SOCIAL AND PSYCHOLOGICAL FACTORS AFFECTING FERTILITY

XIII. FERTILITY IN RELATION TO FERTILITY PLANNING AND HEALTH OF WIFE, HUSBAND, AND CHILDREN[1]

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ONE of the traditional arguments for family limitation in economically depressed areas is that excessive childbirth is detrimental to the health of mothers and children. The professed aim of planned parenthood groups is that of promoting maternal and child health and this same goal has led many health departments to incorporate contraceptive service into their maternal health activities. Developments of this type have been especially striking in Southern states of high fertility in recent years.

The above statements are concerned with the effect of excessive fertility on health. There is also the reverse problem of the effect of health on fertility. The medical aspects of this problem are rather obvious and are largely those of sterility and pathologies affecting fecundity. The present paper is not concerned with the medical or physiological aspects of the problem but rather with the bearing of health as a social or psychological factor affecting fertility planning and size of planned family. In fact, the analysis is restricted to "relatively fecund" couples. The "relatively sterile" couples are excluded from the analysis.

This paper is a report on two of the twenty-three hypotheses that were formulated for testing in the Study of Social and Psychological Factors Affecting Fertility.[2] The hypotheses were as follows:

The poorer the health of the husband and/or wife, the higher

[2] The general purpose, scope, and methods of the Study have been described in

the proportion of couples practicing contraception effectively, and the smaller the planned families.

The poorer the health of children, the higher the proportion of couples practicing contraception effectively, and the smaller the planned families.

It will be noted that the hypothesized health-fertility relation among planned families is opposite to that discussed in the first paragraph. When the hypotheses were formulated it was assumed that although excessive fertility may impair the health of mother and children, good health of wife, husband, and children are positive factors in the planning of additional children and hence are directly related to fertility among planned families.

The three types of measures needed for testing the hypotheses are those of fertility, fertility-planning status, and health. The chief measure of fertility used in this Study is number of live births per 100 couples. This is not standardized for age because the data are restricted to couples of similar (12–15 years) duration of marriage, with wife under 30 and husband under 40 at the time of marriage.

The classification of couples by fertility-planning status has been described in previous reports.[3] Briefly stated, it is based upon histories of contraceptive practice and attitudes toward each pregnancy and consists of the four broad groups: number

detail in previous articles. The Study was conducted in Indianapolis in 1941 and the data for the present analysis relate to an adjusted sample of 1,444 "relatively fecund" couples with the following characteristics: husband and wife native white, both Protestant, both finished at least the eighth grade, married during 1927–1929, neither previously married, husband under 40 and wife under 30 at marriage, and eight or more years spent in a city of 25,000 population or over since marriage. Couples with these characteristics were located by means of a preliminary Household Survey of virtually all white households in Indianapolis.

For purposes of the Study, all couples with four or more live births were classified as "relatively fecund" regardless of other circumstances. Couples with 0–3 live births were classified as "relatively fecund" unless they knew or had good reason for believing that conception was physiologically impossible during a period of at least 24 or 36 consecutive months since marriage (24 for never-pregnant couples, 36 for others). Failure to conceive when contraception was not practiced "always" or "usually" during periods of above durations was considered "good reason" for such belief. Couples not classified as "relatively fecund" were considered "relatively sterile."

[3] *See especially* Whelpton, P. K. and Kiser, Clyde V.: Social and Psychological Factors Affecting Fertility. VI. The Planning of Fertility. The Milbank Memorial Fund *Quarterly*, January, 1947, xxv, No. 1, pp. 63–111 (Reprint pp. 209–257).

and spacing planned, number planned, quasi-planned, and excess fertility.[4] Couples in the first two categories are regarded as "planned families" and as having "practiced contraception effectively."

With respect to health, it is acknowledged at the outset that the measures available from the Indianapolis Study are very inadequate. The Indianapolis Study did not presume to be a health survey and no effort was made to secure detailed data on type, duration, and severity of illnesses experienced by the people in the Study. The data that are available are described under each of the two hypotheses which will be separately considered.

HEALTH OF WIFE AND HUSBAND

The classifications by health of wife and husband are based mainly upon "multiple choice" replies to several pertinent questions. The form on which these questions appeared was filled out by the wife and husband separately, in the presence of the interviewer, usually at a prearranged evening appointment in the home of the couple. The questions and possible replies are as follows:

How well have you been most of the time since marriage? (Excellent health, very good, good, fair, poor.)
How much has the poor health or physical condition of your-

[4] The four categories may be briefly described as follows:

Number and Spacing of Pregnancies Planned. The 403 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.

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 one or more pregnancies had occurred after the last that was wanted.

Table 1. Percentage distribution of wives and husbands by self-appraisal of health, by fertility-planning and socio-economic status of the couple.

SELF-APPRAISAL OF HEALTH	TOTAL	FERTILITY-PLANNING STATUS				SOCIO-ECONOMIC STATUS		
		Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	High	Medium	Low
NUMBER OF COUPLES	1,444a	403	205	454	382a	224	566	654a
Wife								
Total	100.1	100.0	100.1	100.0	100.0	100.0	100.1	99.9
Poor	2.6	1.7	2.0	4.6	1.6	0.9	3.5	2.4
Fair	19.9	13.9	19.0	19.4	27.2	12.5	18.4	23.7
Good	23.1	22.6	22.0	23.8	23.3	20.5	22.3	24.6
Very Good	33.4	36.0	33.2	31.1	33.5	42.4	29.9	33.3
Excellent	21.1	25.8	23.9	21.1	14.4	23.7	26.0	15.9
Husband								
Total	100.0	100.1	100.0	99.9	100.0	99.9	100.1	100.0
Poor	1.2	2.5	0.0	0.2	1.6	2.2	0.4	1.5
Fair	10.2	5.7	10.2	11.2	13.7	2.2	8.3	14.6
Good	17.6	19.4	20.0	15.6	16.9	17.4	18.4	17.1
Very Good	35.6	34.5	32.2	36.1	38.0	29.0	35.2	38.2
Excellent	35.4	38.0	37.6	36.8	29.8	49.1	37.8	28.6

a Base for percentages smaller by three for husbands because of unknown health status.

self discouraged you and your husband [wife] from having [more] children?[5] (Discouraged very much, much, some, little, very little or not at all.)

How much has the poor health or physical condition of your husband [wife] discouraged you and your husband [wife] from having [more] children?[5] (Replies same as above.)

How much energy and pep do you ordinarily have? (Very little, little, somewhat less than average, about average, somewhat more than average, much, very much.)

How much energy and pep does your husband [wife] ordinarily have? (Replies same as above.)

The schedules also contained an "Interviewer's Rating Scale" in which the interviewer recorded her personal rating of the wife and husband on pep and energy in terms of the following: worn out—no reserves of energy, some pep and energy, average pep and energy, much pep and energy, unlimited pep and energy.

In addition, wives were asked:

How much risk to your health do you think you would run in having a [another] child?[6] How much risk to your health does your husband think you would run in having a [another] child?[6] (Much less than most women, somewhat less than most women, about average, somewhat more than most women, much more than most women, very much more than most women.)

Husbands were asked:

How much risk to her health do you think your wife would run in having a [another] child?[6] How much risk to her health does your wife think she would run in having a [another] child?[6] (Replies same as above.)

Distribution of the Replies. It will be noted in Table 1 that 54.5 per cent of the wives and 71 per cent of the husbands appraised their general health since marriage as "very good" or

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[5] In the questionnaire for childless couples the question relates to "children" instead of "more children."

[6] In the questionnaire for childless couples, the question relates to "a child" instead of "another" child.

Table 2. Distribution by risk to wife's health in having another child according to wife's opinion, husband's opinion, wife's rating of husband's opinion, and husband's rating of wife's opinion.[1]

RISK TO WIFE'S HEALTH IN HAVING ANOTHER CHILD	NUMBER				PER CENT			
	Wife's Opinion	Husband's Opinion	Wife's Rating of Husband's Opinion	Husband's Rating of Wife's Opinion	Wife's Opinion	Husband's Opinion	Wife's Rating of Husband's Opinion	Husband's Rating of Wife's Opinion
TOTAL	1,444	1,444	1,444	1,444	100.0	100.0	100.0	99.9
Very Much More Than Most Women	91	124	76	113	6.3	8.6	5.3	7.8
Much More Than Most Women	69	99	98	90	4.8	6.9	6.8	6.3
Somewhat More Than Most Women	254	298	296	219	17.6	20.6	20.5	15.2
About Average	884	753	838	808	61.2	52.1	58.2	56.1
Somewhat Less Than Most Women	49	117	65	110	3.4	8.1	4.5	7.6
Much Less Than Most Women	97	53	68	100	6.7	3.7	4.7	6.9
Unknown			3	4				

[1] For childless couples the data relate to health risk in having "a child" rather than "another child."

"excellent." Only about 3 per cent of the wives and 1 per cent of the husbands replied that their health had been "poor."[7] For this reason the "poor" and "fair" categories are consolidated in the analyses and these together constitute only about 23 per cent of the wives' replies and 11 per cent of the husbands'.

Possibly because "pep and energy" may be interpreted as a "health plus" quality, the replies on this item are less skewed toward the high ratings than are those on general health. The distributions are given in detail in Appendix I. Only 9 per cent of the wives rated themselves as having "very much" pep and energy, 10 per cent as "much," 15 per cent as "somewhat more than average," 52 per cent as "about average," 9 per cent as "somewhat less than average," and 5 per cent as "very little or little" pep and energy. Below, the percentage distributions are shown for wife and husband in terms of three broad categories and based upon ratings by self, spouse and interviewer.[8]

Several points may be noted from the broad classification: (a) the ratings on pep and energy of the husband tend to be

[7] The characteristics of couples in the Study, described in footnote 2, probably help to account for the low proportion of wives and husbands rating their health as "poor." By virtue of the joint restrictions on year of marriage and age at marriage, all wives in the Study were under 45 years of age at interview and all husbands were under 55. The median ages at interview were 34.0 for wives and 36.5 for husbands in the Study sample of 1,444 relatively fecund couples. Another restriction of importance was that wives and husbands were to have at least a complete elementary school education.

[8]

RATING BY	BELOW AVERAGE	ABOUT AVERAGE	ABOVE AVERAGE
	Pep and Energy of Wife Per Cent		
Self	14	52	34
Spouse	12	51	37
Interviewer	25	41	34
	Pep and Energy of Husband Per Cent		
Self	7	51	42
Spouse	8	53	39
Interviewer	10	46	45

a little higher than those of the wife in the ratings by self, spouse, and interviewer; (b) the self-ratings and the ratings by spouse are distributed in much the same manner; and (c) the ratings by the interviewer differ from the others mainly with respect to higher proportion of wives rated as below average in pep and energy.[9]

Distributions by four types of ratings on risk to wife's health in having another child ("a child" if childless) are presented in Table 2. These are the wife's own opinion, husband's own opinion, wife's statement of husband's opinion, and husband's statement of wife's opinion. It will be noted that these four distributions do not differ greatly. In all of them, from 52 to 61 per cent of the ratings are "about average." The higher figure represents the wife's own opinion. Only about 11 per cent of the wives rated their health risk as being "very much" or "much" more than that confronted by most women, but an additional 18 per cent checked the category "somewhat more than most women." Only about 10 per cent rated their health risk as below that of most women.

Table 3. Percentage distribution of wives in planned families by self-rating on risk to own health in having another child, by self-appraisal on general health since marriage.[1]

RISK TO WIFE'S HEALTH IN HAVING ANOTHER CHILD	WIFE'S HEALTH SINCE MARRIAGE				
	Total	Poor or Fair	Good	Very Good	Excel-lent
Number of Couples	608	106	136	213	153
TOTAL	100.0	100.0	100.0	100.1	99.9
Very Much More Than Most Women	5.1	6.6	6.6	5.2	2.6
Much More Than Most Women	4.6	7.5	5.9	3.8	2.6
Somewhat More Than Most Women	21.1	43.4	22.1	15.5	12.4
About Average	61.2	42.5	62.5	66.2	66.0
Somewhat Less Than Most Women	2.1	0.0	0.0	3.3	3.9
Much Less Than Most Women	5.9	0.0	2.9	6.1	12.4

[1] For childless couples the data relate to health risk in having "a child" rather than "another child."

