SOCIAL AND PSYCHOLOGICAL FACTORS AFFECTING FERTILITY

XVII. THE INTERRELATION OF FERTILITY, FERTILITY PLANNING, AND FEELING OF PERSONAL INADEQUACY¹

CHARLES F. WESTOFF AND CLYDE V. KISER

G ENERAL feelings of psychological insecurity which supposedly characterize modern competitive urban society have been suggested as factors at least partially operative in the downward trend of the birth rate. Exactly what role they play varies with the theorist. Corrado Gini, at one extreme, was firmly convinced that man's fecundity was being reduced by the psycho-physical consequences of the competitive struggle. Modern gynecologists are pointing with increasing frequency to psychosomatic conditions as possible causes of sterility. Sociologists and psychologists, on the other hand, are more inclined to regard feeling of personal insecurity as a basic factor not in the impairment of fecundity but rather in a reduction of the motivation to have children.

Data on the relationship of these variables have been conspicuously absent. This has probably been due to both the subjective nature of "psychological insecurity" and to the lack of the interdisciplinary approach that such a study requires. To the authors' knowledge, the data collected in the Indianapolis Study and presented in this paper represent the first attempt at measuring the interrelationship of feeling of personal inadequacy, fertility-planning status, and fertility. Are feelings of inadequacy detrimental or conducive to effective contraceptive practice? Among the couples who do practice contraception regularly are feelings of inadequacy associated with

¹ This is the seventeenth 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. The first-mentioned author wishes to thank the Committee for the fellowship which facilitated the preparation of this paper.

The Milbank Memorial Fund Quarterly

high or low fertility? What are the socio-psychological correlates of psychological insecurity? These are the main questions raised in this analysis. The particular hypothesis under consideration is: "The stronger the feeling of personal inadequacy, the higher the proportion of couples practicing contraception effectively and the smaller the planned families."

THE DATA

The general demographic criteria and the sampling plan of the Indianapolis Study have been described in previous articles.² Briefly, the 1,444 couples in the "inflated" sample met the following eligibility requirements for inclusion in the Study: husband and wife native white, both Protestant, both at least eighth grade graduates, married during 1927-1929, neither previously married, husband under 40 and wife under 30 at marriage, and both residents of a large city most of the time since marriage. Furthermore, the 1,444 couples are those classified as "relatively fecund."³

The fertility-planning categories, which were constructed from detailed pregnancy and contraceptive histories, including data on termination of pregnancies and attitudes toward each pregnancy, have also been described in earlier reports.⁴ In descending order of success in fertility planning, there are four

240

² For a complete description of the eligibility requirements and their rationale see Whelpton, P. K. and Kiser, Clyde V.: Social and Psychological Factors Affecting Fertility. IV. Developing the Schedules, and Choosing the Type of Couples and the Area to be Studied. The Milbank Memorial Fund *Quarterly*, October, 1945, xxiii, No. 4, pp. 386-409 (Reprint pp. 139-162). A detailed account of the sampling procedure may be found in Whelpton, P. K. and Kiser, Clyde V.: Social and Psychological Factors Affecting Fertility. v. The Sampling Plan, Selection, and Representativeness of Couples in the Inflated Sample. The Milbank Memorial Fund *Quarterly*, January, 1946, xxiv, No. 1, pp. 49-93 (Re-print pp. 163-207)

print pp. 163-207).

³ All couples reporting four or more live births were classified as "relatively fecund" regardless of other circumstances. Couples with three or fewer live births were also 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 if never pregnant, 36 if ever preg-nant). Failure to conceive in the absence of contraception practiced "always" or "usually" during periods of the above durations was considered "good reason" for such belief. ⁴ See 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). ³ All couples reporting four or more live births were classified as "relatively

classifications: Number and Spacing Planned, Number Planned, Quasi-Planned, and Excess Fertility.⁵ The measure of fertility employed throughout this analysis represents the number of live births per 100 couples. This rate is not standardized for age because of the high degree of homogeneity of the couples with respect to duration of marriage.

