5	32.6	29.1	100	27.6	10.5	37.8	24.1
Great Importance	100	25.5	15.4	32.8	26.4	100	27.9	15.3	30.9	25.9
<i>Religion Brings Fellowship with God</i>										
No Importance	100	51.9	7.4	33.4	7.4	100	36.8	18.4	21.1	23.7
Little Importance	100	18.5	48.2	29.6	3.7	100	47.1	1.4	25.0	26.5
Some Importance	100	36.0	13.5	28.6	21.9	100	24.3	16.8	29.3	29.6
Much Importance	100	29.7	9.0	33.8	27.5	100	27.8	10.9	36.4	24.9
Great Importance	100	24.8	15.8	31.0	28.4	100	27.1	16.1	30.6	26.2
<i>Religion Prepares One for Eternal Life</i>										
No Importance	100	41.9	14.0	27.9	16.3	100	39.3	15.2	20.5	25.0
Little Importance	100	32.1	30.4	19.6	17.9	100	32.4	14.8	25.9	26.9
Some Importance	100	32.8	14.4	28.9	23.9	100	27.4	9.0	32.2	28.1
Much Importance	100	31.4	6.8	34.8	26.9	100	26.0	12.2	42.2	22.7
Great Importance	100	24.6	15.4	32.0	28.0	100	26.4	16.9	29.5	27.3
<i>Religion Helps Build a Better World</i>										
No Importance	b	...	...	...	...	100	41.9	9.7	19.4	29.0
Little Importance	b	...	...	...	...	100	23.1	10.3	33.3	33.3
Some Importance	100	36.4	16.4	24.5	22.7	100	26.1	14.4	27.7	31.9
Much Importance	100	31.5	6.9	31.5	30.1	100	29.3	12.9	33.2	24.6
Great Importance	100	26.4	15.2	32.3	26.1	100	27.6	14.9	32.0	25.5

<sup>a</sup> For numerical distributions see Appendix 2, Table 18.

<sup>b</sup> Percentages not computed for total less than 20.

coefficients for the relationship between importance attached to two "secular" reasons ("churches provide social life" and

Table 3. The relation of fertility-planning status of "relatively fecund" couples to statements by wives and husbands about religious experience of their children.

AMOUNT OF RELIGIOUS EXPERIENCE OF CHILDREN <sup>b</sup>	PER CENT DISTRIBUTION BY PLANNING STATUS <sup>a</sup>				
	Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
ALL COUPLES WITH CHILDREN: <sup>c</sup>	100	21.1	15.4	34.4	29.0
<i>Wives</i>					
<i>Frequency Children Have:</i>					
<i>Attended Church or Sunday School?</i>					
Seldom	100	16.2	12.4	39.0	32.4
Fairly Often	100	22.0	13.9	33.8	30.4
Regularly	100	21.3	17.0	34.2	27.5
<i>Said Prayers at Bedtime?</i>					
Seldom	100	15.8	17.7	28.5	38.1
Fairly Often	100	20.9	13.6	37.6	27.9
Regularly	100	23.9	16.1	34.1	25.9
<i>Heard Grace at Meals?</i>					
Seldom	100	22.3	14.6	33.6	29.5
Fairly Often	100	15.2	16.5	36.3	32.0
Regularly	100	24.3	16.0	34.2	25.6
<i>Husbands</i>					
<i>Frequency Children Have:</i>					
<i>Attended Church or Sunday School?</i>					
Seldom	100	22.8	16.9	30.1	30.1
Fairly Often	100	18.0	13.1	35.8	33.0
Regularly	100	23.8	17.2	34.0	25.0
<i>Said Prayers at Bedtime?</i>					
Seldom	100	18.4	15.7	34.4	31.5
Fairly Often	100	17.7	15.2	34.5	32.7
Regularly	100	27.9	15.1	34.4	22.6
<i>Heard Grace at Meals?</i>					
Seldom	100	21.7	15.3	32.7	30.4
Fairly Often	100	20.2	13.8	35.9	30.1
Regularly	100	20.9	17.4	37.6	24.0

<sup>a</sup> For numerical distributions, see Appendix 2, Table 19.

<sup>b</sup> The exact question asked was "How often have your children (or how often will they later, if too young now) attended church or Sunday School?" etc.

<sup>c</sup> Only couples with children responded to these questions.

Table 4. The relation of fertility-planning status and births per 100 "relatively fecund" couples to religious denomination of wives and husbands.

RELIGIOUS DENOMINATION	PER CENT DISTRIBUTION BY PLANNING STATUS <sup>a</sup>					BIRTHS PER 100 COUPLES
	Total	No. and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility	
ALL COUPLES	100	27.9	14.2	31.4	26.5	203
<i>Denomination of Wife:</i>						
Congregational, Episcopal, Unitarian, Friends, Universalist <sup>b</sup>	100	28.6	16.6	38.1	16.6	195
Christian Science	100	38.8	...	30.6	30.6	161
Presbyterian	100	38.4	16.4	30.1	15.1	171
Lutheran	100	34.6	12.8	30.8	21.8	194
Christian	100	24.8	19.4	33.5	22.3	201
Methodist	100	21.3	9.5	40.9	28.3	214
Evangelical, Evangelical- Reformed, Evangelical- Zion <sup>b</sup>	100	35.8	26.4	17.0	20.8	170
Baptist	100	22.3	18.1	22.9	36.7	201
United Brethren	100	20.0	...	43.3	36.7	227
Church of Christ, Church of God, Church of 1st Born, Nazarene, Pentecostal <sup>b</sup>	100	11.9	15.2	30.5	42.4	297
Miscellaneous <sup>b</sup>	100	32.4	21.6	24.3	21.6	195
Unknown, but Protestant	100	39.5	10.5	18.6	31.4	210
None <sup>c</sup>	100	46.3	14.9	17.9	20.9	202
<i>Denomination of Husband:</i>						
Congregational, Episcopal, Unitarian, Friends, Universalist <sup>b</sup>	100	11.9	19.0	50.0	19.1	214
Christian Science	100	37.5	...	45.0	17.5	155
Presbyterian	100	38.6	20.0	26.4	15.0	185
Lutheran	100	39.1	11.6	29.0	20.3	200
Christian	100	21.6	19.6	35.9	22.9	204
Methodist	100	24.3	12.0	37.4	26.3	204
Evangelical, Evangelical- Reformed, Evangelical- Zion <sup>b</sup>	100	42.0	16.0	18.0	24.0	186
Baptist	100	25.0	17.1	25.0	32.9	199
United Brethren	100	...	8.3	50.0	41.7	262
Church of Christ, Church of God, Church of 1st Born, Nazarene, Pentecostal <sup>b</sup>	100	17.1	12.2	29.3	41.4	315
Miscellaneous <sup>b</sup>	100	31.8	20.4	22.7	25.0	209
Unknown, but Protestant	100	35.3	10.8	18.6	35.3	224
None <sup>c</sup>	100	33.6	6.6	26.2	33.6	178

<sup>a</sup> For numerical distributions, see Appendix 2, Table 20.

<sup>b</sup> See footnote 16 for explanation of these groupings and categories.

<sup>c</sup> Protestants without specific denominational preference.

“churches are the center of useful activity”) and two “sacred” reasons (“religion brings fellowship with God” and “religion prepares one for eternal life”) range from .38 to .49.<sup>17</sup> In view of these findings, the answers to these six questions have been treated as indices of religious interest. Attaching “great importance” to any of the reasons has been considered as indicating great religious interest.

The denomination given by the respondent in reply to the question on religious preference is no evidence of active membership, but probably indicates the religious group to which the respondent feels the most affinity. The meaning to attribute to preferences for different religious denominations is a difficult question which will be discussed more fully at a later point. The assumption has been made in this study that the denominations with a “liberal” theology in which the area of “reason” is maximized and emotional demonstrations minimized are also the denominations which in general have condoned or encouraged family limitation. According to the rationale for our hypothesis, affiliation with these “liberal” denominations should have an effect similar to a low degree of religious interest in increasing the practice of family limitation.

The validity of the data on religious behavior is difficult to establish. It is probably true that some of the responses reflect what are considered to be conventional or “correct” answers. One partial check is available in the independent responses of husbands and wives to the question: “How often have your children (or how often will they, later, if too young now): (1) attended church or Sunday School? (2) said prayers at bed-time? (3) heard grace at meals?” For each of these three items a higher number of wives than husbands answered “regularly,” as may be seen from a comparison of the “total” columns in Table 3. Unfortunately, even these data are not a perfect check, since the husband-wife discrepancy may have arisen from differences in expectations of husbands and wives about the behavior of children “too young now.”

<sup>17</sup> See Appendix 1 for a tabulation of the coefficients.

Table 5. The relation of fertility-planning status of "relatively fecund" couples to reason rated by wives and husbands as most important for having lost child.