[9] To some extent this may be due to differences in number and labeling of detailed ratings (*see* Appendix i).

As expected, the appraisals on health risk incurred in having another child are related to actual health status. Table 3 presents data on this relationship for the wives in "planned families." The total proportion of wives appraising their health risk as above average is about 58 per cent for the wives rating their general health as "poor" or "fair," 35 per cent for those of "good health," 25 per cent for those of "very good" health, and 18 per cent for those of "excellent health." Conversely, the proportion appraising their health risk as below average ranges from none at all for those of "poor or fair" health to 16 per cent for those rating their health as "excellent."[10]

Relation of Health to Fertility-Planning Status. The pro-

[10] The Pearsonian coefficients of correlation give some indication of the extent to which various items considered in this analysis are related. They are shown below for selected pairs of items. Several cross-classifications are also given in detail in the tables.

Items Correlated	Coefficient of Correlation
Wife's General Health (Self-Appraisal) and	
Wife's pep and energy (rating by self)	+ .31
" " " " (rating by spouse)	+ .21
" " " " (rating by interviewer)	+ .38
Risk to wife's health by another child (wife)	− .34
" " " " " " " (husband)	− .31
Extent couple discouraged from having more children by wife's poor health (rating by wife)	− .50
Extent couple discouraged from having more children by wife's poor health (rating by husband)	− .37
Husband's General Health (Self-Appraisal) and	
Husband's pep and energy (rating by self)	+ .17
" " " " (rating by spouse)	+ .15
" " " " (rating by interviewer)	+ .35
Ratings of Wives and Husbands on Same Items:	
Pep and energy of wife	+ .27
" " " " husband	+ .26
Risk to wife's health by another child	+ .53
Extent couple discouraged from having more children by wife's poor health	+ .48
Other:	
Pep and energy of wife (interviewer-self)	+ .36
" " " " " (interviewer-spouse)	+ .27
Pep and energy of husband (interviewer-self)	+ .25
" " " " " (interviewer-spouse)	+ .29
Wife's self-rating pep and energy and risk to health in having another child	− .16
Wife's rating on extent couple discouraged from having more children by wife's poor health and risk to wife's health by another child	+ .54
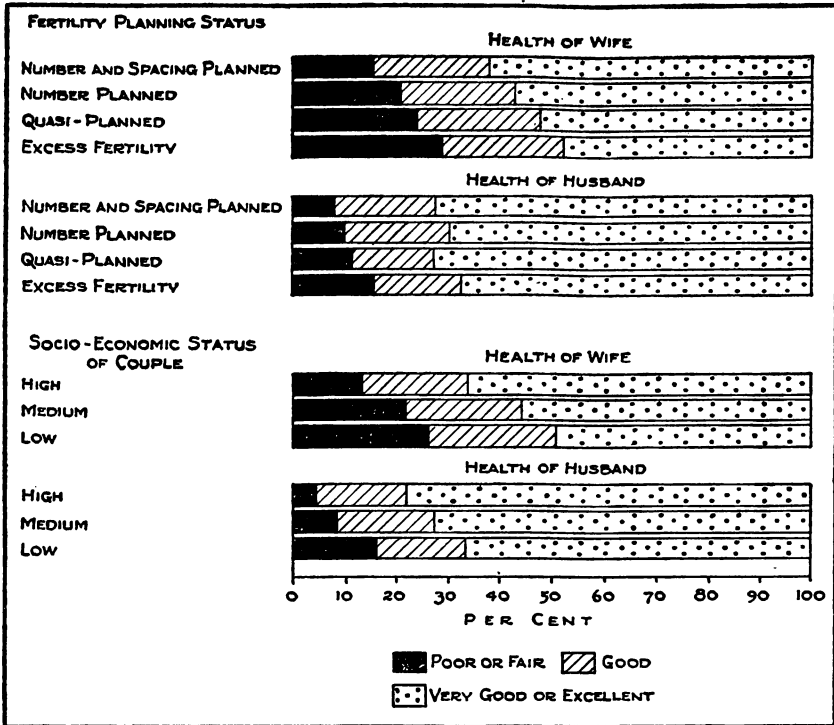
Fig. 1. Percentage distribution of wives and husbands by self-appraisal of health since marriage, according to fertility-planning and socio-economic status of the couple (*see* Table 1).

portion of wives and husbands reporting very good or excellent health decreases definitely with fertility-planning status and also with socio-economic status of the couple. (Figure 1 and Table 1.)[11]

When socio-economic status is held constant, the tendency for high ratings on health of wife to be associated with high fertility-planning status persists only within the groups of "medium" and "low" socio-economic status. To a less extent this type of persistence holds with respect to ratings of the hus-

[11] The index of socio-economic status of the couple is based upon ratings of the couple with respect to average annual earnings of the husband since marriage, monthly rental value of the home at interview, net worth of the couple, husband's longest occupation since marriage, purchase price of car, education of the husband and wife, and score on Chapin's Social Status Scale. For further description, *see* Kiser, Clyde V. and Whelpton, P. K.: Social and Psychological Factors Affecting Fertility. IX. Fertility Planning and Fertility Rates by Socio-Economic Status. The Milbank Memorial Fund *Quarterly*, April, 1949, xxvii, No. 2, pp. 214, 216, 244 (Reprint pp. 385, 387, 415).

Table 4. Percentage distribution by self-appraisal of health of wife and husband for couples of given fertility-planning and socio-economic status.

SELF-APPRAISAL OF HEALTH	WIFE				HUSBAND			
	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
HIGH SOCIO-ECONOMIC STATUS								
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Poor or Fair	13.8	18.2	10.9	11.1	5.5	6.1	3.6	0.0
Good	22.9	12.1	29.1	3.7	13.8	9.1	29.1	18.5
Very Good or Excellent	63.3	69.7	60.0	85.2	80.7	84.8	67.3	81.5
MEDIUM SOCIO-ECONOMIC STATUS								
TOTAL	100.0	100.0	99.9	100.0	100.0	99.9	100.0	100.1
Poor or Fair	14.7	20.7	24.7	29.8	6.8	5.7	10.6	10.6
Good	26.0	21.8	23.7	13.5	24.3	19.5	15.2	13.5
Very Good or Excellent	59.3	57.5	51.5	56.7	68.9	74.7	74.2	76.0
LOW SOCIO-ECONOMIC STATUS								
TOTAL	100.0	100.1	100.0	100.0	100.0	100.0	99.9	100.0
Poor or Fair	18.8	22.4	26.9	30.3	12.8	16.5	14.4	19.0
Good	17.1	25.9	22.4	29.5	17.1	24.7	12.4	18.1
Very Good or Excellent	64.1	51.8	50.7	40.2	70.1	58.8	73.1	62.9
NUMBER OF COUPLES (BASES FOR ABOVE PERCENTAGES)								
High Socio-Economic Status	109	33	55	27	109	33	55	27
Medium Socio-Economic Status	177	87	198	104	177	87	198	104
Low Socio-Economic Status	117	85	201	251	117	85	201	248
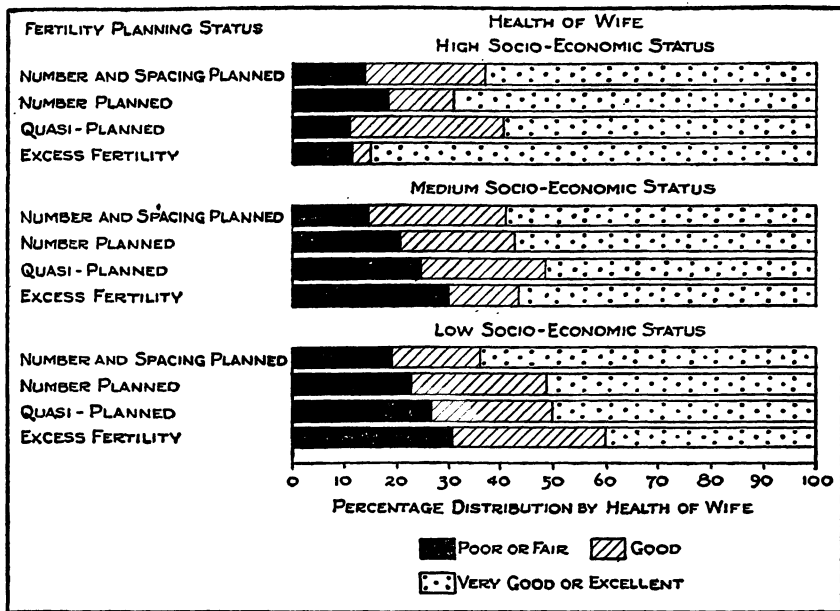
Fig. 2. Percentage distribution by self-appraisal of health of wife since marriage, for couples of given fertility-planning and socio-economic status (*see* Table 4).

band on his health (Figure 2 and Table 4). On the other hand, within each fertility-planning status, low ratings on health of wife and husband are associated with low socio-economic status.

Indirectly, the above data themselves fail to support that part of the hypothesis concerning the relation of health of wife and husband to effectiveness of contraceptive practice. More direct testing is afforded in Figure 3, based on Table 5, showing distributions by fertility-planning status within groupings by self-appraised health of the wife and husband. The results are again opposite those assumed in the hypothesis. The poorer the health of the wife, and to a less extent the poorer the health of the husband, the *smaller* is the proportion of the couples practicing contraception with sufficient effectiveness to be classified as "planned families." The proportion of "planned families" extends from about one-third among couples in which wives rated their own health as "poor" or "fair" to about one-half
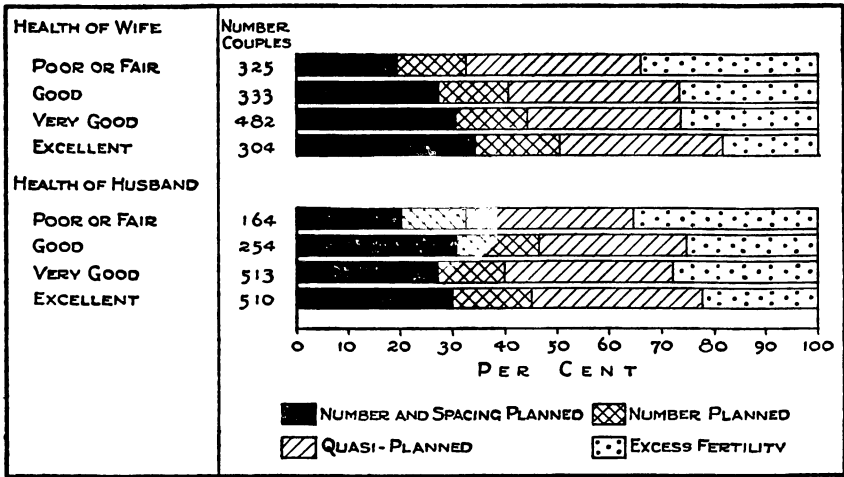
Fig. 3. Fertility-planning status by self-appraisal of health of wife and husband since marriage (*see* Table 5).

among couples in which wife's health was appraised as "excellent." On the basis of the husband's health, the proportion is again about one-third for the "poor or fair" group, but the remaining percentages are 47, 40, and 45 for the "good," "very good," and "excellent" health-of-husband categories.

Table 5. Fertility-planning status by self-appraisal of health of wife and husband.