The data collected to measure "feeling of personal inadequacy" constitute a series of thirty-five questions of the multiple-choice variety. In addition, there is the interviewer's rating of each spouse on a scale of Personal Inadequacy. This rating was based on the interviewer's over-all, subjective impression of the respondent after the interview was completed. These thirty-five questions, along with a supplementary list of forty-two other questions (reduced to sixteen core items in the validity check, that is, not repeating the same question to or about the spouse) were subjected to tests of validity and item analysis. The validity test consisted in an item evaluation by a group of psychiatrists and the item analysis involved various statistical checks on the internal consistency of the items. The mechanical details of these and other tests and the original and supplementary lists of questions that were used are presented in the Appendix. The net effect of these refinements was to limit the final number of questions to twenty-

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 they neither wanted the last pregnancy nor another.'

Kiser, Clyde V. and Whelpton, P. K.: Social and Psychological Factors Affecting Fertility. 1x. Fertility Planning and Fertility Rates by Socio-Economic Status. The Milbank Memorial Fund *Quarterly*, April, 1949, xxvii, No. 2, p. 211 (Reprint p. 382).

⁵ The four categories may be summarized as follows: "Number and Spacing Planned. The 403 couples in this group exhibit the most "Number and Spacing Planned. The 403 couples in this group exhibit the most complete planning of fertility in that they had no pregnancies that were not deliber-ately planned by stopping contraception in order to conceive. The group consists of two major subdivisions: (a) 121 couples practicing contraception regularly and con-tinuously 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 pregnancy under other circumstances. Because

The Milbank Memorial Fund Quarterly

eight: fourteen of or about the wife, and fourteen of or about the husband. From the responses of these two sets of items, indices of feeling of personal adequacy were then constructed for the wife and husband separately and a joint classification was derived for the couple.6

DISTRIBUTION BY THE SUMMARY INDICES OF PERSONAL ADEQUACY

It is evident from the distributions in Table 1 that a significantly greater proportion of husbands than wives score high

INDEX OF	Nu	MBER	Percentage			
INDEX OF PERSONAL ADEQUACY W OTAL 100 and Over (High) 90-99 80-89 70-79 60-69 50-59 Under 50 (Low)	Wives	Husbands	Wives	Husbands		
Total	1,444	1,444	100.0	100.0		
100 and Over (High)	33	76	2.3	5.3		
90-99	138	226	9.5	15.6		
80-89	273	355	18.9	24.6		
70–79	375	399	26.0	27.6		
60-69	417	297	2 8. 9	20.6		
5059	138	65	9.5	4.5		
Under 50 (Low)	70	26	4.9	1.8		

Table 1. Numerical and percentage distributions of wives and husbands on the summary indices of personal adequacy.

⁶ Only the core items of the twenty-eight questions used in the construction of the summary indices of personal adequacy are presented below. The first number in the parenthesis represents the number of times the question was used in the index. There are four possibilities: asked of the wife about herself; asked of the wife about her husband; asked of the husband about himself; and of the husband about his wife. The second number in the parenthesis indicates the number of alternative responses provided in the questionnaire.

How often is it difficult for you to make up your mind about the things that have to be done day by day? (1:5)

Do you get upset easily? (4:5)

How much confidence do you have in yourself? (4:7)

Aside from financial matters, how good a job do you think you and your husband (wife) could do in bringing up several children? (2:5)

How much are you inclined to worry? (4:7)

Are you a good manager? (1:7) On the whole, how good a chance do you have to express yourself and show what you are worth either in your homemaking (work) or in your outside (other) interests? (2:5)

How often has everything seemed to go wrong without any reason at all? (2:5) How much energy and pep do you ordinarily have? (4:7) Do you usually feel cheerful and look on the bright side of things? (2:7)

Interviewer's Rating on a Personal Inadequacy scale. (2:5)

242

on the personal adequacy scale. Over 45 per cent of the husbands are represented above the mean category (70-79) while only around 30 per cent of the wives are so represented. This is consistent with the findings on sex differences in most psychological tests, particularly the so-called personality inventories. The mean score is 78.7 for the husbands and 73.2 for the wives. The hypothetical range of the scores is from 14 to 124 and the actual range extends from 30 to 114 for wives and from 36 to 119 for husbands. The correlation between the scores of wives and the scores of husbands is +.39, as measured by the Pearsonian coefficient of correlation.