REASON RATED AS MOST IMPORTANT	Total Number	PER CENT DISTRIBUTION BY PLANNING STATUS					Excess Fertility
		Total	No. and Spacing Planned	Number Planned	Quasi-Planned		
<b>ALL WIVES:<sup>a</sup></b>							
A Strong Likng for Children	1,354	100	23.8	15.1	33.3	27.8	
A Belief that it is a Religious Duty to Have a Family	667	100	27.0	13.8	34.5	24.7	
The Traditional Belief that Married Couples Ought to Have Children	30	100	6.7	10.0	40.0	43.3	
A Feeling that it is Important to Carry on the Family Name	123	100	13.8	8.9	30.9	46.4	
A Desire to See What Own Children Would be Like	8	<sup>b</sup>	...	...	...	...	
A Feeling that Children Bring Husband and Wife Closer Together	68	100	42.6	7.4	23.5	26.5	
Not Wanting an Only Child	147	100	23.1	12.9	34.0	30.0	
Not to be Left Childless in Case of Death of Only Child	167	100	20.4	25.7	35.3	18.6	
The Desire of Children for More Brothers and Sisters	14	<sup>b</sup>	...	...	...	...	
Wanting a Girl if Only Had Boys, or a Boy if Only Had Girls Unknown	32	100	18.8	25.0	37.5	18.7	
	71	100	12.7	21.1	26.8	39.4	
	27	100	7.4	11.1	33.3	48.2	
<b>ALL HUSBANDS:<sup>a</sup></b>							
A Strong Likng for Children	1,357	100	23.6	15.2	33.6	27.6	
A Belief that it is a Religious Duty to Have a Family	593	100	30.0	13.5	34.1	22.4	
The Traditional Belief that Married Couples Ought to Have Children	47	100	23.4	14.9	25.5	36.2	
A Feeling that it is Important to Carry on the Family Name	124	100	18.5	8.9	37.9	34.7	
A Desire to See What Own Children Would be Like	29	100	41.4	...	17.2	41.4	
A Feeling that Children Bring Husband and Wife Closer Together	47	100	29.8	6.4	40.4	23.4	
Not Wanting an Only Child	244	100	16.0	16.8	37.7	29.5	
Not to be Left Childless in Case of Death of Only Child	131	100	21.4	35.1	25.2	18.3	
The Desire of Children for More Brothers and Sisters	5	<sup>b</sup>	...	...	...	...	
Wanting a Girl if Only Had Boys, or a Boy if Only Had Girls Unknown	21	100	23.8	4.8	28.6	42.8	
	75	100	1.3	14.7	32.0	52.0	
	41	100	22.0	7.3	24.4	46.3	

<sup>a</sup> Includes responses for all couples who had a live birth and all childless couples with wife pregnant at interview or respondent indicating couple intended to have a child in future. Forty-five childless couples are included on basis of response of wife and 48 on basis of response of husband.

<sup>b</sup> Percentages not computed for total less than 20.

The data on other questions consistently show a greater amount of religious interest and participation for wives than for husbands. It is impossible to determine whether this indicates a genuinely greater religious interest on the part of the wives or a stronger feeling that answers showing interest in religion are socially expected. In any case, it might be argued that a deference to social expectation is exactly the kind of traditionalism which is one basis for expecting religious interest to affect reproductive behavior.

The religious data are very complete for each person in the sample, in the sense that there are very few cases of "unknown" responses to religious interest items. There are only three tabulations, among the many presented in this paper, for which the "unknown" responses number more than three. Therefore, except for these three tabulations, the "unknowns" are not shown as separate categories, although they are included in the "total" in each case.

#### THE RELATIONSHIP BETWEEN RELIGIOUS INTEREST AND THE PLANNING OF FERTILITY

For the sample as a whole, the data show a small but fairly consistent relationship between the various indices of religious interest and the effective planning of fertility. However, these relationships are largely a function of the socio-economic status of the respondents. The relationship is most marked for religious preference. This is a much simplified summary of the findings we present now in detail.

Tables 1 to 4 show separately for husbands and wives the relationship between each of the 15 indices of religious interest and the effectiveness of planning of fertility. The relationship shown in these tables is rarely large enough to obtain regular gradations of effectiveness of planning as one moves from low-religious-interest to high-religious-interest categories. However, a fair consistency appears if only the extreme categories of religious interest are used in each case. If we consider only the data in Tables 1-3 (excluding religious denomination for



the moment), the categories reflecting "lowest" religious interest contain a higher percentage of "effective planners"<sup>18</sup> than the categories reflecting the "highest" degree of religious interest, for 9 out of 14 comparisons for wife and 8 out of 14 comparisons for husbands. If we add religious denomination to this comparison, (Table 4) comparisons are consistent 10 out of 15 times for wife and 9 out of 15 times for husbands. For responses of both husbands and wives 3 of the 5 comparisons inconsistent with the hypothesis are for the questions on religious behavior of their children. We will see later that this inconsistency is a function of the socio-economic status of the parents. If we set aside for the moment the three questions about the children, the comparisons are consistent with the hypothesis in 10 out of 12 cases for wife and 9 out of 12 cases for husbands.

Essentially the same results are obtained if extreme categories are compared with respect to per cent of families classified as "number and spacing planned." In this case the comparisons are consistent with the hypothesis for 10 out of 15 items for the wife and 9 out of 15 for husband. Three of the inconsistencies for wives and two of those for husbands are for the questions on the religious behavior of the children. If the questions on religious behavior of children are omitted, the comparisons are consistent with the hypotheses in 9 of 12 cases for wives and 8 of 12 cases for husbands.

The comparisons are most consistent with the hypothesis for the group of six items on "reasons" for importance of religion (see Table 2). For each of the six items, for responses of either husbands or wives, the comparisons of extreme categories on percentage of "effective planners" are consistent with the hypothesis. Similarly, when the extreme categories on these items are compared on percentage of couples classified as "number and spacing planned," the comparisons are consistent with the

<sup>18</sup> The term "effective planners" is used in this, as in preceding studies of the series, to refer to couples whose planning status was either "number and spacing planned" or "number planned." The *number* of children is completely planned for the couples in both of these categories.

hypothesis for each of the six items for wives and for five of the six items for husbands. Thus, the reasons for importance of religion are more consistently related to planning status than are other measures indicating personal interest in religion or reporting on religious activities. However, this difference should not be over emphasized, since the relationship is not large in either case.

Chi-square values were compared to test the significance of each of the relationships in Tables 1-4. Very few are significantly greater than might be expected to occur by chance alone. The level at which chi square is significant for each item is given in Appendix 4. For fifteen items for which chi-square measures were computed, five show relationships significant at the .05 level for the responses of wives but only two show a relationship significant at this level for husbands. For both husbands and wives one of these "significant" relationships is in a direction opposite to the hypothesis. (There is a significant *positive* relationship between the frequency with which children say prayers at bed-time and the effectiveness of planning fertility.) Therefore, there remain four items for responses of wives and one for responses of husbands in which there are statistically significant relationships consistent with the hypothesis. The relationship of religious denomination and planning status is significant at the .001 level for either husbands or wives. For wives, the other three statistically significant relationships consistent with the hypothesis are for three of the reasons which they gave for the importance of religion.<sup>19</sup>

As indicated by the data in Table 4, as well as by the chi-square values, the most marked relationship is that between religious denomination and planning status. These data are difficult to interpret with any precision, because it is difficult to classify the religious denominations precisely either with reference to their general emphasis on the rational examination of

<sup>19</sup> Churches provide social life; Religion brings fellowship with God; Religion prepares one for eternal life.

traditional values or their specific pronouncements on the issues of family planning. Very roughly, there does seem to be a tendency for the religious groups with a relatively high percentage of effective planners to be those generally regarded as "liberal" or those in which the "prudent" elements of the "Protestant Ethic" are very strong (e.g., the Presbyterians and the Lutherans). The denominations with a low percentage of "effective planners" appear to be mainly those with a "fundamentalist" approach to religion and a more emotional emphasis on faith. This is certainly a very crude statement, subject to many qualifications. The fundamental difficulty in interpretation is that American Protestant denominations have no binding central creed which persists over time and in different places.

As between responses of husbands and wives, the findings for religious denominations are relatively consistent. If the ten religious denomination groups are ranked on the basis of the percentage of effective planners, the rankings based on responses of husbands and wives differ by more than one rank in only two cases.

We have seen that planning status is more closely related to religious denomination than to the specific religious interest items. This may result from the fact that the religious interest items represent variable statements of subjective attitudes, while the religious denominations represent objective historic groups whose common membership is characterized by a variety of selective factors possibly related to reproductive behavior. Similar statements of attitudes may arise out of a variety of different group connections. Common denominational affiliation is an indication of at least one common group membership. It probably is more likely to indicate interactions among the persons involved than is a common statement of attitudes. A number of students of religious organization indicate that the denominations have social origins and are linked to other distinctive groupings in society. To the extent that this is true, differing reproductive behavior for members of different

denominations may reflect the requirements of other groups related to the denominations.