SELF-APPRAISAL OF HEALTH	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
Wife						
Poor or Fair	325	100	19.4	13.2	33.5	33.8
Good	333	100	27.3	13.5	32.4	26.7
Very Good	482	100	30.1	14.1	29.3	26.6
Excellent	304	100	34.2	16.1	31.6	18.1
Husband						
Poor or Fair	164	100	20.1	12.8	31.7	35.4
Good	254	100	30.7	16.1	28.0	25.2
Very Good	513	100	27.1	12.9	32.0	28.1
Excellent	510	100	30.0	15.1	32.7	22.2

Per Cent Distribution by Fertility-Planning Status

RATING ON PEP AND ENERGY	PEP AND ENERGY OF WIFE					PEP AND ENERGY OF HUSBAND				
	Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total	Number 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	26.5
Rating By Self										
Very Little or Little	100	23.7	18.4	25.0	32.9	*	*	*	*	*
Somewhat Less Than Average	100	29.4	18.3	28.6	23.8	100	34.4	6.7	32.2	26.7
About Average	100	24.5	9.3	36.1	30.0	100	24.9	13.8	32.8	28.5
Somewhat More Than Average	100	35.3	17.6	26.2	20.8	100	29.2	14.6	34.9	21.4
Much	100	35.7	9.3	29.3	25.7	100	34.8	13.5	31.2	20.6
Very Much	100	27.5	35.1	22.1	15.3	100	31.0	20.1	21.7	27.2
Rating By Spouse										
Very Little or Little	100	25.0	13.6	34.1	27.3	100	17.1	5.7	20.0	57.1
Somewhat Less Than Average	100	29.5	17.4	31.8	21.2	100	36.0	16.0	28.0	20.0
About Average	100	26.8	13.1	30.8	29.3	100	26.4	12.6	31.9	29.1
Somewhat More Than Average	100	31.7	10.7	32.5	25.1	100	33.6	12.5	31.3	22.7
Much	100	28.0	16.0	34.0	22.0	100	27.0	14.6	36.0	22.5
Very Much	100	25.0	23.3	28.4	23.3	100	25.0	27.2	27.9	19.9
Rating By Interviewer										
Worn Out—No Reserves of Energy	100	8.0	20.0	32.0	40.0	100	17.9	7.1	14.3	60.7
Some Pep and Energy	100	31.5	10.0	28.0	30.4	100	24.6	7.9	33.3	34.2
Average Pep and Energy	100	26.5	11.5	34.7	27.3	100	26.5	10.7	32.5	30.3
Much Pep and Energy	100	30.0	19.3	29.0	21.7	100	30.0	18.9	31.4	19.7
Unlimited Pep and Energy	100	33.8	18.2	31.2	16.9	100	33.3	18.2	28.3	20.2

[1] For numerical distributions, *see* Appendix I.
* Percentages not computed for base less than 20.

It will be noted that in both cases the patterns of relationship between health and fertility-planning status are set in large part by differential proportions in the two extreme fertility-planning groups, "number and spacing planned" and "excess fertility." For instance, in the classifications by wife's health the proportion of "number and spacing planned" couples extends from 19 per cent for the "poor or fair" group to 34 per cent for the "excellent" group. The proportion of "excess fertility" couples is 34 per cent for the "poor or fair" group and 18 per cent for the group with wives rating their health as excellent. The proportion of couples in the "number planned" and "quasi-planned" groups differ little by health status of the wife or husband.

The relationships that exist between fertility-planning status and "pep and energy" of the wife and husband (as rated by self, spouse, and interviewer) also are direct and hence run counter to the hypothesis. This type of relation is especially prominent in the classification by interviewer's rating. As indicated in Table 6 (lowest sections), the proportion of "planned families" ("number and spacing planned" and "number planned" combined) increases and the proportion of "excess fertility" families decreases rather sharply with rise of interviewer's rating on pep and energy of either the wife or husband. In the classifications by rating by self or spouse the direct relation of fertility-planning status to "pep and energy" is exhibited in the comparison of extreme groups but it does not extend throughout the groups intermediate with respect to rating on "pep and energy."

Even less relation is found between fertility-planning status of the couple and the putative risk to wife's health in having another child (Table 7). In the joint classification by statement of wife and husband (Table 8) the proportion of "planned families" is about 44 per cent for the group in which both wife and husband indicated above-average risk to wife's health. It is 43 per cent for the group in which both stated "about average" and 23 per cent for the group in which both

PER CENT DISTRIBUTION BY FERTILITY-PLANNING STATUS

RISK TO WIFE'S HEALTH IN HAVING ANOTHER CHILD	WIFE'S OPINION					HUSBAND'S OPINION				
	Total²	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total²	Number 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	26.5
Very Much More Than Most Women	100	27.5	6.6	35.2	30.8	100	30.6	13.7	30.6	25.0
Much More Than Most Women	100	30.4	10.1	27.5	31.9	100	32.3	12.1	25.3	30.3
Somewhat More Than Most Women	100	33.9	16.5	30.7	18.9	100	30.5	15.4	29.9	24.2
About Average	100	27.1	14.9	31.2	26.7	100	28.2	14.6	32.9	24.3
Somewhat Less Than Most Women	100	12.2	14.3	44.9	28.6	100	20.5	11.1	35.0	33.3
Much Less Than Most Women	100	25.8	11.3	27.8	35.1	100	11.3	13.2	24.5	50.9

RISK TO WIFE'S HEALTH IN HAVING ANOTHER CHILD	WIFE'S RATING OF HUSBAND'S OPINION					HUSBAND'S RATING OF WIFE'S OPINION				
	Total²	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total²	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
Very Much More Than Most Women	100	36.8	11.8	25.0	26.3	100	31.9	9.7	28.3	30.1
Much More Than Most Women	100	27.6	13.3	28.6	30.6	100	28.9	13.3	34.4	23.3
Somewhat More Than Most Women	100	35.5	16.6	28.4	19.6	100	27.9	15.1	33.8	23.3
About Average	100	24.5	13.2	33.2	29.1	100	28.1	13.6	31.8	26.5
Somewhat Less Than Most Women	100	24.6	23.1	35.4	16.9	100	32.7	11.8	33.6	21.8
Much Less Than Most Women	100	29.4	10.3	32.4	27.9	100	14.0	26.0	23.0	37.0

¹ For childless couples the data relate to health risk in having "a child" rather than "another child."
² The numbers on which percentage distributions are based are given in the left section of Table 2.

Table 8. Fertility-planning status by wife's and husband's opinion regarding risk to wife's health in having another child.[1]

Risk to Wife's Health in Having Another Child		Number of Couples	Per Cent Distribution by Fertility-Planning Status				
Opinion of			Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
Wife	*Husband*						
More Than Most Women	More Than Most Women	297	100	30.3	13.5	32.7	23.6
More Than Most Women	About Average	101	100	36.6	10.9	26.7	25.7
About Average	More Than Most Women	208	100	30.8	15.9	24.5	28.8
About Average	About Average	575	100	28.0	14.8	34.1	23.1
About Average	Less Than Most Women	101	100	14.9	13.9	28.7	42.6
Less Than Most Women	About Average	77	100	18.2	18.2	32.5	31.2
Less Than Most Women	Less Than Most Women	53	100	18.9	3.8	37.7	39.6

[1] For childless couples the data relate to health risk in having "a child" rather than "another child."

husband and wife indicated that the risk to wife's health was
below average. However, whereas the first two percentages are
based upon 297 and 575 cases, the last one is based upon 53
and hence lends little support to the hypothesis.

It should also be noted that the direct relation of fertility-
planning status to health of wife is greatly reduced when the
analysis is restricted to groups of given index of socio-economic
status (Table 9). In fact, within the top socio-economic group
there is the suggestion of a reversal. It may be that among
such couples there is some tendency for health to be inversely
related to fertility-planning status. The numbers are too small
to afford assurance on this point. Whatever this situation may
be, it is clear that much of the observed direct relation of fer-
tility-planning status to health appraisals of the wife or hus-

Table 9. Fertility-planning status in subdivisions by wife's self-appraisal
of health and socio-economic status of the couple.

SELF-APPRAISAL HEALTH OF WIFE	NUMBER	PER CENT DISTRIBUTION BY PLANNING STATUS				
		Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
		HIGH-SOCIO-ECONOMIC STATUS				
TOTAL	224	100	48.7	14.7	24.6	12.1
Poor or Fair	30	100	50.0	20.0	20.0	10.0
Good	46	100	54.3	8.7	34.8	2.2
Very Good or Excellent	148	100	46.6	15.5	22.3	15.5
		MEDIUM SOCIO-ECONOMIC STATUS				
TOTAL	566	100	31.3	15.4	35.0	18.4
Poor or Fair	124	100	21.0	14.5	39.5	25.0
Good	126	100	36.5	15.1	37.3	11.1
Very Good or Excellent	316	100	33.2	15.8	32.3	18.7
		LOW SOCIO-ECONOMIC STATUS				
TOTAL	654	100	17.9	13.0	30.7	38.4
Poor or Fair	171	100	12.9	11.1	31.6	44.4
Good	161	100	12.4	13.7	28.0	46.0
Very Good or Excellent	322	100	23.3	13.7	31.7	31.4

band is associated with the direct relation of socio-economic status to both health and fertility-planning status.

Fertility by Health of Wife and Husband. As already noted, the last part of the hypothesis under consideration states that "the poorer the health of the wife and/or husband the smaller the planned family."

In the first place, available data of the opinion-poll type may be of interest. In addition to the questions previously listed, wives and husbands in the Study were asked to indicate which of a list of reasons were of first, second, and third importance in discouraging the couple from having children or more children. "Poor health of self" was checked by 17 per cent of the wives as the reason of first importance, by 12 per cent as reason of second importance, and by 9 per cent as the reason of third importance. Correspondingly, "poor health of spouse" was indicated by 20 per cent of the husbands as the reason of first importance, by 10 per cent as the reason of second importance, and by 8 per cent as the reason of third importance. As one might expect, the poor health of the husband was rarely given as a factor of importance. Thus, "poor health of self" was given as the reason of first importance by only 1 per cent of the husbands, as the second reason by only 4 per cent, and as the third reason by only 3.5 per cent. "Poor health of spouse" was checked by only 2 per cent of the wives as the reason of first importance,[12] by 4 per cent as the reason of second importance, and by 3 per cent as the reason of third importance. Although the above data relate to all couples, the proportion of wives and husbands indicating poor health of self or spouse as the chief reason for not having a child or more children has been found to differ little by fertility-planning status.

As previously stated, all wives and husbands in the Study were asked to indicate on five-point scales the *extent* to which

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[12] For a complete distribution of reasons of first, second, and third importance, *see* Kiser, Clyde V. and Whelpton, P. K.: Social and Psychological Factors Affecting Fertility. XI. The Interrelation of Fertility, Fertility Planning, and Feeling of Economic Security. The Milbank Memorial Fund *Quarterly*, January, 1951, xxix, No. 1, p. 73.

they were discouraged from having a child or more children by the poor health of self and poor health of spouse. The replies again attest to the relative unimportance of health as a factor in fertility of the group. (Table 10.) Almost half (47 per cent) of the wives and over half (51 per cent) of the husbands stated that poor health of the wife had discouraged the couple "very little or not at all" from having a child or more children. Approximately 80 per cent of the husbands gave this reply regarding their own health and a corresponding 74 per cent of the wives gave it with respect to health of spouse.

At the other end of the scale, about 12 per cent of all wives and 9 per cent of all husbands stated that the couple had been "very much" discouraged from having a child or more children because of the poor health of the wife. The proportion replying either "very much" or "much" was about 20 per cent for the wives and 17.5 per cent for the husbands. Only about 5 per cent of the wives and 4 per cent of the husbands gave these replies with respect to health of the husband as a deterrent to fertility.

As one would expect, the extent of discouragement from

Table 10. Percentage distribution by extent to which poor health of wife and husband discouraged the couple from having more children, by statement of self and spouse.[1]

| EXTENT OF DISCOURAGEMENT | COUPLE DISCOURAGED FROM HAVING MORE CHILDREN BY POOR HEALTH OF | | | |
| | Wife | | Husband | |
	Statement by Self	Statement by Spouse	Statement by Self	Statement by Spouse
TOTAL	100.0	100.1	99.9	100.0
Very Much	11.8	9.3	1.8	3.7
Much	8.5	8.2	1.8	1.5
Some	18.3	17.9	6.2	6.0
Little	14.7	13.7	10.2	14.4
Very Little or Not at All	46.7	51.0	79.9	74.4

[1] The percentage base is 1,444 in each column except the last, which is 1,442. For childless couples the data relate to discouragement from having "children" rather than "more children."