Sociological Correlates

Before proceeding to the analysis of the interrelation of feeling of personal adequacy with fertility-planning and fertility, it may be well to review certain other relationships. Previous investigations have revealed various types of relationships between fertility, contraceptive practice, and such variables as occupation, net worth, shelter rent, education, and socio-economic status in general. A definite positive association between these variables and fertility-planning status was discovered by Kiser and Whelpton; the higher the occupation, net worth, education, etc., the higher the proportion of couples practicing contraception effectively.7 More significantly, it was also ascertained that within the topmost fertility-planning group, the "number and spacing planned" category, a direct relation was manifested between fertility and socio-economic status. In other words, as status with respect to occupation, education, and the other above-mentioned variables increases, the fertility of these families also increases. The degree of consistency of this relationship fluctuates but the trend is clearly apparent.

Feeling of economic insecurity is another variable whose theoretical connection to psychological insecurity seems obvious. How obvious is it? Is socio-economic status the sole

⁷ Kiser and Whelpton, op. cit., 1x. Fertility Planning and Fertility Rates by Socio-Economic Status. Pp. 217-221. (Reprint pp. 388-391).

The Milbank Memorial Fund Quarterly

determinant of adequacy feelings? Or are feelings of personal adequacy more dependent upon the subjective evaluations of economic position—feelings of economic security? Or is feeling of adequacy independent of both these dimensions? The relationship of economic security to fertility and fertility-planning was the subject of a recent publication in this series, wherein it was found that both success in fertility-planning and the size of the "number and spacing planned" families are directly associated with feeling of economic security.8

In view of these findings and in consideration of the paramount analytical importance of these variables, it is pertinent to ascertain the nature and degree of the relation of several socio-economic variables to feeling of personal adequacy.

Occupation. The data on occupation are available in the Indianapolis Study in the conventional census classifications and refer here to the husband's longest occupation since marriage. As indicated in Tables 2 and 3, the pattern of association between occupational status and feeling of personal adequacy is a direct one. The higher the occupational status, the higher are the proportions of husbands and wives expressing feelings of psychological security. There are some irregularities, such as those shown by the proprietary and clerical classes, but the general relation is definite.

Net Worth. The meaning of this term is the same as its usage in the business and financial world. It is the sum of cash savings, market values of equities in real property, investments, business enterprises, and insurance policies, minus debts outstanding.9 The direct relationship between net worth and feeling of adequacy is not consistent but again it is fairly well established (Tables 2-3). In the "\$10,000 and Over" category, about 69 per cent of the husbands represented are above the

⁸ Kiser, Clyde V. and Whelpton, P. K.: Social and Psychological Factors Affect-ing Fertility. XI. The Interrelation of Fertility, Fertility Planning, and Feeling of Economic Security. The Milbank Memorial Fund *Quarterly*, January, 1951, xxix, No. 1, pp. 53-62, 76-83 (Reprint pp. 479-488, 502-509). ⁹ Kiser and Whelpton, *op. cit.*, IX. P. 212 (Reprint p. 383). Net worth was not asked as a single question but was computed on the basis of component data col-lected specifically for the purpose.