Another type of evidence is contained in Table 5. This shows the results of asking the husband and wife which of ten listed reasons was most important to them in the decision to have their last child. (The responses of childless couples were tabulated also, if the couple indicated an intention to have a child or if the wife was pregnant at interview.) The number indicating "a belief that it is a religious duty to have a family" as reason for last child is small for both husbands and wives (thirty for wives and forty-seven for husbands). Explicit religious considerations are clearly not a widespread conscious motivation for having children in the stage of family growth represented by our sample. In frequency of mention as the "most important reason," religious duty ranks eighth among the ten possible reasons of wives and is tied for sixth with another reason among the ten for husbands.<sup>20</sup> Considering only those who gave this reason, the results vary with whether responses of husbands or wives are considered. Among couples for which wives gave "religious duty" as the most important reason, there is a very low percentage of "effective planners." However, among couples for which husbands gave this answer, the percentage of "effective planners" is only slightly below the corresponding percentage for all couples.

In interpreting these data, it is important to note that the importance attached to "reasons" for having the last child may not have been the same at various stages of growth of particular families. A "reason" considered as unimportant for the last child may have been important for an earlier birth. Conversely, a reason unimportant in an earlier birth may become important because of the nature of the earlier births (e.g. sex of child). Thus, parents who believe that it is a religious duty to have children may have felt that this duty was

<sup>20</sup> In Flanagan's study of the families of Air Corps officers 51 out of 427 officers and 53 of 320 wives reporting indicated that "religious obligation" was of "some," "much," or "great" importance as a reason for having children. Flanagan, *op cit.*, p. 28.

fulfilled prior to the last child. This might account partially for the relatively high percentage of wives who were in the "excess fertility" group among those who answered "little" or "very little" to the question on importance of religious duty as the reason for the last child. (See Table 1.)

A rough index of religious interest for the couple was constructed by adding the codes for five of the religious interest items for husbands and wives. These items were: religious interest as a child, religious interest since marriage, church attendance as a child, "useful activities" as a reason for importance of religion, and "fellowship with God" as a reason for importance of religion.<sup>21</sup> Since the individual codes ranged

Table 6. The relation of fertility-planning status and births per 100 "relatively fecund" couples to religious interest index.

RELIGIOUS INTEREST INDEX	PER CENT DISTRIBUTION BY PLANNING STATUS <sup>a</sup>				
	Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
ALL COUPLES	100	27.9	14.2	31.4	26.5
Below 40	100	28.1	21.9	31.2	18.8
40-49	100	51.1	10.5	10.5	27.9
50-59	100	24.7	13.7	33.1	28.4
60-69	100	28.7	12.2	32.9	26.2
70-79	100	22.9	17.6	33.2	26.3
80 and Over	100	31.8	14.5	30.0	23.6
	BIRTHS PER 100 COUPLES <sup>a</sup>				
ALL COUPLES	203	106	228	199	296
Below 40	188	b	b	b	b
40-69	194	97	208	189	297
70 and Over	222	132	255	221	290

<sup>a</sup> See Appendix 2, Table 21 for numerical distributions.

<sup>b</sup> Rates not computed for less than 20 cases.

<sup>21</sup> Of the original fourteen religious interest items, four were excluded because they refer most directly to couples with children and many childless couples did not answer them. Of the six items referring to reasons for religious interest, only two were selected for the index, since it is desirable not to overweight the index with this one type of item. The two "reasons" included are at opposite extremes on the sacred-secular continuum. In addition to the index reported here, separate indices

(Continued on page 315)

from 1 to 9 on these items, the possible range of the resulting Religious Interest Index for each couple was 10 to 90.

The relationship of this Index to extent of planning fertility is shown in Table 6.<sup>22</sup> The group with the lowest Religious Interest Index has a higher percentage of "effective planners" and a lower percentage of "excess fertility" families than the group with the highest Religious Interest Index. However, the relationship is not consistent for intermediate categories. Moreover, when percentage of families "number and spacing planned" is considered, the pattern is even less consistent.

Another type of evidence was obtained by selecting two groups of couples on the basis of answers to two or three of the religious interest items. An extreme group of "very low religious interest" consists of those who answered "little" or "very little" to both of the following questions:

How much have you been interested in religion since marriage?  
How much were you interested in religion when you were 10-15 years old?

An extreme group of "very high religious interest" consists of those with "very much interest in religion since marriage," attributing very much importance to "preparation for eternal life" as the basis for their interest in religion, and belonging to one of the extreme fundamentalist or evangelistic religious denominations. Since the number of husbands whose responses placed them in this category was small, the comparison was based on responses of wives only. Table 7 shows that the results of the comparison between the "low" and "high" groups are very clearly consistent with the hypothesis. Fifty-six per cent of the "very low religious interest" group were "effective planners" as compared with 32 per cent of the "very high religious interest group."

were constructed for husbands and wives based on the same five items used for the index for the couple. The separate indices for the husband and wife were combined by cross-classification to provide another type of index for the couple. None of these indices were related to fertility planning and fertility more consistently than the index reported in the body of the paper.

<sup>22</sup> The chi square value for this table shows a relationship not significant at the .05 level.

MULTIPLE RELIGIOUS INTEREST CLASSIFICATION	NUMBER OF COUPLES	PER CENT DISTRIBUTION BY PLANNING STATUS				
		Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fer- tility
Very Little Religious Interest	64	100	39.1	17.2	20.3	23.4
Very High Religious Interest	41	100	17.1	14.6	34.1	34.2

Table 7. Relation of fertility-planning status of "relatively fecund" couples to multiple religious interest classification of wife.

The small gross relationships found for the sample as a whole are largely a function of socio-economic status. A detailed analysis of the relationship *within* socio-economic groups does not indicate a consistent pattern for most of the items. Religious denomination is the only individual item for which an analysis within socio-economic categories shows some consistency of relationship to planning status.

For the purpose of this analysis, the Index of Socio-Economic-Status, developed by Kiser and Whelpton,<sup>23</sup> was used. This index is a simple summation of the ratings of each couple on a 8, 9, or 10 point code for each of the following eight items: husband's average annual earnings since marriage, net worth, shelter rent at interview, husband's longest occupational class since marriage, purchase price of car, education of husband, education of wife, and rating of the household on Chapin's Social Status Scale. A low score on the index indicates a high socio-economic status and *vice versa*. With the code numbers used a couple could receive any score from 1 to 72. The actual range of variation extended from 1 to 69. Kiser and Whelpton found that five groupings of the sample based on the Index of Socio-Economic Status serve to differentiate the couples with respect to planning status and fertility very well as compared with any of the conventional individual items.

Let us consider first the fourteen religious items in Tables 1-3. The relationship between each of these religious interest

<sup>23</sup> *Op. Cit.*, pp. 214, 216. (Reprint pp. 385, 387).

indices and planning status was found separately for each of five socio-economic status subgroups. Table 23, Appendix 5 contains a sample set of data for the relationship between one of these indices and planning status, subclassified into the five socio-economic status groups. Similar tabulations were made for each item, separately for husband and wife. These tabulations yielded seventy sets of data (considering the relationship separately for each of the fourteen items for each socio-economic status) for which the relationship could be examined. A study of these tables did not indicate any regular pattern. As a minimum test of the hypothesis, the "extreme" categories of the religious interest items were compared with respect to the percentage of couples in each group who were "effective planners."<sup>24</sup> In such comparisons, it was found that categories reflecting a "low" degree of religious interest have a higher percentage of "effective planners" than categories reflecting a "high" degree of religious interest, as follows:

in thirty-eight out of seventy comparisons based on responses of wives to religious interest items.

in twenty-seven out of seventy comparisons based on responses of husbands to religious interest items.

As between the five socio-economic status groups, the middle group (30-39) has the highest number of comparisons consistent with the hypothesis, for both husbands and wives: twelve of the fourteen comparisons based on the responses of the wives and nine of the fourteen comparisons based on the responses of the husbands. Thus, the only set of relationships fairly consistent with the hypothesis, even at a minimum involving extremes, is that for planning status and the religious interest of the middle socio-economic status group of wives. This group is probably fairly close to being of a middle class

<sup>24</sup> In these comparisons within socio-economic status groups, response categories were combined for most items into three or four categories, to increase the size of the base for percentages. The combinations used are consistent for socio-economic status groups within each item. Percentages were not computed for a base of less than twenty cases. Comparisons were made between the extreme response categories having at least twenty couples in each.



character, even though some of the lower class couples were excluded from the study by the definition of the sample.

For only one individual item (churches are the center of useful activities) for wives is the comparison consistent with the hypothesis in each of the five socio-economic status groups at the minimum level considered.

The religious interest items appear to be more closely related to socio-economic status than to planning status. Contingency coefficients were computed<sup>25</sup> for the relationship between the Index of Socio-Economic Status and each of fourteen religious interest items, separately for responses of husbands and wives. The resulting twenty-eight contingency coefficients were small. However, of the twenty-eight, twenty-three were higher than the comparable contingency coefficients for the relationship between the religious interest item and planning status. Further, planning status is more closely related to socio-economic status than to any of the specific religious interest variables. The relationship between socio-economic status and planning status is shown in Table 8.