Fig. 4. Percentage distribution by wife's statement on extent to which her poor health discouraged the couple from having more children, by fertility-planning status of the couple and wife's appraisal of her health since marriage (*see* Table 11).

having more children because of poor health is related both to actual health status and to number of children already born. Thus among all couples, the proportion of wives stating that their own poor health had discouraged the couple "very much or much" from having more children is 46 per cent for those rating their health as "poor or fair," 21 per cent for those with "good" health, and 9 per cent for those with "excellent" health. As indicated in Figure 4 and Table 11, this pattern of relationship holds within each fertility-planning group.

The proportion of wives reporting that they were "very much or much" discouraged from having more children because of their own poor health tends to increase somewhat with number of children but not to a striking degree. (Table 12.)[13] The

[13] Among "planned families," the proportion giving the above replies is about 15 per cent for those with no live births, 24 per cent for those with one, 20 per cent for those with two, 17 per cent for those with three, and 26 per cent for those with four or more.

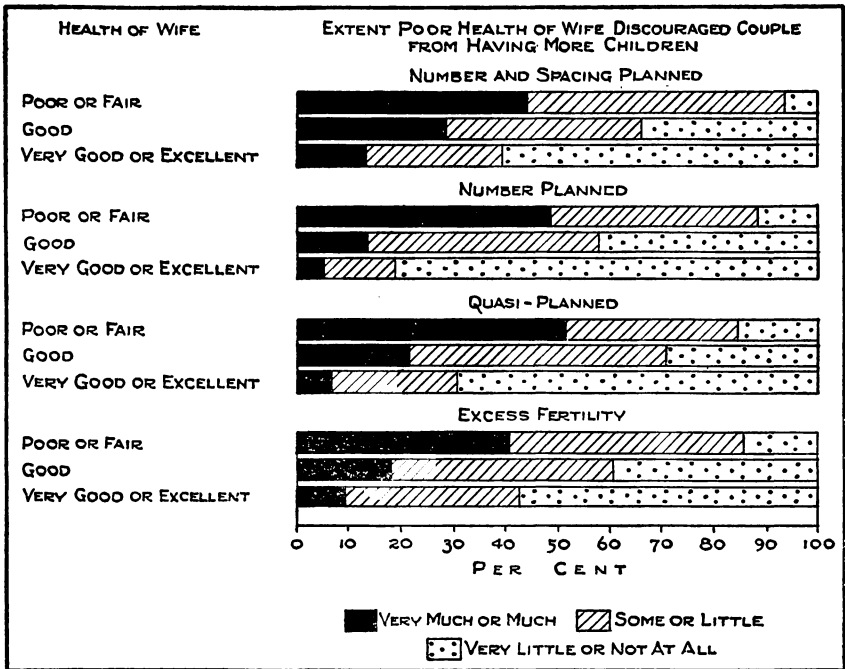proportions of *husbands* stating that the couple was "very much or much" discouraged from having more children because

Table 11. Percentage distribution by wife's statement on extent to which her poor health discouraged couple from having more children, by wife's self-appraisal of health and by fertility-planning status of the couple.[1]

SELF-APPRAISAL HEALTH OF WIFE	NUMBER OF COUPLES	PER CENT DISTRIBUTION BY EXTENT OF DISCOURAGEMENT			
		Total	Very Much or Much	Some or Little	Very Little or Not at All
ALL COUPLES					
TOTAL	1,444	100	20.3	33.0	46.7
Poor or Fair	325	100	46.2	40.9	12.9
Good	333	100	21.3	43.5	35.1
Very Good or Excellent	786	100	9.2	25.2	65.6
NUMBER AND SPACING PLANNED					
TOTAL	403	100	21.6	32.3	46.2
Poor or Fair	63	100	44.4	49.2	6.3
Good	91	100	28.6	37.4	34.1
Very Good or Excellent	249	100	13.3	26.1	60.6
NUMBER PLANNED					
TOTAL	205	100	16.1	25.9	58.0
Poor or Fair	43	100	48.8	39.5	11.6
Good	45	100	13.3	44.4	42.2
Very Good or Excellent	117	100	5.1	13.7	81.2
QUASI-PLANNED					
TOTAL	454	100	20.9	31.9	47.1
Poor or Fair	109	100	51.4	33.0	15.6
Good	108	100	21.3	49.1	29.6
Very Good or Excellent	237	100	6.8	23.6	69.6
EXCESS FERTILITY					
TOTAL	382	100	20.4	38.7	40.8
Poor or Fair	110	100	40.9	44.5	14.5
Good	89	100	18.0	42.7	39.3
Very Good or Excellent	183	100	9.3	33.3	57.4

[1] For childless couples the data relate to discouragement from having "children" rather than "more children."

of poor health of the wife or self showed little systematic varia-
tion by number of children.[14]

Although data of the above type are of interest in indicating
the extent to which respondents *said* that poor health of self or
spouse discouraged them from having more children, a more
rigorous testing of the hypothesis is afforded by data relating
to actual fertility rates by various measures of health of the
wife and husband. Figure 5 presents fertility rates by self-
ratings of the general health of the wife and husband within
each of the four broad fertility-planning groups. Within no
fertility-planning group, including the "number and spacing

Table 12. Extent to which poor health of self discouraged wife from having
more children, by number of live births, for all couples and planned families.[1]

EXTENT OF DISCOURAGEMENT OF WIFE	NUMBER OF LIVE BIRTHS					
	Total	0	1	2	3	4 +
	ALL COUPLES					
Number of Couples	1,444	135	365	540	234	170
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
Very Much	11.8	6.7	11.0	12.0	14.1	13.5
Much	8.5	7.4	14.5	6.9	4.3	7.6
Some	18.3	16.3	19.7	17.6	16.7	21.2
Little	14.7	22.2	12.9	13.1	16.2	15.3
Very Little or Not at All	46.7	47.4	41.9	50.4	48.7	42.4
	PLANNED FAMILIES					
Number of Couples	608	130	164	238	53	23
TOTAL	100.0	100.0	99.9	100.0	100.0	99.9
Very Much	11.3	6.9	10.4	14.3	11.3	13.0
Much	8.4	7.7	13.4	5.5	5.7	13.0
Some	18.6	16.2	21.3	15.5	18.9	43.5
Little	11.5	22.3	8.5	8.8	11.3	0.0
Very Little or Not at All	50.2	46.9	46.3	55.9	52.8	30.4

[1] For childless couples the data relate to discouragement from having
"children" rather than "more children."

[14] To some extent the data suggest an increase with lowering of socio-economic
status in the proportion of wives or husbands stating that the couple was discouraged
"very much" from having more children because of poor health of the wife. On the
basis of statement by wife the proportions are 8.9, 10.4, and 13.9 for couples of high,
medium, and low socio-economic status, respectively. On the basis of husband's state-
ment the proportions are 0.0, 1.9, and 2.3, respectively.
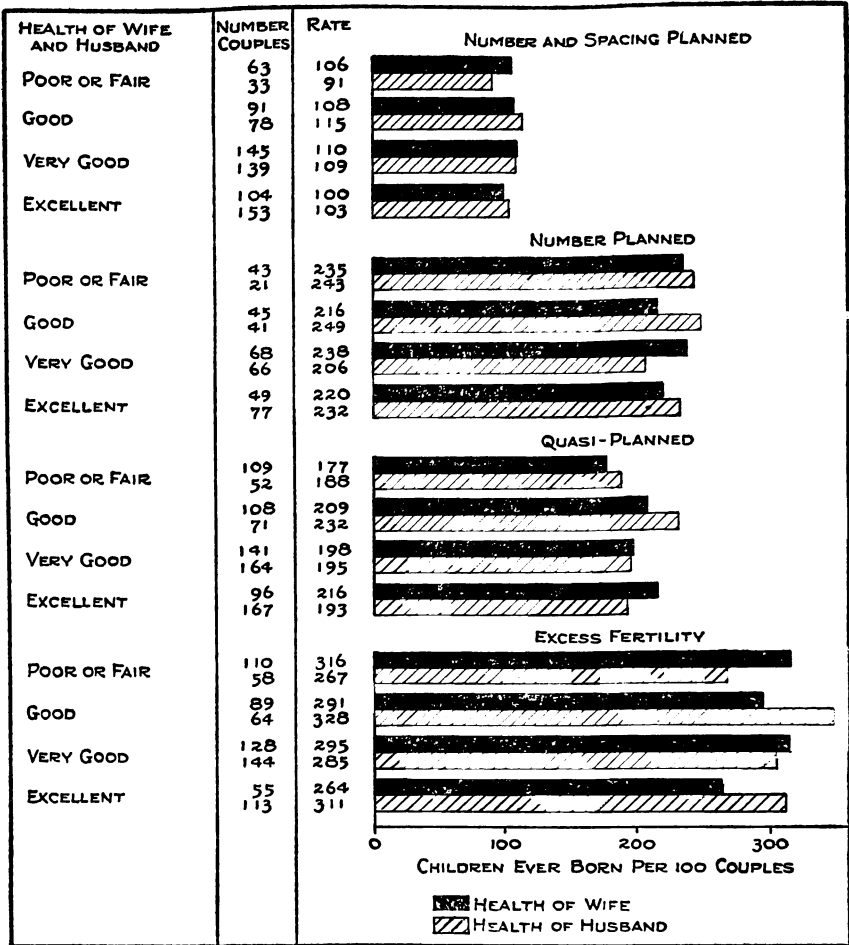
Fig. 5. Fertility rates by fertility-planning status and self-appraisal of health of wife and husband since marriage.

planned," is there any systematic relation of fertility to self-ratings of wives or husbands on their general health since marriage. It is true that within the "quasi-planned" group the variations in fertility rates by wife's self-appraisals of health conform to some extent with those assumed in the hypothesis. However, the hypothesis relates to "planned families" and the data for neither subgroup of these support the hypothesis.

In Figure 6 the data are shown for the total group of planned families subdivided into three socio-economic groups. No con-

HEALTH OF WIFE	NUMBER COUPLES	RATE	NUMBER AND SPACING OR NUMBER PLANNED
			HIGH SOCIO-ECONOMIC STATUS
POOR OR FAIR	21	190	
GOOD	29	128	
VERY GOOD	57	177	
EXCELLENT	35	166	
			MEDIUM SOCIO-ECONOMIC STATUS
POOR OR FAIR	44	132	
GOOD	65	114	
VERY GOOD	82	146	
EXCELLENT	73	123	
			LOW SOCIO-ECONOMIC STATUS
POOR OF FAIR	41	171	
GOOD	42	200	
VERY GOOD	74	136	
EXCELLENT	45	142	

CHILDREN EVER BORN PER 100 COUPLES

Fig. 6. Fertility rates of "planned families" cross-classified by socio-economic status and wife's appraisal of her health since marriage.

sistent relationship between health of wife and fertility is seen within groups of either "high" or "medium" socio-economic status. Among "planned families" of low socio-economic status, fertility rates are rather conspicuously lower for wives rating their own health as "very good" or "excellent" than for those rating their health status since marriage as only "good," "fair," and "poor." These rates are based upon small numbers but the relationships observed probably reflect the bearing of fertilty on health appraisals rather than the bearing of health on fertility.