MEASURE OF	Number	Per Cei on te	nt Distri 1e Summa	BUTION BY	r the Ray of Perso	ring of t nal Ade	he Wife Quacy
Socio-Leonomic Status	OF COUPLES	Total	90 and Over	80–89	70–79	60–69	Under 60
ALL WIVES	1,444	100	11.8	18.9	26.0	28.9	14.4
Occupation of Husband							1
Professional	153	100	18.9	13.1	24.2	28.1	15.7
Proprietary	189	100	23.8	22.8	24.3	16.9	12.2
Clerical	358	100	9.8	22.9	27.1	27.4	12.8
Skilled	298	100	9.7	20.8	29.5	29.9	10.1
Semiskilled	375	100	5.9	16.5	24.8	35.2	17.6
Unskilled	29	100	3.5	10.3	17.3	31.0	37.9
Net Worth of Couple							
\$10,000 and Over	97	100	19.6	23.7	36.1	12.3	8.2
6,000-9,999	109	100	19.3	25.7	20.2	30.3	4.6
4,000-5,999	114	100	20.1	21.1	28.1	22.8	7.9
2,000-3,999	281	100	8.9	22.0	29.9	26.0	13.2
1,000–1,999	203	100	10.3	24.1	16.3	34.5	14.8
200- 999	307	100	10.4	17.6	26.4	30.3	15.3
0- 200	237	100	9.3	12.7	24.5	32.9	20.7
Net Indebtedness	94	100	7.4	3.2	32.0	34.0	23.4
Shelter Rent at Interview							
\$60 and Over	156	100	17.9	28.2	16.7	27.6	9.6
50–59	110	100	17.3	27.3	25.5	19.1	10.9
35-49	367	100	12.8	21.0	32.4	21.3	12.5
25-34	389	100	11.6	15.4	27.2	31.1	14.7
15-24	328	100	8.2	14.9	24.1	36.9	15.9
Under 15	90	100	5.6	12.2	18.9	34.4	28.9
Education of Wife							
College 4+	86	100	23.3	27.9	23.3	20.9	4.6
College 2-3	80	100	16.2	31.3	17.5	26.3	8.8
College 1	73	100	10.9	13.7	41.1	28.8	5.5
High School 4	489	100	10.8	20.9	28.4	23.9	15.9
High School 3	119	100	12.6	23.6	19.3	26.9	17.6
High School 2	231	100	10.7	14.3	28.6	33.8	12.6
High School 1	142	100	9.9	12.0	20.4	41.5	16.2
Grade School 8	218	100	9.2	15.1	24.8	31.7	19.3

Table 2. The relation of the wife's rating on the summary index of personal adequacy to the husband's occupation, net worth of the couple, monthly rent or rental value of the home, and education of the wife.

mean category on the adequacy scale as contrasted with 34 per cent in the "Net Indebtedness" class. With the wives, the corresponding figures are 43 per cent and 11 per cent, respectively. We noted above that the husbands are more concentrated at the "adequate" end of the scale.

Shelter Rent. This term refers to the monthly shelter rent or rental value of the home at the time of interview (1941).

245

Measure of Socio-Economic Status	Number of	PER CENT DISTRIBUTION BY THE RATING OF THE HUSBAND ON THE SUMMARY INDEX OF PERSONAL ADEQUACY					
Statu8	COUPLES	Total	90 and Over	80-89	70–79	60–69	Under 60
ALL HUSBANDS	1,444	100	20.9	24.6	27.6	20.6	6.3
Occupation of Husband				[1
Professional	153	100	26.1	37.3	17.6	16.3	2.6
Proprietary	189	100	36.0	20.6	28.0	10.6	4.8
Clerical	358	100	18.7	24.6	29.9	21.2	5.6
Skilled	298	100	18.8	26.5	28.2	22.5	4.0
Semiskilled	375	100	14.4	22.7	29.1	24.8	9.1
Unskilled	29	100	13.8	3.4	27.6	27.6	27.6
Net Worth of Couple						1	
\$10.000 and Over	97	100	45.4	23.7	14.4	14.4	2.1
6.000-9.999	109	100	25.7	40.4	22.0	8.3	3.7
4,000-5,999	114	100	25.4	31.6	26.3	16.7	0.0
2,000-3,999	281	100	21.7	23.1	33.8	14.9	6.4
1,000-1,999	203	100	17.7	21.7	22.7	29.1	8.9
200- 999	307	100	18.2	25.7	31.6	17.6	6.8
0- 200	237	100	13.5	20.2	24.9	34.6	6.8
Net Indebtedness	94	100	17.0	17.0	35.1	19.1	11.7
Shelter Rent at Interview							
\$60 and Over	156	100	30.8	33.3	17.9	16.7	1.3
50-59	110	100	17.3	35.5	24.5	12.7	10.0
35-49	367	100	23.2	28.3	24.0	19.9	4.6
25-34	389	100	21.6	18.5	\$2.4	21.3	6.2
15-24	328	100	17.1	19.5	33.2	22.6	7.6
Under 15	90	100	11.1	24.4	21.1	30.0	13.3
Education of Husband		1					
College 4+	174	100	27.0	33.9	17.2	17.8	4.0
College 2-3	102	100	31.4	33.3	25.5	7.8	2.0
College 1	58	100	19.0	24.1	34.5	13.8	8.6
High School 4	315	100	28.9	22.5	27.6	16.2	4.8
High School 3	118	100	17.8	24.6	29.7	26.3	1.7
High School 2	205	100	18.0	28.3	25.9	21.0	6.8
High School 1	134	100	11.9	21.6	29.1	28.4	9.0
Grade School 8	319	100	14.4	19.1	31.0	24.8	10.7

Table 3. The relation of the husband's rating on the summary index of personal adequacy to occupation, net worth of the couple, monthly rent or rental value of the home, and education of the husband.