Within the socio-economic status groups the high category

Table 8. The relation of fertility-planning status of "relatively fecund" couples to the index of socio-economic status.<sup>a</sup>

INDEX OF SOCIO-ECONOMIC STATUS	NUMBER OF COUPLES	PER CENT DISTRIBUTION BY PLANNING STATUS				
		Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
ALL COUPLES	1,444	100	27.9	14.2	31.4	26.5
0-19	224	100	48.7	14.7	24.6	12.1
20-29	243	100	39.1	18.5	30.9	11.5
30-39	323	100	25.4	13.0	38.1	23.5
40-49	403	100	21.8	11.2	32.5	34.5
50 and over	251	100	11.6	15.9	27.9	44.6

<sup>a</sup> Adapted from Kiser and Whelpton. *Op. cit.* p. 220 (Reprint p. 392).

<sup>25</sup> Each of the fourteen religious interest items was correlated separately with socio-economic status and with planning status. The computations for each of these pairs of contingency coefficients were based on classifications of the data into comparable table forms. Comparisons between religious interest items are not exactly comparable on this basis. The contingency coefficients varied from .08 to .26 for the relationship of religious interest items to socio-economic status and from .07 to .16 for the relationship of religious interest items to planning status.

Table 9. The relation of religious denomination of wives and husbands to the index of socio-economic status.

RELIGIOUS DENOMINATION	PER CENT DISTRIBUTION BY INDEX OF SOCIO-ECONOMIC STATUS					
	Total	0-19	20-29	30-39	40-49	50 & Over
ALL COUPLES	100	15.5	16.8	22.4	27.9	17.4
<i>Denomination of Wife:</i>						
Congregational, Episcopal, Unitarian, Friends, Universalist <sup>a</sup>	100	61.9	14.4	9.5	7.1	7.1
Christian Science	100	24.5	14.3	26.5	34.7	...
Presbyterian	100	38.4	29.4	12.3	14.4	5.5
Lutheran	100	17.9	23.1	23.1	26.9	9.0
Christian	100	7.9	14.9	26.4	31.4	19.4
Methodist	100	13.7	13.6	26.2	31.9	14.6
Evangelical, Evangelical- Reformed, Evangelical- Zion <sup>a</sup>	100	...	13.3	23.4	23.3	40.0
Baptist	100	7.5	30.2	34.0	18.9	9.4
United Brethren	100	5.4	10.8	24.7	33.8	25.3
Church of Christ, Church of God, Church of 1st Born, Nazarene, Pentecostal <sup>a</sup>	100	3.4	1.7	11.9	38.9	44.1
Miscellaneous <sup>a</sup>	100	5.4	18.9	27.0	27.0	21.6
Unknown, but Protestant	100	18.6	19.8	11.6	24.4	25.6
None <sup>b</sup>	100	16.4	25.4	16.4	20.9	20.9
<i>Denomination of Husband:</i>						
Congregational, Episcopal, Unitarian, Friends, Universalist <sup>a</sup>	100	35.7	26.2	11.9	16.7	9.5
Christian Science	100	22.5	17.5	35.0	25.0	...
Presbyterian	100	35.7	25.0	15.7	17.8	5.7
Lutheran	100	13.0	23.2	26.1	27.5	10.1
Christian	100	10.6	15.1	26.5	31.4	16.3
Methodist	100	16.8	13.7	27.1	26.0	16.5
Evangelical, Evangelical- Reformed, Evangelical- Zion <sup>a</sup>	100	8.0	32.0	24.0	26.0	10.0
Baptist	100	5.9	11.2	23.7	36.2	23.0
United Brethren	100	...	20.8	29.2	20.8	29.2
Church of Christ, Church of God, Church of 1st Born, Nazarene, Pentecostal <sup>a</sup>	100	...	2.4	2.4	48.8	46.3
Miscellaneous <sup>a</sup>	100	18.2	20.4	22.7	27.3	11.4
Unknown, but Protestant	100	13.7	20.6	12.7	21.6	31.4
None <sup>b</sup>	100	14.6	13.9	16.8	32.8	21.9

<sup>a</sup> See footnote 16 for explanation of these groupings and categories.

<sup>b</sup> Protestants without specific denominational preference.

on the Religious Interest Index, previously described, has a higher percentage of "effective planners" than the low category in four out of five cases.<sup>26</sup> However, for none of these four socio-economic status groups considered separately is the relationship statistically significant (as measured by chi square). The intermediate Religious Interest Index categories do not have an intermediate position on percentage of "effective planners" with any consistency.

It is not possible to study the relationship between religious denomination and planning status separately for each of the 5 socio-economic status groups, since the numbers involved in individual denominations are relatively small. Yet, the importance of considering the effect of socio-economic status on this relationship may be seen in Table 9, which shows a marked variation in the distribution by socio-economic status for the various denominations.

One approach to the problem was made by considering the two denominations having the largest numbers in the sample: the Methodist and the Christian. For each of these groups separately it is possible to consider the relationship between socio-economic status and planning status. If common denominational affiliation makes for homogeneity in planning status, then the relationship between socio-economic status and planning status should be small within each of these religious groups—at least, it should be less marked than for the sample as a whole. This does not appear to be the case. Table 10 shows that there is a marked relationship of planning status and socio-economic status for each of these two denominations. The contingency coefficients for the relationships are .41 and .38, for Methodist husbands and wives respectively. The contingency coefficients for the Christians are .34 for both husbands and wives. These are larger than the corresponding coefficient of .32 for the whole sample.<sup>27</sup>

<sup>26</sup> The direction of the difference is reversed in the 20-29 socio-economic status group.

<sup>27</sup> These contingency coefficients were computed for 4 by 4 tables with the 0-19 and 20-29 socio-economic status categories combined.

Table 10. The relation of fertility-planning status to the index of socio-economic status, for Methodists and Christians: wives and husbands.

SOCIO-ECONOMIC STATUS AND RELIGIOUS DENOMINATION	TOTAL NUMBER	PER CENT DISTRIBUTION BY PLANNING STATUS				
		Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
ALL COUPLES	1,444	100	27.9	14.2	31.4	26.5
<i>Couples with Methodist Wife Socio-Economic Status</i>						
Total	389	100	21.3	9.5	40.9	28.3
0-19	53	100	49.1	5.7	35.8	9.4
20-29	53	100	24.5	22.6	37.7	15.1
30-39	102	100	13.7	3.9	54.9	27.4
40-49	124	100	19.4	7.2	38.7	34.7
50 and Over	57	100	10.5	15.8	28.1	45.6
<i>Couples with Christian Wife Socio-Economic Status</i>						
Total	242	100	24.8	19.4	33.5	22.3
0-19	19	a	...	...	...	...
20-29	36	100	36.1	36.1	27.8	...
30-39	64	100	32.8	23.4	31.2	12.5
40-49	76	100	17.1	13.2	39.5	30.3
50 and Over	47	100	10.6	14.9	36.2	38.3
<i>Couples with Methodist Husband Socio-Economic Status</i>						
Total	358	100	24.3	12.0	37.4	26.3
0-19	60	100	53.3	8.3	25.0	13.3
20-29	49	100	26.5	24.5	34.7	14.3
30-39	97	100	14.4	6.2	57.7	21.6
40-49	93	100	21.5	11.8	33.3	33.3
50 and Over	59	100	13.6	15.2	25.4	45.8
<i>Couples with Christian Husband Socio-Economic Status</i>						
Total	245	100	21.6	19.6	35.9	22.9
0-19	26	100	34.6	15.4	23.1	26.9
20-29	37	100	32.4	37.8	24.3	5.4
30-39	65	100	29.2	21.5	33.8	15.4
40-49	77	100	11.7	12.9	40.2	35.1
50 and Over	40	100	10.0	15.0	50.0	25.0

a Percentages not computed for total less than 20.

Another approach to the problem was made for the sample as a whole, by classifying the religious denominations as "Low," "Middle," and "High" planners on the basis of the percentage of "effective planners" in each group.<sup>28</sup> The persons classified as "none" or "unknown" on religious denomination were combined into a separate fourth group. The four groups were large enough to permit subclassification by the five socio-economic status groups. The objective was to determine whether the religious groups having a relatively low percentage of "effective planners" for the sample as a whole have also a relatively low percentage of effective planners within each of the five socio-economic status groups. Although there is much erratic fluctuation, involving the "middle" and "none or unknown groups," it is true that the "high" planning group has a higher percentage of "effective planners" than the "low" planning group in each of the five socio-economic status groups, regardless of whether the classification is made on the basis of the religious affiliation of the wife or of the husband. This fact may indicate that if there were larger samples for each of the denominations, it might be found that the relationship between denomination and planning status is not wholly a function of socio-economic status. However, the results of this analysis are inconclusive. They are not consistent with the previous findings for the two largest denominations.