Little systematic relation is found between fertility and "pep and energy" of the wife or husband as rated by self or spouse. Among the six sets of data shown in Table 13, only the interviewer's rating concerning fertility in relation to "pep and energy" *of the husband* clearly supports the hypothesis. In this instance (lower section of Table 13), the fertility rates of "number and spacing planned" couples increase sharply with rising "pep and energy." To a less extent a similar situation is found by interviewer's rating of the wife. It will be noted, however, that among the "number and spacing planned" couples

viewer on pep and energy of wife and husband.[1]

RATING ON PEP AND ENERGY	PEP AND ENERGY OF WIFE					PEP AND ENERGY OF HUSBAND				
	Fertility Rates by Fertility-Planning Status									
	Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
ALL COUPLES	203	106	228	199	296	203	106	228	199	296
Rating By Self										
Very Little or Little } Somewhat Less Than Average	193	105	222	162	293	197	125	*	210	235
About Average	215	120	237	205	297	209	108	215	201	303
Somewhat More Than Average	182	91	226	203	274	192	102	251	185	287
Much	189	90	*	212	283	196	92	*	218	331
Very Much	202	97	222	190	365	205	109	238	195	298
Rating By Spouse										
Very Little or Little } Somewhat Less Than Average	216	118	234	204	343	201	118	*	168	283
About Average	205	105	228	200	293	212	113	222	204	305
Somewhat More Than Average	188	107	255	183	268	187	101	238	193	279
Much	201	117	204	216	282	187	81	208	209	265
Very Much	207	83	215	203	337	208	103	241	189	322
Rating By Interviewer										
Worn Out } Some	223	111	243	191	341	256	76	*	243	345
Average	196	96	222	201	276	196	97	214	196	275
Much	196	107	229	210	270	199	116	230	193	305
Unlimited	190	146	*	162	*	202	139	*	200	300

1 For numbers on which rates are based, *see* Appendix I.
* Rate not computed for base less than 20.

WIFE'S STATEMENT— EXTENT OF DISCOURAGEMENT	WIFE'S SELF-APPRAISAL OF HEALTH	NUMBER COUPLES	RATE
VERY MUCH OR MUCH	POOR OR FAIR	49 / 101	186 / 250
VERY MUCH OR MUCH	GOOD	32 / 39	125 / 205
VERY MUCH OR MUCH	VERY GOOD OR EXCELLENT	39 / 33	144 / 258
SOME OR LITTLE	POOR OR FAIR	48 / 85	129 / 242
SOME OR LITTLE	GOOD	54 / 91	146 / 257
SOME OR LITTLE	VERY GOOD OR EXCELLENT	81 / 117	142 / 236
VERY LITTLE OR NOT AT ALL	POOR OR FAIR	9 / 33	* / 252
VERY LITTLE OR NOT AT ALL	GOOD	50 / 67	152 / 255
VERY LITTLE OR NOT AT ALL	VERY GOOD OR EXCELLENT	246 / 270	148 / 240

HUSBAND'S STATEMENT— EXTENT OF DISCOURAGEMENT	WIFE'S SELF-APPRAISAL OF HEALTH	NUMBER COUPLES	RATE
VERY MUCH OR MUCH	POOR OR FAIR	34 / 74	150 / 224
VERY MUCH OR MUCH	GOOD	28 / 46	139 / 235
VERY MUCH OR MUCH	VERY GOOD OR EXCELLENT	40 / 30	125 / 253
SOME OR LITTLE	POOR OR FAIR	44 / 96	159 / 222
SOME OR LITTLE	GOOD	48 / 52	135 / 244
SOME OR LITTLE	VERY GOOD OR EXCELLENT	97 / 119	153 / 248
VERY LITTLE OR NOT AT ALL	POOR OR FAIR	28 / 49	168 / 331
VERY LITTLE OR NOT AT ALL	GOOD	60 / 59	153 / 253
VERY LITTLE OR NOT AT ALL	VERY GOOD OR EXCELLENT	229 / 271	146 / 235

0   100   200   300

CHILDREN EVER BORN PER 100 COUPLES

■ NUMBER AND SPACING OR NUMBER PLANNED
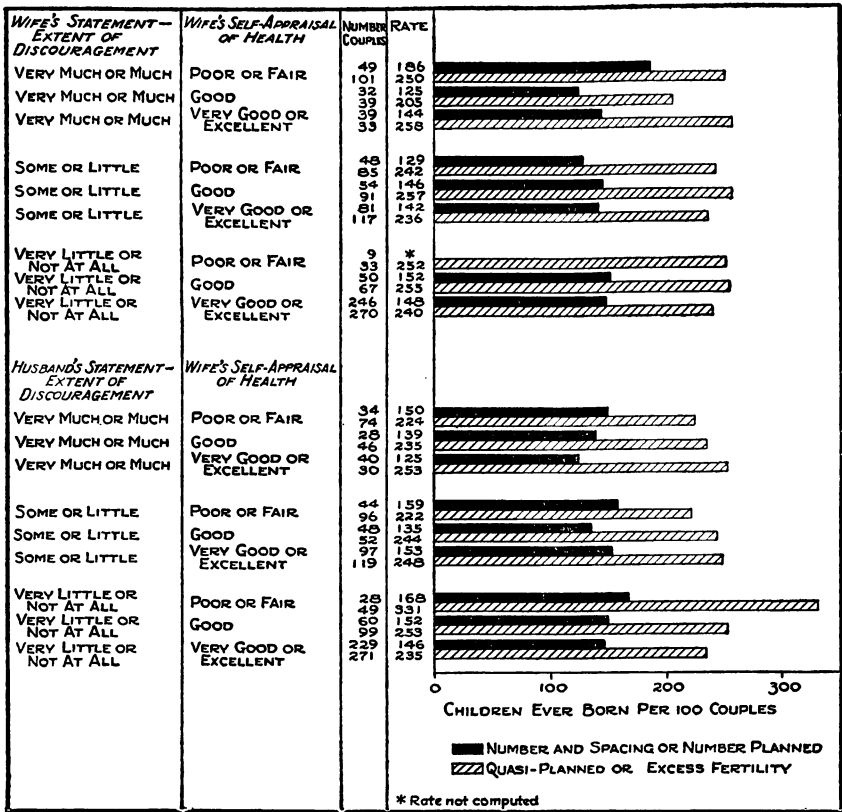▨ QUASI-PLANNED OR EXCESS FERTILITY

* Rate not computed

Fig. 7. Fertility rates of "planned families" and remaining couples cross-classified by wife's appraisal of her health since marriage and statement of the wife and husband on extent to which poor health of wife discouraged the couple from having more children.

in each of the four types of classification by rating of self or spouse, the opposite type of relation is exhibited to the extent that the fertility rate is lower for the class of most than of least "pep and energy."

Fertility rates are also presented in Figure 7 for cross-classifications of the "planned families," and remaining couples, by health ratings for the wife and extent to which the couple was discouraged from having more children because of the poor health of the wife.[15] The cross-classifications are shown on the

[15] Among "number and spacing planned" couples classified by statement of the wife on extent of discouragement from having more children because of poor health of the wife (regardless of health status), the fertility rates are directly related to

RISK TO WIFE'S HEALTH *WIFE'S OPINION*	NUMBER COUPLES	RATE	
VERY MUCH MORE THAN MOST WOMEN	31	129	
MUCH MORE THAN MOST WOMEN	28	157	
SOMEWHAT MORE THAN MOST WOMEN	128	152	
ABOUT AVERAGE	372	144	
SOMEWHAT OR MUCH LESS THAN MOST WOMEN	49	165	
HUSBAND'S OPINION			
VERY MUCH MORE THAN MOST WOMEN	55	140	
MUCH MORE THAN MOST WOMEN	44	116	
SOMEWHAT MORE THAN MOST WOMEN	137	140	
ABOUT AVERAGE	322	149	
SOMEWHAT OR MUCH LESS THAN MOST WOMEN	50	192	
HEALTH OF WIFE			
POOR OR FAIR	106	158	
GOOD	136	143	
VERY GOOD	213	151	
EXCELLENT	153	139	

O   100   200
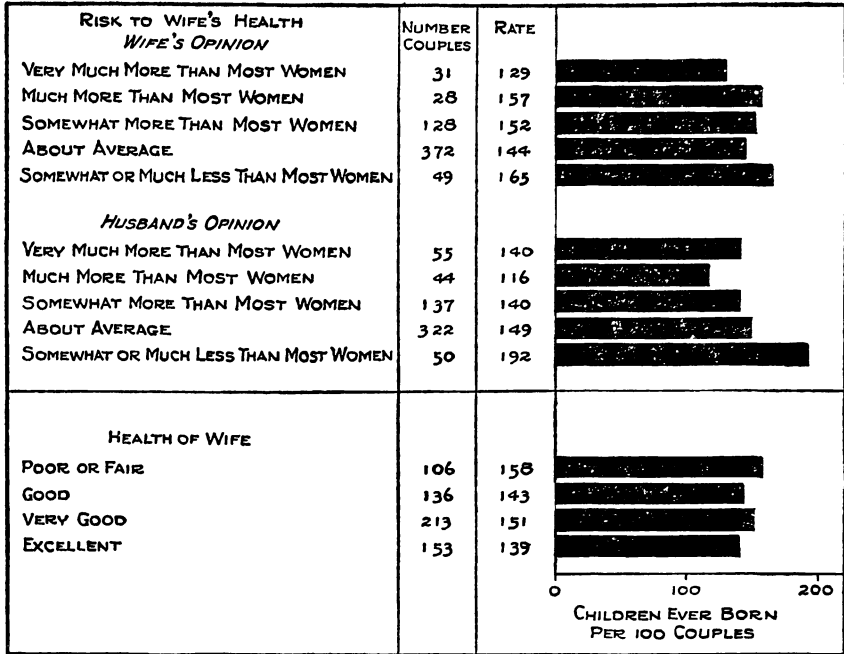CHILDREN EVER BORN
PER 100 COUPLES

Fig. 8. Fertility rates of "planned families" by statement of wife and husband on risk to wife's health in having another child, and by wife's appraisal of her health since marriage.

basis of replies of wives and husbands separately. Again, there is no systematic pattern of variations in fertility rates. It is interesting to note, however, that in the classification of planned families by wife's statements on health and extent of discouragement, the fertility rate is highest (186) for the group "discouraged very much or much—health poor or fair." The fer-

degree of discouragement. However, this may simply reflect a selective tendency for statements on extent of discouragement to be related to number of children the wife has. The rates are as follows by statement of wife and husband.

	STATEMENT BY			
EXTENT OF DISCOURAGEMENT	Wife	Husband	Wife	Husband
	Number Couples		Children Ever Born Per 100 Couples	
Very Much or Much	87	70	128	106
Some	75	71	117	86
Little	55	53	80	115
Very Little or Not at All	186	209	100	111

tility rate is only 148 for the group "discouraged very little or not at all—health excellent or very good." However, the remaining rates range from 125 to 152 and the former is for the group "discouraged very much or much—health of wife good."

Fertility rates among "planned families" by replies of wives and husbands to the question regarding risk to wife's health in having another child are shown in Figure 8. These data partially support the hypothesis. In the classification by husband's opinion, the fertility rate is 140 for the "very much more [risk] than average" group and 116 for the "much more than average" group. From the latter point, however, the fertility rates increase consistently with lowering of risk to wife's health and support the hypothesis rather strikingly. In the classification by wife's opinion, the fertility rates for the two extreme groups support the hypothesis but those for the intermediate groups run counter to it.[16]

For comparison, fertility rates by wife's self-appraisals on general health are also shown for the consolidated group of "planned families" in Figure 8. These run from 158 for the "poor or fair" group to 139 for the "excellent" group. Thus the fertility positions of the extreme groups in the classification by general health appraisals are opposite those by opinions regarding risk to wife's health in having another child. In view of this

[16] The joint classification by reply of wife and husband in "planned families" to the question regarding risk to wife's health in having another child yields the following results:

RISK TO WIFE'S HEALTH		NUMBER COUPLES	LIVE BIRTHS PER 100 COUPLES
Wife	Husband		
More Than Average	More Than Average	130	144
" " "	About Average	48	150
" " "	Less Than Average	9	*
About Average	More Than Average	97	119
" "	About Average	246	148
" "	Less Than Average	29	203
Less Than Average	More Than Average	9	*
" " "	About Average	28	164
" " "	Less Than Average	12	*

* Rate not computed.

apparent inconsistency the results based upon joint considera-
tion of wife's self-appraisals on general health and health risk
in having another child are of interest. In the first place it will
be noted from Table 3 that within each health-appraisal group
the replies regarding risk tend to pile up on "about average"
and "somewhat more than most women." Thus among the 106
wives reporting "poor or fair" health only about 14 per cent
stated that the health risk in having another child was "very
much or much more than most women." The remaining cou-
ples were almost equally divided between the "somewhat more
than most women" and "about average" groups. Among the
153 women with "excellent" health only 5 per cent replied that
the health risk involved in having another child was "very
much or much more than most women" and only 16 per cent
replied "somewhat or much less than most women."