Again the relationship with personal adequacy is direct (Tables 2-3). Of the husbands in the highest rental group "\$60 and Over", over 64 per cent are above the mean on the summary index of personal adequacy as compared with only about 35 per cent for those in the "Under \$15" rental class. When the

wives are considered, the association is even more pronounced and the consistency is higher.

Education. The relationship between personal adequacy and education is not complete. The expectation of a direct relation. similar to that existing between adequacy and the above variables, is only slightly borne out in the intermediate education classes. However, for both wives and husbands the proportions scoring 80 or higher are about twice as high in the "College 4+" group as in the "Grade School 8" class (Tables 2-3). The relationship is again more sharply defined for wives than for husbands. A possible reason for the lack of consistency in all the educational classes represented is that the difference between reaching the second and the third year in high school, for example, is less meaningful sociologically than the differences between occupational or economic levels. Furthermore, because of the eligibility restrictions no educational class below the eighth grade is represented in the Study. This restriction doubtless affects the character of couples ranking lowest by occupation, net worth, rent, income, etc., but the scales for these items do start from the bottom. Therefore, perhaps one would not expect a highly regular correlation between subjective selfevaluations of feelings of psychological adequacy and educational levels of single years above the eighth grade.

Socio-Economic Status. The index of socio-economic status is an empirically constructed rating of the couples on the basis of their scores on eight social and economic variables.¹⁰ As such, the index is a very useful summary device.

The relation between the rating of the wife and the husband on the index of personal adequacy and their rating on the index of socio-economic status is apparent in Table 4 and Figure 1 (top section). The relationship is clearly positive and, with but

¹⁰ These are: 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.

For the details of the construction of this index, see *Ibid.*, 1x. P. 244 (Reprint p. 415). A low index, in this instance, denotes high socio-economic status and vice versa.

Index of Socio-Economic Status of the Couple	Number of	Per Ce	Per Cent Distribution by the Rating of the V and the Husband on the Index of Personal Adequacy						
OF THE COUPLE	COUPLES	Total	90 and Over	8089	70–79	60–69	Under 60		
		WIFE							
Under 20 (High)	224	100	20.2	25.4	24.1	22.3	8.0		
20-29	243	100	16.1	22.6	27.6	21.4	12.3		
30 39	323	100	10.5	20.7	31.3	24.1	13.4		
40-49	403	100	8.9	17.6	25.3	33.5	14.7		
50 and Over (Low)	251	100	6.8	9.2	20.3	40.6	23.1		
				HUSI	BAND				
Under 20 (High)	224	100	29.9	37.0	17.9	14.3	0.9		
20-29	243	100	28.4	27.6	27.2	11.5	5.3		
30-39	323	100	21.4	23.2	32.5	17.3	5.6		
40-49	403	100	17.6	20.1	28.5	25.6	8.2		
50 and Over (Low)	251	100	10.7	19.1	29.1	31.1	10.0		

Table 4. The relation of the rating of the spouse on the index of personal adequacy to the score of the couple on the index of socio-economic status.

a few minor exceptions, it is regular and consistent throughout the intermediate classes for both wives and husbands. For both groups, the proportion of respondents with above average (80+) scores on personal adequacy is well over twice as large in the highest as in the lowest socio-economic group. Conversely, the same pattern is apparent with respect to respondents rating low on the adequacy scale.