We have already seen that the relationship between the indices of religious activity of the children and the planning status of the parents is positive—a deviation from the hypothesis and from the other relationships for the sample as a whole. In general, the data show a small *positive* relationship between socio-economic status and the religious activity of the children. This explains the anomaly in part, since only these items on religious activity of children show a positive relationship to socio-economic status. The positive relationship between planning status and religious activity of children is not consistent within socio-economic categories. The religious activity of the

<sup>28</sup> See Appendix 6 for the denominations in each classification.

children may have a status-giving rather than a *religious* function for the parents, since it is inconsistent with any direct measures of the religious interest and activities of the parents.

#### THE RELATIONSHIP BETWEEN RELIGIOUS INTEREST AND FERTILITY

The second part of the hypothesis is: "the greater the interest in religion the larger the planned families." This part of the hypothesis may be valid, even if the effectiveness of fertility planning is not related to religious interest. For religious persons who plan, it may be that religious interest helps to determine the goal of family size to which the planning is directed. While the use of rational means may not be related to religious interest, it is quite possible that the ends of planning may be.

Tables 11-14 show the fertility rates by various measures of religious interest and participation. (Religious denomination and the Religious Interest Index will be treated separately.) The rates represent number of live births per 100 couples and have been computed separately for the sample as a whole and for each of the four planning status groups. There are separate sets of rates based on responses of husbands and wives.

The pattern of fertility rates tends to be consistent with the hypothesis, if the extreme religious interest categories are used for comparison. The relationship is not close enough to provide a systematic increase in fertility rates in the progression from the lowest to the highest religious interest categories in each case. However, for the sample as a whole, the "highest" religious interest category has a higher fertility rate than the "lowest" religious interest category for thirteen out of fourteen items on the basis of responses of wives and eleven out of fourteen items on the basis of responses of husbands.

Since there are fourteen items and four planning status categories, there are fifty-six possible comparisons of fertility rates for "highest" and "lowest" religious interest categories. On the basis of the responses of the wives forty-six of the fifty-six

Table 11. Births per 100 couples by fertility-planning status and by statements of wives and husbands indicating degree of religious interest.

DEGREE OF RELIGIOUS INTEREST <sup>b</sup>	BIRTHS PER 100 COUPLES BY PLANNING STATUS <sup>a</sup>									
	For Statements By Wives					For Statements By Husbands				
	Total	No. and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total	No. and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
ALL COUPLES	203	106	228	199	296	203	106	228	199	296
<i>Extent Last Child Encouraged</i>										
By Religious Duty										
Very Little or Little	211	130	224	195	292	211	142	216	200	280
Some	217	141	232	215	275	216	124	261	187	315
Much or Very Much	242	150	262	212	349	238	113	°	221	338
<i>Interest in Religion:</i>										
Since Marriage										
Very Little or Little	188	84	170	192	325	193	97	215	182	277
Some	204	103	231	202	286	196	92	223	200	296
Much	208	115	237	199	294	216	153	242	213	303
Very Much	211	135	254	201	286	251	134	275	227	360
As a Child										
Very Little or Little	192	98	190	218	281	201	102	216	192	307
Some	193	113	234	186	284	205	107	228	203	294
Much	198	99	217	184	296	196	104	248	188	290
Very Much	226	108	248	228	314	214	120	220	230	289
<i>Church Attendance As a Child</i>										
Very Seldom or Seldom	200	°	•	°	°	217	94	°	200	325
Sometimes	206	100	°	200	300	201	94	219	185	298
Often	193	99	236	189	271	204	107	253	199	280
Regular	206	110	231	199	308	200	111	216	204	300
<i>Are Week-Day Activities All Right on Sunday Too?</i>										
Definitely or Probably No	191	90	210	193	297	192	104	216	189	276
Doubtful	224	132	279	205	300	211	108	228	204	299
Probably or Definitely Yes	211	122	230	207	292	222	112	252	217	337

<sup>a</sup> For number of couples on which rates are based see Appendix 2, Table 17.  
<sup>b</sup> See Appendix 8 for specific questions to which statements are replies.  
<sup>c</sup> Rates not computed for less than 20 couples.

Table 12. Births per 100 couples by fertility-planning status and by statements of wives and husbands about reasons for religious interest.

ANSWERS TO QUESTION: HOW IMPORTANT IS EACH OF THESE BELIEFS IN ACCOUNTING FOR YOUR INTEREST IN RELIGION OR CHURCH ACTIVITIES?	BIRTHS PER 100 COUPLES BY PLANNING STATUS <sup>a</sup>									
	For Statements by Wives					For Statements by Husbands				
	Total	No. and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total	No. and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
<b>ALL COUPLES:</b>	203	106	228	199	296	203	106	288	199	296
<i>Churches Provide Social Life</i>										
No Importance	183	125	b	200	249	199	117	b	178	306
Little Importance	196	88	216	200	300	198	89	219	197	277
Some Importance	195	106	224	190	281	186	90	219	191	262
Much Importance	231	100	225	212	341	223	138	247	214	343
Great Importance	213	109	263	205	300	231	109	248	222	338
<i>Churches are Centers of Useful Activity</i>										
No Importance	176	104	b	b	b	226	140	b	b	329
Little Importance	194	108	245	184	317	185	71	b	195	261
Some Importance	198	95	218	211	298	192	99	228	189	264
Much Importance	207	117	211	193	297	204	124	214	209	292
Great Importance	213	116	260	200	294	225	102	253	211	361
<i>Religion Helps One Lead a Better Life</i>										
No Importance	159	b	b	b	b	179	b	b	b	b
Little Importance	145	b	b	b	b	170	67	b	146	256
Some Importance	171	79	203	166	282	197	96	232	184	279
Much Importance	202	102	219	199	290	191	119	221	190	261
Great Importance	216	120	239	208	306	222	109	240	221	337
<i>Religion Brings Fellowship with God</i>										
No Importance	163	b	b	b	b	203	b	b	b	b
Little Importance	156	b	b	b	b	166	116	b	b	b
Some Importance	177	110	196	174	276	190	68	232	188	269
Much Importance	197	93	212	208	292	194	125	221	191	262
Great Importance	215	111	240	205	300	218	109	229	213	330
<i>Religion Prepares for Eternal Life</i>										
No Importance	146	b	b	b	b	180	96	b	170	307
Little Importance	175	b	b	b	b	178	103	b	168	262
Some Importance	178	92	217	171	281	196	116	224	188	271
Much Importance	197	99	228	203	294	191	121	240	191	251
Great Importance	216	112	237	208	303	218	100	234	217	323
<i>Religion Helps Build a Better World</i>										
No Importance	b	b	b	b	b	181	b	b	b	b
Little Importance	b	b	b	b	b	192	b	b	b	b
Some Importance	163	112	b	148	260	193	90	222	179	277
Much Importance	201	84	b	197	320	185	105	225	200	238
Great Importance	207	111	234	204	293	212	110	231	205	320

<sup>a</sup> For number of couples on which rates are based see Appendix 2, Table 18.  
<sup>b</sup> Rates not computed for less than 20 couples.



comparisons yield results consistent with the hypothesis. On the basis of the responses of the husbands, forty-two out of fifty-six comparisons are consistent.

The fertility rates for groupings based on the Religious Interest Index are shown in Table 6. For the sample as a whole,

Table 13. Births per 100 couples by fertility-planning status and by statements of wives and husbands about religious experience of their children.

AMOUNT OF RELIGIOUS EXPERIENCE OF CHILDREN	BIRTHS PER 100 COUPLES BY PLANNING STATUS <sup>a</sup>				
	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility
ALL COUPLES WITH CHILDREN :	224	155	233	201	296
<i>Wives</i>					
<i>Frequency Children Have:</i>					
<i>Attended Church or</i>					
<i>Sunday School?</i>					
Seldom	174	b	b	149	224
Fairly often	223	142	223	202	306
Regularly	232	169	244	210	301
<i>Said Prayers at Bed-Time?</i>					
Seldom	250	142	222	204	343
Fairly often	223	156	237	200	296
Regularly	212	159	235	201	262
<i>Heard Grace at Meals?</i>					
Seldom	214	146	215	197	283
Fairly often	240	165	232	204	321
Regularly	230	167	268	206	299
<i>Husbands</i>					
<i>Frequency Children Have:</i>					
<i>Attended Church or</i>					
<i>Sunday School?</i>					
Seldom	198	142	222	180	246
Fairly often	218	141	211	194	290
Regularly	235	168	252	212	319
<i>Said Prayers at Bed-Time?</i>					
Seldom	233	151	228	203	316
Fairly often	232	169	236	205	294
Regularly	205	148	235	194	271
<i>Heard Grace at Meals?</i>					
Seldom	219	152	216	202	287
Fairly often	228	148	244	202	307
Regularly	232	170	264	198	314

<sup>a</sup> For numbers of couples on which rates are based, see Appendix 2, Table 19.