Several comments may be made regarding fertility rates in
Table 14. In the first place it will be noted that the fertility

Table 14. Number of children ever born per 100 couples among planned
families, by wife's self-appraisal of health and risk to health by having another
child.

WIFE'S SELF-APPRAISAL		NUMBER COUPLES	LIVE BIRTHS PER 100 COUPLES
General Health	Risk to Health		
TOTAL		608	148
Poor or Fair	More Than Most Women	61	180
Poor or Fair	About Average	45	129
Poor or Fair	Less Than Most Women	0	—
Good	More Than Most Women	47	128
Good	About Average	85	147
Good	Less Than Most Women	4	*
Very Good	More Than Most Women	52	138
Very Good	About Average	141	148
Very Good	Less Than Most Women	20	210
Excellent	More Than Most Women	27	137
Excellent	About Average	101	145
Excellent	Less Than Most Women	25	116

* Rate not computed.

rate is relatively high (180) for the group with wives reporting "poor or fair" health and more than average risk to health in having another child. It is lowest (116) for the group at the other extreme, health excellent—less than average risk. In the second place, within each health-status group except "poor or fair" the fertility rate is lower for the more than average risk than for the "average risk" group. In the third place, the conspicuously high rate for the wives reporting "poor or fair" health and more than average risk probably again illustrates a selective relationship corresponding to that assumed to underlie the high fertility rate (186) for the group "health poor or fair—discouraged much or very much" from having more children because of wife's poor health. In other words, the fact that a woman has had a comparatively large number of children may influence her self-rating on general health and risk to health involved in having another child.

Data on Illness. In addition to the self-appraisals of the type previously considered, wives and husbands were asked "What serious illnesses have you had? When?" The coding of these data has thus far been restricted to designations by "0" of wives and husbands who had been free of any illness. However, this has been done for each pregnancy interval on the basis of the dates afforded.

As noted in Table 15, the illness status of the wife prior to a given pregnancy apparently has little relation to the proportion of couples proceeding to have a subsequent pregnancy. Thus among couples having at least one pregnancy and with wife reporting no illness before the first pregnancy, 71 per cent eventually had a second pregnancy. The percentage was a little higher (76) for corresponding couples in which the wife reported an illness before the first pregnancy. Differences in the same direction and of about the same magnitude are found in the data concerning second and third pregnancies. A larger difference in the same direction is found with respect to proportions having a pregnancy after the fourth. The difference is in the opposite direction with respect to proportions having a

pregnancy after the fifth but these proportions are based upon numbers too small to yield trustworthy results. Within the limits of the data available for "planned families" the results are essentially similar to those described above for all couples in the Study.

Sickness of Husband in Relation to Unemployment. Unemployment histories of the husband since marriage provided for designations as to whether specific periods of unemployment had been due to sickness. In the coding, given durations of unemployment (including "no unemployment") were subdivided into the two groups "sick two months or more" and "sick under two months or not at all." Despite the inadequacy of these cat-

Table 15. Illness status of wife and husband prior to a given pregnancy in relation to proportion of couples having another pregnancy, for all couples, and planned families reporting pregnancies of given order.

ILLNESS STATUS PRECEDING GIVEN PREGNANCY	ALL COUPLES		PLANNED FAMILIES	
	Number	Per Cent Having Another Pregnancy	Number	Per Cent Having Another Pregnancy
First Pregnancy				
No Illness	635	70.9	187[a]	49.7
One Illness or More	483	75.6	95[a]	54.7
Second Pregnancy				
No Illness	525	48.8	182	29.7
One Illness or More	489	53.2	162	36.4
Third Pregnancy				
No Illness	238	45.8	50	26.0
One Illness or More	278	50.0	63	39.7
Fourth Pregnancy				
No Illness	98	38.8	13	*
One Illness or More	150	46.7	25	*
Fifth Pregnancy				
No Illness	35	51.4	1	*
One Illness or More	73	42.5	7	*

* Per cent not computed.
[a] This "First Pregnancy" group consists only of "number and spacing planned" couples, since, by definition, the probability of having a second pregnancy is almost 100 per cent for the "number planned" couples.

egories for present purposes, it is of interest to note that among all "planned families" the fertility rate is approximately the same for those with husbands reporting two months or more of sickness (150) as for those reporting under two months of sickness or none at all (147). Among all couples the rates are 233 and 199, respectively, for the two groups regardless of unemployment. No consistent difference is found between the rate for couples with husbands sick "two months or more" and "under two months" within groups similar with respect to months of unemployment.

To summarize this section it may be stated that neither part of the hypothesis on the relation of health of wife and husband to fertility-planning status and size of planned family is supported by the limited data available. Moreover, the data suggest that whether or not poor health is conducive to family limitation, high fertility is associated with relatively poor health. There is, of course, little doubt that the hypothesis holds for families with specific types of illness. Downes has reported lower fertility of tuberculous families than of those in the general population of a rural area in New York State.[17] Probably many of us know of certain couples who refrain from having more children because the wife is tuberculous, has diabetes, or because she has had only Caesarean deliveries in the past.[18] However, this type of relation appears to be lost in a small sample of the general population in which such cases are relatively few and no distinction is made by type of illness.

HEALTH OF CHILDREN

The data concerning health of children are subject to limitations similar to those on health of wife and husband. They

[17] Downes, Jean: The Effect of Tuberculosis on the Size of Family. The Milbank Memorial Fund *Quarterly*, July, 1939, xvii, No. 3, pp. 274–287.

[18] Dorn's study of cancer in relation to marital status suggested that "the ameliorative effect of marriage upon health seems to be due to childbearing rather than to the fact of marriage itself, at least insofar as cancer is concerned. For both males and females, those who marry and have children are less likely to die from cancer than those who remain single, but those who marry and do not have children have the highest death rates."

See Dorn, Harold: Cancer and Marital Status. *Human Biology*, February, 1943, xv, No. 1, p. 78.

consist not of detailed histories of illnesses but of (a) mother's ratings of the health of each of her children "in infancy" (under 2 years of age) and "since infancy," (b) multiple-choice replies of parents in the Study concerning extent of discouragement from having another child because of poor health of the children, (c) deaths of children, and (d) proportions of wives and husbands giving ,"poor health of children" as the reason of first, second, and third importance for not having more children.

For obvious reasons the above-described data were not collected for childless couples so the analysis of the present hypothesis is restricted to 1,309 couples with at least one live birth. It should also be noted that, although the collected data included health ratings of each child, the coded data for these materials consist mainly of average ratings on health of all children in the family "in infancy" and "since infancy."[19]

Like the ratings on health of wife and husband, those on health of children tend to be high. The average ratings on the health of children "in infancy" are distributed as follows: "excellent," 48 per cent; "very good," 29 per cent; "good," 17 per cent; "fair," 4 per cent; and "poor," 2 per cent. Thus over three-fourths of the average ratings are "excellent or very good" and only 6 per cent are in the combined "poor or fair" category. With respect to health of children "since infancy," the proportions are "excellent," 37 per cent; "very good," 35 per cent; "good," 22 per cent; "fair," 5 per cent; and "poor," less than 1 per cent.[20] Only about 8 per cent of the fertile couples reported one or more deceased children. The data on stated impact of children's health on fertility are presented in a later section.

Fertility-Planning Status of Couples by Health Status of Children. As already indicated, the first part of the hypothesis

[19] The five categories extending from "excellent" to "poor" were numbered 1, 2, 3, 4, 5 on the original schedule. The averages of scores for more than one child were reconverted to appropriate qualitative categories in the present analysis. Although the coded data relate mainly to average ratings, they permit some differentiation on the basis of individual ratings.

[20] The numbers to which the percentages correspond are given in Table 16. Since the "poor" and "fair" categories are consolidated, it may be noted that there are 27 average ratings of "poor health in infancy" and 10 of "poor health since infancy."

Fig. 9. Fertility-planning status of fertile couples by average rating of health of children in infancy and since infancy, by presence or absence of at least one child with a health rating of "poor or fair," and by deaths of children in family (*see* Table 16).

under consideration is: "The poorer the health of children, the higher the proportion of couples practicing contraception effectively. . . ." As indicated in Figure 9 and Table 16 no consistent relationship is found between fertility-planning status of the couple and average health ratings of children "in infancy" and "since infancy." However, certain selective factors are inherent in the use of average ratings, especially in data presented for all family sizes combined. Stated briefly, the extreme categories on the "average rating" scales are likely to be weighted unduly by one-child families. The average rating for two or more children in a family tends to be "poor" or "excellent" only if all children are so rated. The small families are

AVERAGE RATING	NUMBER OF COUPLES	PER CENT DISTRIBUTION BY FERTILITY-PLANNING STATUS				
		Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
Health of Children in Infancy						
TOTAL	1,309ᵃ	100	21.2	15.4	34.4	29.1
Poor or Fair	81	100	28.4	3.7	45.7	22.2
Good	218	100	15.6	22.9	29.4	32.1
Very Good	381	100	18.6	12.3	34.4	34.6
Excellent	625	100	23.8	16.2	34.4	25.6
Health of Children Since Infancy						
TOTAL	1,293ᵇ	100	20.2	15.5	34.8	29.5
Poor or Fair	79	100	25.3	8.9	34.2	31.6
Good	285	100	20.0	13.3	35.4	31.2
Very Good	439	100	16.6	15.7	32.3	35.3
Excellent	471	100	23.4	17.8	36.7	22.1
Deaths of Children						
TOTAL	1,309	100	21.2	15.4	34.4	29.1
Families With Deaths	103	100	9.7	23.3	33.0	34.0
Families Without Deaths	1,206	100	22.1	14.7	34.5	28.7

ᵃ Includes four unknowns on average health rating.
ᵇ Includes 19 unknowns on average health rating. Excludes 16 couples whose children were infants at interview, i.e., under 2 years of age.

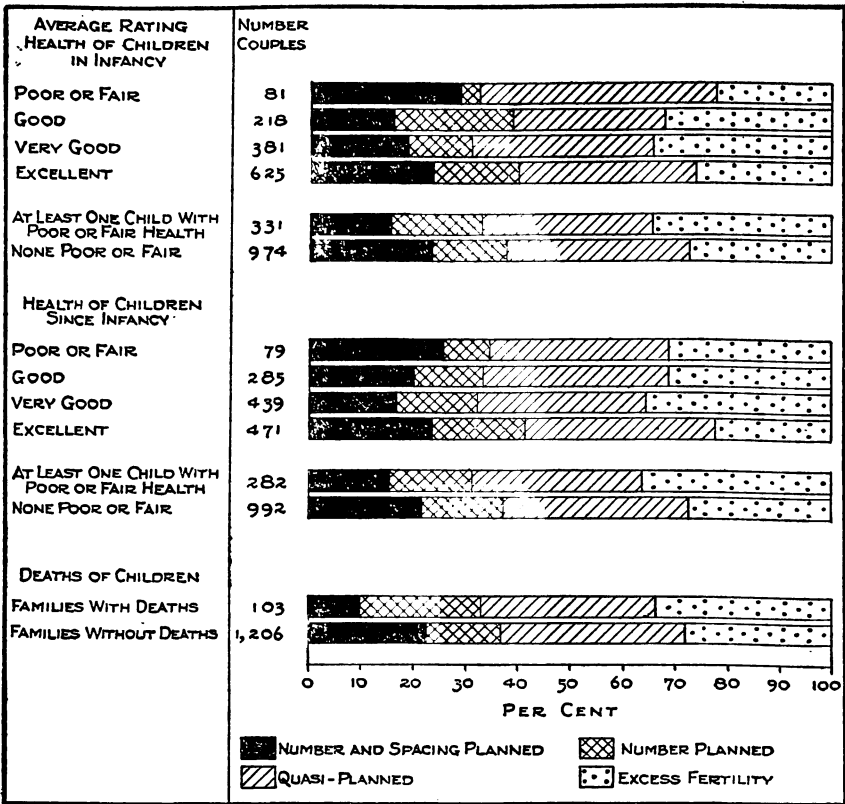Table 16. Fertility-planning status of fertile couples by average rating of health of children in infancy and since infancy and by deaths of children.

more likely to be "number and spacing planned" than are large families and probably partly for this reason the proportion of such couples is higher in the "poor or fair" and "excellent" health-of-children categories than in the intermediate health-status groups. This type of bias is overcome in part in the analyses specific with reference to number of live births (Table 17).