Economic Security. The measure of "feeling of economic security" used here is the summary index constructed by Kiser and Whelpton for their publication on this subject.¹¹

The relation of the husbands' scores on this index to their

¹¹ Kiser and Whelpton, op. cit., XI. The Interrelation of Fertility, Fertility Planning, and Feeling of Economic Security. See pp. 45-47 (Reprint pp. 471-473) for analysis of the interrelation of these items, and pp. 112-114 (Reprint pp. 538-540) for the mechanics of the construction of the index.

analysis of the interrelation of these items, and pp. 112-114 (Reprint pp. 538-540) for the mechanics of the construction of the index. The index represents the sum of the ratings of the wife and husband separately on the following items: interviewer's rating of the wife and husband with respect to feeling of economic security; self-ratings of wives and husbands on extent to which economic security discouraged the couples from having (more) children; degree of confidence in ability to meet future expenses; frequency faced with possibility that husband would have his pay cut or lose his job; frequency of financial help to relatives; and amount of financial help that could be expected from relatives in emergencies.

		وكالباد معيالة المركب المسيعة عاليا فليهين أشادا المرجب والمحاصي ومصادي والتناق سيهوا المحصب سادي بالأكاف الأكاف الماك
INDEX OF SOCIO-ECONOMIC STATUS	NUMBER	
OF THE COUPLE		INDEX OF PERSONAL ADEQUACY - WIFE
UNDER 20 (HIGH)	224	
20-29	243	
30-39	323	
40-49	403	
50 AND OVER (LOW)	251	
		INDEX OF PERSONAL ADEQUACY - HUSBAND
UNDER 20 (HIGH)	224	
20-29	243	
30-39	323	
40-49	403	
50 AND OVER (LOW)	251	
INDEX OF ECONOMIC SECURITY OF EACH SPOUSE Wife		INDEX OF PERSONAL ADEQUACY WIFE
90 AND OVER (HIGH)	123	
80-89	335	
70-79	274	
60-69	275	
50-59	251	
UNDER 50 (LOW)	186	
HUSBAND		INDEX OF PERSONAL ADEQUACY - HUSBAND
90 AND OVER (HIGH)	132	
80-89	326	
70-79	255	
60-69	344	
50-59	216	
UNDER 50 (LOW)	1.71	
		0 10 20 30 40 50 60 70 80 90 100 Per Cent
		90 AND OVER 2280-89 22270-79

Ł

Fig. 1. Percentage distribution by rating of wife and husband on the index of personal adequacy, according to rating of the couple on the index of socioeconomic status and rating of each spouse on the index of economic security.

scores on the index of personal adequacy is positive, but not as high as might be expected on theoretical grounds.¹² Nevertheless, a comparison of the two extremes of the adequacy continuum—the "90 and Over" and the "Under 60" categories—

¹² The Pearsonian coefficient of correlation is +.34 for husbands and +.27 for wives. The correlation coefficients in the Indianapolis Study have been very low as a rule. The extent to which this reflects inadequate techniques of measurement is unknown.

249

Index of Economic Security	Number	Per Cent Distribution by Rating on Index of Personal Adequacy						
Economic Security	OF COUPLES	Total	90 and Over	80–89	70–79	60-69	Under 60	
Wife								
TOTAL	1,444	100	11.8	18.9	26.0	28.9	14.4	
90 and Over	123	100	22.0	24.4	17.1	27.6	8.9	
80-89	335	100	14.6	23.9	35.5	20.3	5.7	
70–79	274	100	10.9	20.1	22.6	31.4	15.0	
6069	275	100	14.2	19.3	30.5	29.1	6.9	
5059	251	100	8.8	13.1	23.5	30.3	24.3	
Under 50	186	100	2.2	11.8	16.1	39.2	30.6	
Husband								
Total	1,444	100	20.9	24.6	27.6	20.6	6.3	
90 and Over	132	100	40.9	29.5	20.5	8.3	0.8	
80-89	326	100	27.0	29. 8	22.7	16.6	4.0	
70–79	255	100	27.1	24.7	27.5	18.4	2.4	
6069	344	100	16.9	19.8	37.2	20.9	5.2	
50-59	216	100	12.5	21.8	25.5	30.6	9.7	
Under 50	171	100	3.5	24.0	26.3	27.5	18.7	

Table 5. The relation of the rating of the wife and the husband on the index of personal adequacy to their rating on the index of economic security.

indicates a definite and positive association of personal adequacy and economic security (*see* Table 5 and bottom sections of Figure 1). Essentially the same relationship is evident when wives are considered.