<sup>b</sup> Rates not computed for less than 20 couples.

the fertility rate increases regularly from the lowest through the middle to the highest Religious Interest Index group. For each of the four planning status categories rates were computed for 2 groupings based on the Religious Interest Index. For each planning status category, except "excess fertility," the fertility rate is highest for the highest religious interest category.

Fertility rate comparisons may also be made for the two extreme religious interest groups, previously described, constructed by cross-classifying answers to two or three questions. On the basis of the response of wives, sixty-four couples in the

Table 14. Births per 100 couples by reason rated as "most important for having last child."

REASON RATED AS MOST IMPORTANT	BASED ON RATINGS BY WIFE		BASED ON RATINGS BY HUSBAND	
	Number of Couples	Births Per 100 Couples	Number of Couples	Births Per 100 Couples
ALL COUPLES <sup>a</sup>	1,354	216	1,357	216
A Strong Liking for Children	667	201	593	206
A Belief that it is a Religious Duty to Have a Family	30	247	47	247
The Traditional Belief that Married Couples Ought to Have Children	123	260	124	246
A Feeling that it is Important to Carry on the Family Name	8	b	29	210
A Desire to See What Own Children Would be Like	68	150	47	140
A Feeling that Children Bring Husband and Wife Closer Together	147	228	244	207
Not Wanting an Only Child	167	203	131	215
Not to be Left Childless in Case of Death of Only Child	14	b	5	b
The Desire of Children for More Brothers and Sisters	32	269	21	262
Wanting a Girl if Only Had Boys, or a Boy if Only Had Girls	71	282	75	273
Unknown	27	278	41	236

<sup>a</sup> Includes all couples who had a live birth and all childless couples with wife pregnant at time or respondent indicating intention to have a child in future. Forty-eight childless couples are included on basis of response of wife and 45 on basis of response of husband.

<sup>b</sup> Rates not computed for less than 20 couples.

“low” religious interest group have a fertility rate of 184. At the other extreme, the fertility rate is 250 for the forty-two couples in the “high” religious interest category on the basis of the wives’ responses.

Among those couples having “some” or “much” interest in religion, a comparison was made between those who attribute “little” and those who attribute “much” importance to “preparation for eternal life” as the basis for their religious interest. The following tabulation shows higher fertility rates for those attributing “much” importance to this reason:

Importance of “Preparation for Eternal Life” as a Reason for Interest in Religion:

<i>Reply of Wife</i>	<i>No. of Couples</i>	<i>Births per 100 Couples</i>
Little Importance	190	179
Much Importance	964	213
<i>Reply of Husband</i>		
Little Importance	220	187
Much Importance	731	214

Table 14 indicates that the couples for whom either husband or wife indicated “religious interest” as the most important reason for having the last child have a fertility rate considerably higher than the rate for the sample as a whole. This is true even if the comparison is made only with couples who had a child.

The hypothesis is concerned specifically with the size of *planned* families, because in the case of such families the relationship between religious interest and family size is not obscured by variations in the effectiveness of contraceptive practice. Although a certain amount of planning is found in each of the four planning status categories, the number of children is completely planned only in the categories “number and spacing planned” and “number planned.” The tendency toward a direct relationship between degree of religious interest

and size of family planned is found in both of these categories, if we compare only extreme categories of religious interest. However, this relationship is about the same within each of the two other planning status categories. The number of items for which the comparisons of extremes are consistent with the hypothesis is about the same for the four planning categories. Further, the size of the differences in such comparisons does not vary consistently with planning status.

The relationship of religious denomination and fertility is treated separately here, because it involves special problems. The fertility rates of the couples classified by religious denominations are shown in Table 4. In general, the denominational groups with low fertility rates are those already found to have a high percentage of "effective planners." There is a close inverse relationship between the ranking of the denominational groups on fertility rates and their ranking on percentage of "effective planners." For denominations of either wives or husbands, there are only two cases in which the rank position of the denomination on percentage of "effective planners" (ranked from high to low) is more than one rank from the position on fertility rates (ranked from low to high). The highest fertility rates are for the United Brethren and a group of "fundamentalist" sects. (This is true for denomination of either husband or wife.) These two groups have already been shown to have the lowest socio-economic status, and the lowest percentage of "effective planners." The three lowest fertility groups are the Christian Science, Presbyterian, and the "Evangelical" groups. The Presbyterian group has the highest percentage of "effective planners" and the highest socio-economic status. The "Evangelical" group has a very high percentage of "effective planners" and an intermediate position on socio-economic status. The Christian Science group is intermediate on both socio-economic status and percentage of "effective planners." The low fertility rate of the Christian Science group appears anomalous in terms of our hypothesis, since this group places an extreme emphasis on faith in its theology. However,

other elements of the religious background of this group make it difficult to classify. In any case its position on fertility may be a "chance" phenomenon, since the size of the sample is very small.

The remaining religious denominations in the middle of the range do not differ widely in their fertility rates.

The close relationship between the extent of planning fertility and the fertility rates of the denominations makes it desirable to control planning status in examining the relationship between fertility and religious denomination. The size of the sample made it possible to do this only for the four largest denominations. The results are shown in Table 15.

The most significant finding from this table is that the Presbyterian group, which has the lowest total fertility rates for the four denominations, has the highest fertility rates in the two effective planning categories. This is consistent with the Kiser-Whelpton finding that while socio-economic status and fertility are inversely related in the categories of least effective planning, they tend to be directly related in the most effective

Table 15. Births per 100 couples by fertility-planning status for four religious denominations of wives and husbands.

RELIGIOUS DENOMINATION	BIRTHS PER 100 COUPLES BY PLANNING STATUS <sup>a</sup>				
	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility
<i>Denomination of Wife</i>					
Presbyterian	171	134	242	182	245
Christian	201	105	236	194	289
Methodist	214	124	219	199	301
Baptist	201	97	203	174	280
<i>Denomination of Husband</i>					
Presbyterian	185	133	229	186	257
Christian	204	108	225	201	284
Methodist	204	113	221	193	298
Baptist	199	89	219	197	272

<sup>a</sup> For numerical distributions see Appendix 2, Table 20.

planning categories. The Presbyterians have a much higher concentration in the upper socio-economic status categories, while the three other denominations have a fairly similar intermediate socio-economic status distribution. Thus, among those couples who plan effectively, the religious denomination characterized by the highest socio-economic status has a relatively high fertility rate. These findings suggest that the comparison of fertility rates by denomination is not very useful for analysis, if it is not possible to take planning status (or socio-economic status) into account. Unfortunately, our sample for the denominations, other than the four largest, is too small to make this possible.

Theoretically, it should be possible for the effectively planned families with a great degree of religious interest to have fertility rates as high as or higher than those of the families in planning status categories in which planning is less com-

Table 16. Births per 100 couples, by importance to wife of "religion gives fellowship with God" as reason for religious interest, and by socio-economic status of the couples.

INDEX OF SOCIO-ECONOMIC STATUS	IMPORTANCE OF "RELIGION GIVES FELLOWSHIP WITH GOD" AS REASON FOR INTEREST IN RELIGION					
	All Wives	No Importance	Little Importance	Some Importance	Much Importance	Great Importance
	BIRTHS PER 100 COUPLES					
ALL COUPLES	203	163	156	177	197	214
0-19	171	a	a	167	142	187
20-29	156	"	a	128	153	173
30-39	182	"	a	166	192	184
40-49	198	a	a	164	202	206
50 and over	309	a	a	a	278	314
	NUMBER OF COUPLES					
ALL COUPLES	1,444	27	27	192	367	831
0-19	224	11	6	49	52	106
20-29	243	8	2	50	62	121
30-39	323	3	11	35	74	200
40-49	403	2	6	39	111	245
50 and over	251	3	2	19	68	159

a Rates not computed for less than 20 couples.

plete. The question is whether interest in religion leads some of the couples who completely plan family size to have as many children as the couples whose families are not completely planned. The data indicate that this is not the case. Among the "number and spacing planned" couples the highest fertility rate for any religious interest group (based on response of wife) is lower than the lowest fertility rate for any religious interest group in any other planning-status group for thirteen out of fourteen religious interest items, for the Religious Interest Index, and for religious denomination. On the basis of the responses of the husbands, this is true for every religious interest item and for religious denomination. Thus, while there is some tendency for religious interest to be positively associated with higher fertility among planned families, the relationship is not as strong as the negative relationship of fertility and planning status. Planned families tend to be small regardless of religious interest or denomination.

The number of cases in the total sample is too small to permit simultaneous cross-classification of socio-economic status and planning status by degrees of religious interest. However, one experimental tabulation was made to show the relationship of a religious interest variable (importance of "fellowship with God" as a reason for religious interest) and fertility within the five socio-economic status groups. The results based on the response of wives are shown in Table 16. These data indicate that the highest religious interest category in each socio-economic status group has a higher fertility rate than the lowest religious interest category.<sup>29</sup> Again, the position of the middle religious-interest category is erratic.