With the above refinements, it is only for the two-child families that the data rather consistently indicate increasing proportions of "planned families" and especially increasing proportions of "number and spacing planned" families with rising health status of children "in infancy" and "since infancy."[21]

[21] The chi square of the proportions of "number and spacing planned" couples among two-child families, by health of children since infancy, is 7.46 (d.f. = 3), almost significant at the 5 per cent level.

AVERAGE RATING	NUMBER OF COUPLES	PER CENT DISTRIBUTION BY FERTILITY-PLANNING STATUS				
		Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
ONE LIVE BIRTH						
Health of Children in Infancy						
Poor or Fair	54	100	42.6	0.0	50.0	7.4
Good	52	100	32.7	11.5	42.3	13.5
Very Good	93	100	48.4	0.0	34.4	17.2
Excellent	166	100	38.0	6.0	39.8	16.3
TWO LIVE BIRTHS						
Poor or Fair	20	100	0.0	15.0	35.0	50.0
Good	96	100	15.6	30.2	25.0	29.2
Very Good	137	100	16.8	18.2	46.0	19.0
Excellent	284	100	26.1	24.3	36.6	13.0
THREE LIVE BIRTHS						
Good	38	100	5.3	23.7	26.3	44.7
Very Good	85	100	1.2	16.5	29.4	52.9
Excellent	106	100	8.5	17.0	25.5	49.1
ONE LIVE BIRTH						
Health of Children Since Infancy						
Poor or Fair	50	100	36.0	4.0	46.0	14.0
Good	86	100	40.7	4.7	40.7	14.0
Very Good	99	100	44.4	0.0	34.3	21.2
Excellent	117	100	34.2	8.5	45.3	12.0
TWO LIVE BIRTHS						
Poor or Fair	21	100	9.5	9.5	14.3	66.7
Good	105	100	19.0	25.7	38.1	17.1
Very Good	179	100	12.8	23.5	41.9	21.8
Excellent	219	100	28.3	23.7	36.5	11.4
THREE LIVE BIRTHS						
Good	60	100	3.3	6.7	33.3	56.7
Very Good	92	100	5.4	23.9	20.7	50.0
Excellent	72	100	5.6	18.1	30.6	45.8

Table 17. Fertility-planning status of fertile couples by average rating of health of children in infancy and since infancy and given number of live births reported by the couple.

It is also apparent that with the use of average ratings the

Table 18. Fertility-planning status of fertile couples by statement of wife and husband on extent to which poor health of children discouraged couple from having more children. Distributions by wife's statement also given separately for families reporting one, two, and three live births.

EXTENT OF DISCOURAGEMENT	NUMBER OF COUPLES	PER CENT DISTRIBUTION BY FERTILITY-PLANNING STATUS				
		Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
TOTAL	1,309	100	21.2	15.4	34.4	29.1
		ALL COUPLES				
Wife's Statement						
Very Much or Much	31	100	38.7	25.8	16.1	19.4
Some	78	100	15.4	19.2	25.6	39.7
Little	112	100	15.2	10.7	37.5	36.6
Very Little or Not at All	1,088	100	21.7	15.3	35.2	27.8
Husband's Statement						
Very Much or Much	26	100	19.2	26.9	34.6	19.2
Some	31	100	0.0	22.6	32.3	45.2
Little	114	100	15.8	17.5	32.5	34.2
Very Little or Not at All	1,138	100	22.3	14.7	34.6	28.4
		ONE LIVE BIRTH				
Wife's Statement						
Very Much, Much, Some	30	100	56.7	13.3	13.3	16.7
Little	33	100	45.5	0.0	36.4	18.2
Very Little or Not at All	302	100	38.4	4.0	43.4	14.2
		TWO LIVE BIRTHS				
Very Much, Much, Some	33	100	18.2	39.4	21.2	21.2
Little	41	100	4.9	9.8	61.0	24.4
Very Little or Not at All	466	100	22.3	23.4	36.3	18.0
		THREE LIVE BIRTHS				
Very Much, Much, Some	28	100	0.0	17.9	39.3	42.9
Little	22	100	0.0	22.7	18.2	59.1
Very Little or Not at All	184	100	6.5	16.8	26.1	50.5

intermediate groups are composed partly of couples with all children having intermediate ratings and partly of couples with children at opposite extremes on the health-rating scale. In view of this, the distributions by fertility-planning status are presented in Figure 9 for couples having and not having at least one child with a health rating of only "poor or fair." These distributions run counter to the hypothesis but they contain the bias that the chance expectancy of having at least one child of poor health is greater in large than in small families and it is known that the small families are more likely to be planned families. This also applies in the distributions by presence or absence of child mortality.

No systematic relation is found between fertility-planning status and extent of discouragement in having more children because of the wife's poor health (Table 18). Among one-child families, the proportion of "planned families" rises sharply with extent of discouragement (as stated by the wife) but the differences have been found to be not statistically significant as a result of small numbers in certain classes.

The previously described positive relation between fertility-planning status of the couple and health of children is consistent with the results found by health of wife and husband. Although in both cases the results are opposite those assumed in the hypotheses, they are perhaps reasonable in view of the direct relation of socio-economic status to both fertility-planning status and to health status of husband, wife, and children. Unfortunately, the sample is too small to permit an actual assessment of the *role* of socio-economic status in the direct relation of fertility-planning status to health status of children in families of given size.

Fertility in Relation to Health of Children. The hypothesis on this topic, as previously given, reads as follows: "The poorer the health of children . . . the smaller the planned families."

In the first place the relative unimportance of "poor health of children" as a deterrent to fertility of planned families in the Study may be judged from the fact that very few of the chil-

dren were rated by their mothers as having "poor" health. The same perspective is yielded by the fact that only 1.5 per cent of all mothers in the Study gave "poor health of children" as the main reason for not having more children, an additional 1 per cent gave this as the reason of second importance, and an-

Table 19. Distribution of fertile couples by statement of wife and husband on extent to which poor health of children discouraged couple from having more children, by average rating of health of children in infancy and since infancy.

AVERAGE RATING OF HEALTH OF CHILDREN	NUMBER OF COUPLES	PER CENT DISTRIBUTION BY EXTENT OF DISCOURAGEMENT				
		Total	Very Much or Much	Some	Little	Very Little or Not at All
		WIFE'S STATEMENT				
In Infancy						
TOTAL	1,309ᵃ	100	2.4	6.0	8.6	83.1
Poor or Fair	81	100	4.9	19.8	8.6	66.7
Good	218	100	7.3	13.8	9.6	69.3
Very Good	381	100	2.6	4.2	13.4	79.8
Excellent	625	100	0.2	2.6	5.3	92.0
		HUSBAND'S STATEMENT				
TOTAL	1,309ᵃ	100	2.0	2.4	8.7	86.9
Poor or Fair	81	100	1.2	2.5	6.2	90.1
Good	218	100	4.6	2.8	10.6	82.1
Very Good	381	100	2.1	2.4	11.0	84.5
Excellent	625	100	1.1	2.2	7.0	89.6
		WIFE'S STATEMENT				
Since Infancy						
TOTAL	1,293ᵇ	100	2.4	6.0	8.7	82.9
Poor or Fair	79	100	8.9	27.8	10.1	53.2
Good	285	100	5.3	9.8	13.7	71.2
Very Good	439	100	1.4	3.9	10.9	83.8
Excellent	471	100	0.6	2.1	3.6	93.6
		HUSBAND'S STATEMENT				
TOTAL	1,293ᵇ	100	2.0	2.4	8.8	86.8
Poor or Fair	79	100	7.6	1.3	2.5	88.6
Good	285	100	3.5	3.9	11.6	81.1
Very Good	439	100	1.4	3.6	10.9	84.1
Excellent	471	100	0.8	0.6	5.9	92.6

ᵃ Includes 4 unknowns on average health ratings.
ᵇ Includes 19 unknowns, excludes 16 couples whose children were infants at interview, i.e., under 2 years of age.

other 3 per cent as the reason of third importance. Thus only about 6 per cent of the mothers (and 4 per cent of the fathers) gave "poor health of children" as one of the three most important reasons for not having more children. The proportions are slightly higher (7 per cent for mothers and 5 per cent for fathers) with respect to "planned families" alone.

Likewise, only about 2 per cent of all mothers and fathers in the Study stated that they had been discouraged "very much or much" from having more children because of the poor health of their children. (Table 19.)[22] The proportions replying "very much or much" are related to health status of the children since infancy and to a less extent to health status of children in infancy.

Fertility rates by fertility-planning status of the couple and average rating on health of children in infancy are shown in the top section of Figure 10. Among "planned families" (number and spacing or number planned) and also among the "quasi-planned" families the parents of children with lowest average ratings of health in infancy exhibit the lowest fertility rate. Little confidence can be placed in the reliability of these rates, however, partly because they are based upon small numbers and partly because of the selective factors inherent in the use of average ratings on health of children in the family. As previously stated, it seems likely that groups with average ratings of "poor" and "excellent" may be unduly weighted with small families because all or almost all children in the family would need to have an extreme rating on health in order to have an extreme "average" rating for all children in the family.[23] Whatever may be the roles of statistical reliability and selection in the low fertility rates for the "poor or fair" group, the remaining rates do not increase with improvement of health status of children in infancy.

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[22] Within "planned families" alone the corresponding proportions are 4 per cent for mothers and 2.5 per cent for fathers.

[23] The effect of this selection is dampened somewhat by the combination of the "poor" and "fair" categories on the one hand and by the large proportion of children of "excellent" health on the other.

AVERAGE RATING HEALTH OF CHILDREN IN INFANCY	NUMBER COUPLES	RATE	
			NUMBER AND SPACING OR NUMBER PLANNED
POOR OR FAIR	26	112	
GOOD	84	206	
VERY GOOD	118	192	
EXCELLENT	250	188	
			QUASI-PLANNED
POOR OR FAIR	37	141	
GOOD	64	209	
VERY GOOD	131	215	
EXCELLENT	215	201	
			EXCESS FERTILITY
POOR OR FAIR	18	*	
GOOD	70	310	
VERY GOOD	132	312	
EXCELLENT	160	288	
DEATHS OF CHILDREN			NUMBER AND SPACING OR NUMBER PLANNED
FAMILIES WITH DEATHS	34	300	
FAMILIES WITHOUT DEATHS	444	179	
			QUASI-PLANNED
FAMILIES WITH DEATHS	34	306	
FAMILIES WITHOUT DEATHS	416	193	
			EXCESS FERTILITY
FAMILIES WITH DEATHS	35	477	
FAMILIES WITHOUT DEATHS	346	278	