It is interesting to note, however, that the relationship between personal adequacy and economic security is not uniform by the occupational class of the husband. The correlation is highest (r = +.40) within the proprietary class and lowest (+.15) within the professional class. Although the differences for the remaining occupational classes are slight,¹³ sociological considerations might suggest a relatively high relationship in the proprietary class. The fact that the operation of a small business is so much an integral part of a man's daily life would seem to increase the probability of a sensitive association between psychological and economic security. It is extremely

¹³ The coefficients of correlation between feelings of personal adequacy and economic security of the husband within the remaining occupational groups are as follows: Professional, +.15; Clerical, +.28; Skilled, +.29; and Semiskilled, +.30. The small number of husbands classified as Unskilled (29) does not permit detailed analysis.

risky to generalize in this manner, however, because it might also be argued that the professional person's work is also an integral part of his daily life.

When socio-economic status is held constant, the positive relationship between personal adequacy and economic security is considerably weakened, but it still exists. There are, however, several irregularities in the consistency of the association. For example, the correlation is highest within the lowest socioeconomic status category. Nevertheless, the positive relationship is still visible throughout all groups.¹⁴ Thus we cannot say that the test factor wholly interprets the original correlation between feeling of personal adequacy and feeling of economic security.

Summary. The relation of feeling of personal adequacy to the various socio-economic factors presented above may be summarized as a direct association. Whether the measures of socio-economic status are considered individually or collectively, as the variable increases, the proportion of couples rated "adequate" also increases. Similarly, the relation of personal adequacy to economic security is also positive. Again this secondary relationship is partly but not entirely a function of socio-economic status. It exists independently. Although the relationship is not statistically high, the relative consistency and persistency of the association suggest that personal adequacy and economic security are part of the same dimension and that "security" feelings, rather than being compartmentalized, are generalized in nature. This comes as no surprise with respect to American urban middle-class society where individual success is highly stressed and usually measured in economic terms.

¹⁴ The correlation coefficients are:

Socio-Economic Status	Wife	Husband
High	+ .18	+ .13
Medium	+ .12	+ .23
Low	+ .29	+ .29

251

The Milbank Memorial Fund Quarterly

It must be kept in mind that the summary index of socioeconomic status does not consist of "classes" in the socialpsychological sense of the term, but rather in a series of discrete continua highly objectified and quantitatively expressed. If anything, the limits to the range of this scale seem to indicate that the couples have been drawn from the middle class. There are only eleven couples in the entire sample in which the husband's average annual income since marriage was \$6,000 or over. The average, of course, is lowered by the fact that it relates to the first 12-15 years of married life and covers a depression period. Nevertheless this hardly suggests the strong representation of an "upper" class in any sense of the word. On the other hand, the educational restrictions which limited inclusion to people with at least a grade school education, and the small number of husbands whose longest occupation since marriage was below the level of semiskilled¹⁵ strongly suggest the absence of a real "lower" class. But yet, even within this relatively confined group, we have evidence of consistent psychological differences. In other words, the 1,444 couples in a selected sample stratified on the basis of objective criteria of socio-economic status, stratify themselves in terms of highly subjective evaluations of their own feelings of personal adequacy.

The remainder of this paper will be devoted to extending the logic of these relationships to fertility-planning and fertility.

Personal Adequacy and Fertility Planning

The first part of the hypothesis stated: "The stronger the feeling of personal *inadequacy*, the higher the proportion of couples practicing contraception effectively. . . ." The measure of effectiveness of contraceptive practice employed is afforded by the four fertility-planning categories defined above. In this, and in the final section of this report, the component questions pertaining to personal adequacy will be considered

¹⁵ There are 29 unskilled laborers. Miscellaneous groups not included in the occupational classifications are: Service Workers except Domestic and Protective, 23; Protective Service Workers, 13; Farmers and Farm Managers, 3; Farm Laborers and Foremen, 2; and Unknown, 1.