#### SUMMARY

This article is a report on an investigation of the hypothesis that "the greater the interest in religion, the lower the proportion of couples practicing contraception effectively and the larger the planned families."

<sup>29</sup> The results based on the response of husbands are essentially similar.

A slight negative relationship exists between the effective practice of contraception and degree of religious interest as determined in this study. However, this relationship is mainly a function of socio-economic status. It is not maintained with any consistency within categories based on an Index of Socio-Economic Status. Religious denomination is more closely related to effective planning than is any of the other indices of religious interest or activity which were utilized. In general the religious groups with a "liberal" theology or a background of emphasis on the "Protestant Ethic" tend to have high percentages of "effective planners." A large part, if not all, of the relationship between denomination and effective planning is a function of the distinctive socio-economic status of the different denominations.

There is a direct relationship between religious interest and fertility, if only the extreme categories of religious interest are compared. It is not evident in regular gradations of fertility in intermediate categories. However, the relationship for extreme religious interest categories does exist within each planning-status group. The relationship is not more pronounced for the effective-planning groups than for the others.

Fertility also varies with religious denomination. There is a close inverse relationship between the rank of a denomination on percentage of effective planners and its rank on fertility rate. The only notable exception is the Christian Science group, which had the lowest fertility rate but an intermediate position on fertility planning.

Four denominations have a sufficiently large number of couples to make it worthwhile to compute fertility rates separately for each fertility planning status. The most significant finding here is that the Presbyterian group, which has the lowest total fertility rate among the four denominations compared, has the highest fertility rate in the two effective-planning categories. This is consistent with a Kiser-Whelpton finding that the negative relationship between socio-economic status and fertility is reversed for effective planners. The Pres-



byterian group has a much higher socio-economic status than any of the three other groups.

The direct relationship between religious interest and fertility is found to persist in each of the five socio-economic status categories, for the one religious item for which this tabulation was made.

On the whole, the findings do not indicate that religious interest is of great importance in explaining variations in reproductive behavior. Neither planning status nor fertility vary in regular gradation with religious interest or participation. It is only when comparisons of extreme religious interest groups are made that the findings indicate a small relationship consistent with the hypothesis. Even the small inverse relationship between fertility planning and religious interest has been shown to be mainly a function of socio-economic status.

Although the findings are mainly negative, they are documented in considerable detail in this study, since the hypothesis is one which has had considerable support from reputable students of the problem, and the data are unique.

It is important to emphasize that the generality of the findings is limited by the nature of the sample—a group of urban native-white Protestants with at least a complete grammar school education. It may be that among Protestants more heterogeneous in religious and cultural background, religious interest and participation may have a more important effect on reproductive behavior. Further, these findings are not necessarily inconsistent with fertility differences found between Catholics and Protestants, since a different range of religious belief and organization and other cultural factors enter into these differences. These findings are not necessarily inconsistent, either, with the hypothesis that religion is a factor in the high fertility of pre-industrial societies (e.g., the Orient), for religion has a far different place in such societies than in an American Middle-Western city.

APPENDIX 1

Reasons for Interest in Religion

The contingency coefficients for the relationship between importance attached to different pairs of reasons for interest in religion are as follows:

<i>Reasons</i>	Contingency Coefficients Based On Responses of:	
	<i>Wives</i>	<i>Husbands</i>
Churches Provide Social Life Religion Prepares One for Eternal Life	.38	.39
Churches Provide Social Life Religion Brings Fellowship with God	.43	.40
Churches Are the Center of Useful Activities Religion Prepares One for Eternal Life	.39	.46
Churches Are the Center of Useful Activities Religion Brings Fellowship with God	.43	.49

The two coefficients for the relationship between “churches are the center of useful activity” and “religion brings fellowship with God” are for tables with 5 rows and 5 columns. The coefficient for wives for “churches provide social life” and “religion prepares one for eternal life” is for a 4 row by 4 column table. All other coefficients are for 4 row by 5 column tables.

Table 17. Number of couples by fertility-planning status and by statements of wives and husbands indicating degree of religious interest.

DEGREE OF RELIGIOUS INTEREST	NUMBER OF HUSBANDS BY FERTILITY PLANNING STATUS					NUMBER OF WIVES BY FERTILITY PLANNING STATUS				
	Total	No and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total	No and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
<b>ALL COUPLES*</b>	1,444	403	205	454	382	1,444	403	205	454	382
<i>Extent Last Child Encouraged by Religious Duty</i>										
Very Little	720	161	108	237	214	699	161	117	231	190
Little	243	72	29	76	66	206	50	29	64	63
Some	223	51	40	73	59	260	62	41	91	66
Much	64	14	11	20	19	90	18	9	41	22
Very Much	104	20	15	45	24	102	29			
<i>Interest in Religion:</i>										
<i>Since Marriage</i>										
Very Little	139	53	8	33	45	275	87	42	56	41
Little	148	50	25	38	35	218	43	31	86	90
Some	597	149	77	203	168	621	179	84	201	157
Much	281	68	43	99	71	192	62	24	67	39
Very Much	278	82	52	81	63	138	32	24	44	38
<i>As a Child</i>										
Very Little	58	18	12	14	14	159	44	28	40	47
Little	92	27	18	24	23	217	64	23	72	58
Some	525	154	64	186	121	558	155	69	177	157
Much	380	108	47	110	115	339	94	50	119	76
Very Much	389	96	64	120	109	171	46	35	46	44
<i>Church Attendance as a Child</i>										
Seldom or Very Seldom	41	10	9	14	8	122	31	17	38	36
Sometimes	120	27	17	44	32	219	49	36	74	60
Often	355	103	44	102	106	404	113	47	121	123
Regularly	923	263	135	289	236	699	210	105	221	163
<i>Are Week-Day Activities All Right on Sunday Too?</i>										
Definitely Yes	255	75	41	80	59	390	109	61	102	118
Probably Yes	481	140	64	154	123	394	116	56	132	90
Doubtful	264	62	34	94	74	279	65	29	106	79
Probably No	263	62	33	85	83	232	66	37	69	60
Definitely No	181	64	33	41	43	147	45	22	45	35

\* Includes "unknown" responses to religious items.

Table 18. Number of couples by fertility-planning status and by statements of wives and husbands about reasons for religious interest.

ANSWERS TO QUESTION: HOW IMPORTANT IS EACH OF THESE BELIEFS IN ACCOUNTING FOR YOUR INTEREST IN RELIGION OR CHURCH ACTIVITIES?	NUMBER OF WIVES BY FERTILITY PLANNING STATUS					NUMBER OF HUSBANDS BY FERTILITY PLANNING STATUS				
	Total	No. and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total	No. and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
ALL COUPLES <sup>a</sup>	1,444	403	205	454	382	1,444	403	205	454	382
<i>Churches Provide Social Life</i>										
No Importance	181	73	16	45	47	140	41	19	45	35
Little Importance	213	57	37	69	50	198	45	32	65	56
Some Importance	556	157	92	166	141	615	169	95	192	159
Much Importance	249	59	28	77	85	286	94	36	89	67
Great Importance	243	57	30	97	59	204	54	23	63	64
<i>Churches are Centers of Useful Activity</i>										
No Importance	63	24	10	12	17	78	20	17	17	24
Little Importance	121	40	20	38	23	127	34	14	43	36
Some Importance	495	154	83	133	125	564	146	80	186	152
Much Importance	418	100	47	149	122	379	110	56	128	85
Great Importance	337	83	43	118	93	296	93	38	80	85
<i>Religion Helps One Lead a Better Life</i>										
No Importance	22	8	4	8	2	52	18	12	13	9
Little Importance	38	18	7	8	5	92	27	9	22	34
Some Importance	217	75	29	56	57	293	77	50	80	86
Much Importance	374	100	43	122	109	410	113	43	155	99
Great Importance	793	202	122	260	209	595	166	91	184	154
<i>Religion Brings Fellowship with God</i>										
No Importance	27	14	2	9	2	38	14	7	8	9
Little Importance	27	5	13	8	1	68	32	1	17	18
Some Importance	192	69	26	55	42	280	68	47	82	83
Much Importance	367	109	33	124	101	385	107	42	140	96
Great Importance	831	206	131	258	236	671	182	108	205	176
<i>Religion Prepares for Eternal Life</i>										
No Importance	43	18	6	12	7	112	44	17	23	28
Little Importance	56	18	17	11	10	108	35	16	28	29
Some Importance	201	66	29	58	48	270	74	33	87	76
Much Importance	264	83	18	92	71	277	72	25	117	63
Great Importance	878	216	135	281	246	675	178	114	199	184
<i>Religion Helps Build a Better World</i>										
No Importance	10	4	2	4	..	31	13	3	6	9
Little Importance	11	2	2	1	6	39	9	4	13	13
Some Importance	110	40	18	27	25	188	49	27	52	60
Much Importance	216	68	15	68	65	280	82	36	93	69
Great Importance	1,095	289	166	354	286	906	250	135	290	231

<sup>a</sup> Includes "unknown" responses to religious interest items.