0   100   200   300
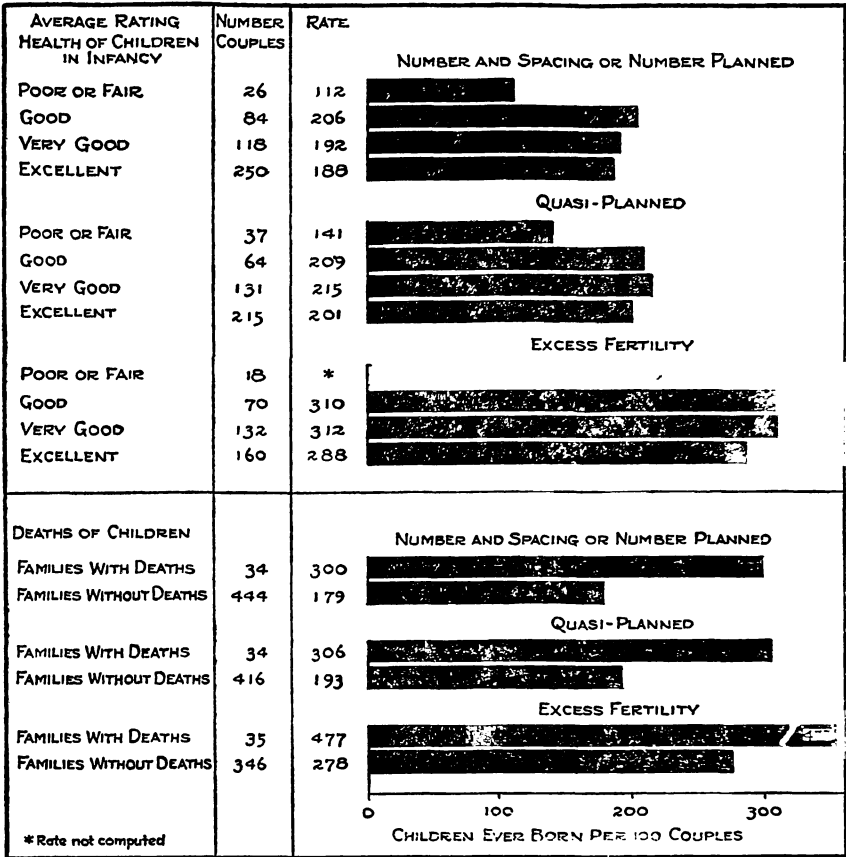* Rate not computed   CHILDREN EVER BORN PER 100 COUPLES

Fig. 10. Fertility rates of fertile couples by average rating of health of children in infancy, by deaths of children in the family, and by fertility-planning status of the couple.

Among the "number and spacing or number planned" couples there is a rather striking increase in fertility rates with rising average rating of health of children since infancy (Figure 11). Caution must be used in interpreting this as support of the hypothesis, however, because the limitations arising from small numbers and selective factors associated with average ratings also apply here.

On the assumption that deaths of children are frequently preceded by illness and that the average ratings of health of children tend to be lower in families reporting deaths of children than in those with all children living, fertility rates are

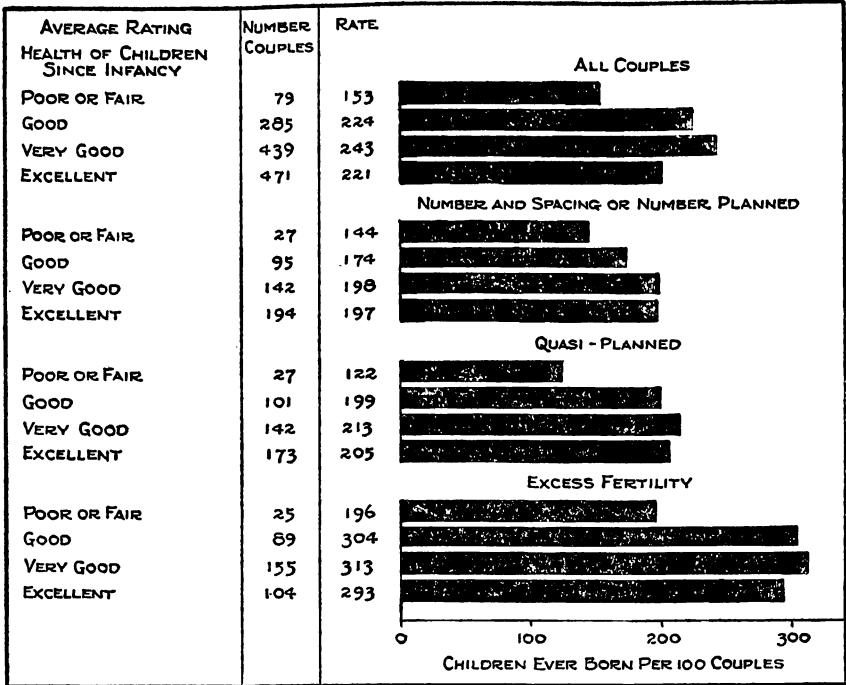| Average Rating Health of Children Since Infancy	Number Couples	Rate	
			All Couples
Poor or Fair	79	153	
Good	285	224	
Very Good	439	243	
Excellent	471	221	
			Number and Spacing or Number Planned
Poor or Fair	27	144	
Good	95	174	
Very Good	142	198	
Excellent	194	197	
			Quasi - Planned
Poor or Fair	27	122	
Good	101	199	
Very Good	142	213	
Excellent	173	205	
			Excess Fertility
Poor or Fair	25	196	
Good	89	304	
Very Good	155	313	
Excellent	104	293	
		0 100 200 300	
		Children Ever Born Per 100 Couples	

Fig. 11. Fertility rates of fertile couples by average rating of health of children since infancy and by fertility-planning status of the couple.

presented for the paired groups in Figure 10. In this instance the families with deaths of children are represented by small numbers. However, within each fertility-planning group the families with deaths are characterized by much higher fertility than those without deaths of children. As already stated, childless couples were excluded from the analysis so they have no part in accounting for the low fertility of the latter group. Nevertheless, a kindred bias is present in that the sheer chance expectancy of at least one child death in a family is higher in large than in small families. It is also possible that among the "planned families" in which child mortality occurs, the high fertility rate is to some extent due to efforts at replacement of the lost children.[24] The factor of replacement will be considered in a later study.

[24] In the "excess fertility" group the higher fertility of families with deaths probably reflects the ordinary association of high fertility, high infant mortality, and low economic status.
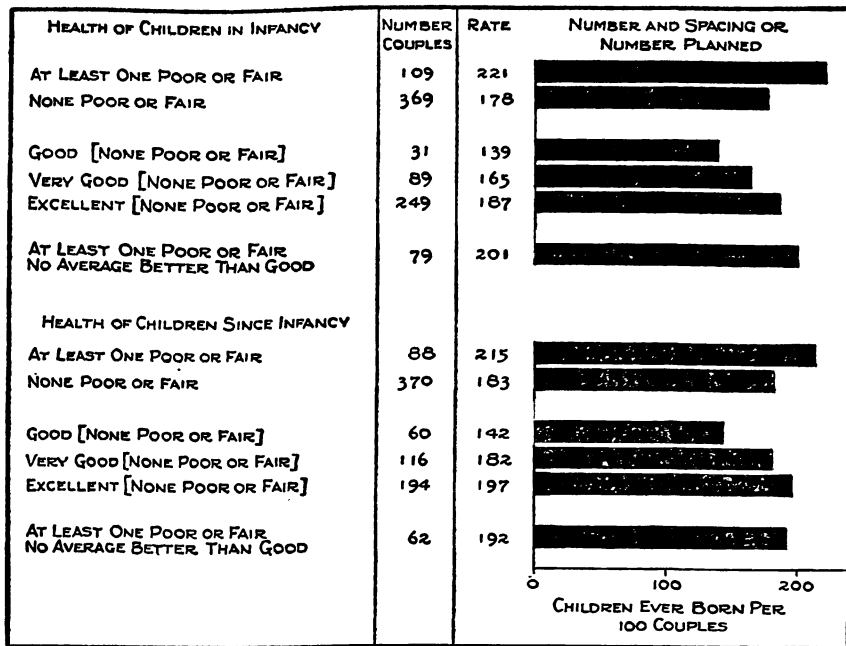
Health of Children in Infancy	Number Couples	Rate	Number and Spacing or Number Planned
At Least One Poor or Fair	109	221	
None Poor or Fair	369	178	
Good [None Poor or Fair]	31	139	
Very Good [None Poor or Fair]	89	165	
Excellent [None Poor or Fair]	249	187	
At Least One Poor or Fair No Average Better Than Good	79	201	
Health of Children Since Infancy			
At Least One Poor or Fair	88	215	
None Poor or Fair	370	183	
Good [None Poor or Fair]	60	142	
Very Good [None Poor or Fair]	116	182	
Excellent [None Poor or Fair]	194	197	
At Least One Poor or Fair No Average Better Than Good	62	192	

0　　　　　100　　　　　200
Children Ever Born Per
100 Couples

Fig. 12. Fertility rates of fertile couples of "planned family" status sub-divided by joint consideration of average rating of health of children and presence or absence of at least one child with a health rating of "poor or fair."

The classifications in Figure 12 by whether the mother rated the health of at least one child as "poor or fair" represent another attempt to circumvent the limitations imposed by average ratings on health of children. They are restricted to "planned families." First of all it will be noted that families with at least one child rated as "poor or fair" in health during infancy or since infancy are more fertile than those with no children with health rating as low as this. As in the classifications by presence or absence of deaths, part of this is probably due to greater chance expectancy of finding one child of relatively poor health in large than in small families.

Of possibly more interest is the subdivision in Figure 12 of the families with no children rated as low as "poor or fair" *in infancy* (top panel) and since infancy (lower panel). Within these subdivisions, fertility rates vary by average health rating in a manner that supports the hypothesis. Thus in the classification by health during infancy, the fertility rates extend from

139 for the parents of children with average ratings of "good" health to 187 for the "excellent" group. However, the fertility rate is still higher for couples with at least one child rated as "poor or fair" and with none rated better than "good."

Owing to heavy concentration of replies to the question regarding extent of discouragement from having more children because of poor health of children, these data are of limited use for fertility comparisons. The fertility rates among "planned families" by wife's statement of extent of discouragement are as follows: "very much or much," 160; "some," 189; "little," 186; and "very little or not at all," 189. These rates are based upon 20, 27, 29, and 402 cases respectively.

In summary, although more adequate measures of health of wife, husband, and children are needed for rigorous testing, the data that are available from the Indianapolis Study fail to confirm the hypotheses that the poorer the health of wife, husband, and children the higher is the proportion of couples practicing contraception effectively and the smaller are the planned families. In most cases the opposite type of relationship is found. To some extent the relationship observed between health and fertility-planning status can be accounted for by the interrelation of socio-economic status, health, and fertility-planning status.

As with other factors investigated in the Study, there probably is a two-way relation between fertility and health. Probably some of the planned families in the Study have regulated family size partly on the basis of health of wife or children. It seems almost certain that, especially in the "excess fertility" group, poor health of wives and children is in part a function of high fertility and poverty.

Number of couples by fertility-planning status and ratings of self, spouse, and interviewer on pep and energy of wife and husband.

RATING ON PEP AND ENERGY	PEP AND ENERGY OF WIFE					PEP AND ENERGY OF HUSBAND				
	Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility	Total	Number and Spacing Planned	Number Planned	Quasi-Planned	Excess Fertility
ALL COUPLES	1,444	403	205	454	382	1,444	403	205	454	382
Rating By Self										
Very Little or Little	76	18	14	19	25	14	1	1	2	10
Somewhat Less Than Average	126	37	23	36	30	90	31	6	29	24
About Average	750	184	70	271	225	734	183	101	241	209
Somewhat More Than Average	221	78	39	58	46	281	82	41	98	60
Much	140	50	13	41	36	141	49	19	44	29
Very Much	131	36	46	29	20	184	57	37	40	50
Rating By Spouse										
Very Little or Little	44	11	6	15	12	35	6	2	7	20
Somewhat Less Than Average	132	39	23	42	28	75	27	12	21	15
About Average	731	196	96	225	214	764	202	96	244	222
Somewhat More Than Average	271	86	29	88	68	256	86	32	80	58
Much	150	42	24	51	33	178	48	26	64	40
Very Much	116	29	27	33	27	136	34	37	38	27
Rating By Interviewer										
Worn Out	75	6	15	24	30	28	5	2	4	17
Some	289	91	29	81	88	114	28	9	38	39
Average	593	157	68	206	162	656	174	70	213	199
Much	410	123	79	119	89	544	163	103	171	107
Unlimited	77	26	14	24	13	99	33	18	28	20
Unknown						3		3		