Table 19. Number of couples, by fertility-planning status and by statement of wives and husbands about religious experiences of children.

AMOUNT OF RELIGIOUS EXPERIENCE OF CHILDREN	FERTILITY PLANNING STATUS				
	Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
<b>ALL COUPLES WITH CHILDREN:*</b>	1,309	277	201	450	381
<i>Wives</i>					
<i>Frequency Children Have:</i>					
<i>Attended Church or Sunday School?</i>					
Seldom	105	17	13	41	34
Fairly Often	533	117	74	180	162
Regularly	670	143	114	229	184
<i>Said Prayers at Bed-Time?</i>					
Seldom	260	41	46	74	99
Fairly Often	537	112	73	202	150
Regularly	510	122	82	174	132
<i>Heard Grace at Meals?</i>					
Seldom	672	150	98	226	198
Fairly Often	322	49	53	117	103
Regularly	313	76	50	107	80
<i>Husbands</i>					
<i>Frequency Children Have:</i>					
<i>Attended Church or Sunday School?</i>					
Seldom	136	31	23	41	41
Fairly Often	572	103	75	205	189
Regularly	600	143	103	204	150
<i>Said Prayers at Bed-Time?</i>					
Seldom	451	83	71	155	142
Fairly Often	441	78	67	152	144
Regularly	416	116	63	143	94
<i>Heard Grace at Meals?</i>					
Seldom	738	160	113	241	224
Fairly Often	312	63	43	112	94
Regularly	258	54	45	97	62

\* Includes unknown responses of couples with children.

Table 20. Number of couples by fertility-planning status and by religious denomination of wives and husbands.

RELIGIOUS DENOMINATION	FERTILITY-PLANNING STATUS				
	Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
<b>ALL COUPLES</b>	<b>1,444</b>	<b>403</b>	<b>205</b>	<b>454</b>	<b>382</b>
<i>Denomination of Wife:</i>					
Congregational, Episcopal, Unitarian, Friends, Universalists	42	12	7	16	7
Christian Science	49	19	...	15	15
Presbyterian	146	56	24	44	22
Lutheran	78	27	10	24	17
Christian	242	60	47	81	54
Methodist	389	83	37	159	110
Evangelical, Evangelical-Reformed, Evangelical-Ziona	53	19	14	9	11
Baptist	166	37	30	38	61
United Brethren	30	6	...	13	11
Church of Christ, Church of God, Church of 1st Born, Nazarene, Pentecostals	59	7	9	18	25
Miscellaneous	37	12	8	9	8
Unknown, but Protestant	86	34	9	16	27
Noneb	67	31	10	12	14
<i>Denomination of Husband:</i>					
Congregational, Episcopal, Unitarian, Friends, Universalists	42	5	8	21	8
Christian Science	40	15	...	18	7
Presbyterian	140	54	28	37	21
Lutheran	69	27	8	20	14
Christian	245	53	48	88	56
Methodist	358	87	43	134	94
Evangelical, Evangelical-Reformed, Evangelical-Ziona	50	21	8	9	12
Baptist	152	38	26	38	50
United Brethren	24	...	2	12	10
Church of Christ, Church of God, Church of 1st Born, Nazarene, Pentecostals	41	7	5	12	17
Miscellaneous	44	14	9	10	11
Unknown, but Protestant	102	36	11	19	36
Noneb	137	46	9	36	46

a See footnote 16 for explanation of these groupings and categories.  
 b Protestants without specific denominational preference.

Table 21. Number of couples by fertility-planning status and by religious interest index.

RELIGIOUS INTEREST INDEX	FERTILITY PLANNING STATUS				
	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility
ALL COUPLES	1,444	403	205	454	382
Under 40	32	9	7	10	6
40-49	86	44	9	9	24
50-59	299	74	41	99	85
60-69	541	155	66	178	142
70-79	376	86	66	125	99
80 and Over	110	35	16	33	26

## APPENDIX 3

The statements in the stub of Table 1 are alternative replies to the following questions:

1. How much did each of these reasons encourage you and your wife (husband) to have your last (to want a) child?:

A belief that it is a religious duty to have a child? (other reasons also rated are listed in Table 5)

2. How much have you been interested in religion since marriage?

3. How much were you interested in religion when you were 10 to 15 years old?

4. How often did you attend church or Sunday School when you were 10 to 15 years old?

5. If it is all right to do something on weekdays, is it all right to do it on Sundays?

APPENDIX 4

Table 22. Level of significance of chi-square values for relationship between answers to religious-interest questions and the index of socio-economic status and fertility-planning status.

QUESTION	LEVEL OF SIGNIFICANCE OF CHI SQUARE FOR RELATIONSHIP TO			
	Index of Socio-Economic Status		Fertility-Planning Status	
	Wives	Husbands	Wives	Husbands
How Much Were You Encouraged to Have a Family by a Belief That it is a Religious Duty to Have a Family?	a	a	c	c
<i>How Much Have You Been Interested in Religion:</i>				
Since Marriage?	c	b	c	c
When You Were 10-15 Years Old?	c	c	c	c
How Often Did You Attend Church or Sunday School When You Were 10-15 Years Old?	c	a	c	c
If it is All Right to do Something on Weekdays is it All Right to do it on Sundays?	a	b	c	c
<i>How Important is Each of These Beliefs in Accounting For Your Interest in Religion or Church Activities?:</i>				
Churches Provide Social Life	a	c	b	e
Churches are the Center of Useful Activities	c	b	c	c
Religion Helps One Lead a Better Life Day by Day	c	c	c	c
Religion Brings a Fellowship with God	a	a	b	e
Religion Prepares One for Eternal Life	a	a	b	e
Religion Helps Build a Better World	c	c	c	c
<i>How Often Have Your Children (or How Often Will They Later, if Too Young Now):</i>				
Attended Church or Sunday School?	c	c	c	c
Said Prayers at Bedtime?	c	b	b	b
Heard Grace at Meals?	b	a	c	c
Religious Denomination	a	a	a	a

a Chi square significant at .01 level.  
 b Chi square significant at .05 level.  
 c Chi square not significant at .05 level.



Table 23. Relationship of fertility-planning status of "relatively fecund" couples to frequency of wife's church attendance as a child, by index of socio-economic status.

INDEX OF SOCIO-ECONOMIC STATUS BY FREQUENCY OF WIFE'S CHURCH ATTENDANCE	NUMBER OF COUPLES	PER CENT DISTRIBUTION BY PLANNING STATUS					Excess Fertility
		Total	Number and Spacing Planned	Number Planned	Quasi-Planned		
ALL COUPLES	1,444	100	27.9	14.2	31.4	26.5	
<i>0-19: Socio-Economic Status</i>							
Total	224	100	48.7	14.7	24.6	12.1	
Seldom and Sometimes	18 <sup>a</sup>	...	...	...	...	...	
Often	42	100	59.6	14.3	19.0	7.1	
Regularly	161	100	47.2	14.9	24.2	13.7	
<i>20-29: Socio-Economic Status</i>							
Total	243	100	39.1	18.5	30.9	11.5	
Seldom and Sometimes	27	100	22.2	11.1	48.2	18.5	
Often	65	100	47.7	10.8	29.2	12.3	
Regularly	151	100	38.4	23.2	28.5	9.9	
<i>30-39: Socio-Economic Status</i>							
Total	323	100	25.4	13.0	38.1	23.5	
Seldom and Sometimes	39	100	17.9	17.9	33.4	30.8	
Often	72	100	34.7	9.7	23.6	32.0	
Regularly	210	100	23.8	13.3	43.4	19.5	
<i>40-49: Socio-Economic Status</i>							
Total	403	100	21.8	11.2	32.5	34.5	
Seldom and Sometimes	43	100	32.6	11.6	30.2	25.6	
Often	110	100	18.2	12.7	30.9	38.2	
Regularly	250	100	21.6	10.4	33.6	34.4	
<i>50+: Socio-Economic Status</i>							
Total	251	100	11.6	15.9	27.9	44.6	
Seldom and Sometimes	34	100	5.9	23.5	41.2	29.4	
Often	66	100	3.0	15.2	36.4	45.4	
Regularly	151	100	16.6	14.6	21.2	47.7	

APPENDIX 6

The classification of denominations was made on the basis of the following ranges of values for percentage of effective planners:

- 37.0 per cent or less —“low planners”
- 37.1 per cent–47.0 per cent—“middle planners”
- 47.1 per cent or more —“high planners”

On the basis of the religious denomination of the wife, the classification of the groups is as follows:

Low planners: Methodist; United Brethren; Extreme Fundamentalist.

Middle planners: Christian Science; Christian; Baptist; Combined Congregational, Episcopal, Unitarian, Friends, Universalist.

High planners: Presbyterian, Lutheran, Moravian, Evangelical, Misc.

The classification on the basis of the denomination of the husband is exactly the same except that the combined group (Congregational, Episcopal, Unitarian, Friends, Universalist) is in the “low planners” group for husbands.