		Per Ci	Per Cent Distribution by Planning Status				
Measure of Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility	
All Couples	1,444	100	27.9	14.2	31.4	26.5	
Chance for Self-Expression:							
Replies of Wives Excellent Good Fair Poor or Very Poor Replies of Husbands Excellent Good Fair Poor Very Poor Things go Wrong:	214 560 618 52 253 518 573 73 27	100 100 100 100 100 100 100 100	32.7 30.9 24.6 15.4 36.4 29.0 24.6 19.2 22.2	19.2 15.4 11.7 11.5 15.4 13.5 12.2 30.1 14.8	33.6 32.7 30.6 19.2 27.3 34.6 33.0 16.4 18.5	14.5 21.1 33.2 53.8 20.9 23.0 30.2 34.2 44.4	
Replies of Wives Very Seldom Seldom Sometimes Often Very Often Replies of Husbands Very Seldom Seldom Sometimes Often Very Often	278 370 566 149 81 267 459 539 110 69	100 100 100 100 100 100 100 100 100	34.2 37.3 24.4 17.4 7.4 39.0 30.9 24.5 19.1 5.8	15.8 12.4 14.8 8.1 23.5 15.4 14.2 13.5 12.7 17.4	31.3 30.8 32.3 32.2 27.2 25.5 33.1 34.1 25.5 31.9	18.7 19.5 28.4 42.3 42.0 20.2 21.8 27.8 42.7 44.9	

Table 6. Fertility-planning status by self-rating of wives and husbands regarding opportunity for self-expression, and by the self-rating of wives and husbands on the frequency with which things seem to go wrong for no reason at all.

in addition to the summary index. For purposes of generalization, primary attention has been paid to the proportions within the extreme fertility-planning categories—the "number and spacing planned" and the "excess fertility" groups. Caution should be exercised in reading these tables because of small numerical totals on which the percentages are based, particularly at the extreme parts of the response scales.

As indicated in Tables 6–16, the Indianapolis data definitely reject the first part of the hypothesis. In fact, just the opposite

The Milbank Memorial Fund Quarterly

type of relationship is evident—the stronger the feeling of personal *adequacy*, the higher tends to be the proportion of couples practicing contraception effectively. Having previously seen that a direct relation exists between adequacy and socio-economic status and economic security, and knowing the positive relationship between these latter two variables and fertility planning, we should expect an invalidation of the first part of the hypothesis.

The direct relation of feeling of personal adequacy to fertility planning is clearly supported in most of the response-patterns to the various questions. Especially pronounced associations are apparent in the self-ratings of the couples on the question concerning the opportunity for self-expression whether in their work (homemaking in the case of the wife) or in outside interests. Of those answering that they had an "excellent chance" for self-expression, 33 per cent of the wives and 36 per cent of the husbands fall within the "number and spacing planned" group. Of those reporting only a "poor" or "very poor" chance, only 15 per cent of the wives and 20 per cent of the husbands fall within this fertility-planning category (Table 6). The relationship is more striking when the proportions classified as "excess fertility" are considered. In this instance the relationship is maintained consistently throughout the intermediate classes of the response-scale.

It seems reasonable to assume that opportunity for selfexpression is largely a function of socio-economic status, because this position might have bearing upon the amount of leisure time available and at least partially affect the range of outside interests.¹⁶ Although the coefficients of correlation between the index of socio-economic status and opportunity for self-expression are not high in themselves (+.30 for wives and

¹⁶ When socio-economic status is discussed in a theoretical context here, we do not mean simply the particular standard of living but rather the whole complex of sub-cultural values, aspirations and motivations that different life-chances involve. On the other hand, when the *summary index* of socio-economic status is referred to in terms of its statistical relationship to a given variable we are obviously using a relatively crude and imperfect measure which is only inferentially related to the concept of social class.

+.32 for husbands) they are relatively high in comparison with the usual correlations found in the Indianapolis Study. Furthermore, when the index of socio-economic status is introduced as a constant, the lack of a markedly consistent relationship between chance for self-expression and fertility planning clearly demonstrates the absence of a wholly independent relation. Only within the "40 and Over" socio-economic category¹⁷ is the positive association clearly maintained, and this only when wives are considered. At the other socio-economic status levels, the strength of the positive relationship is considerably diminished.

An especially strong direct relation is also found between fertility planning and the self-ratings of wives and husbands with respect to the frequency with which "things seem to go wrong for no reason at all" (Table 6). Of those replying "very seldom," 34 per cent of the wives and 39 per cent of the husbands fall within the highest fertility-planning group. Of the respondents indicating "very often," only 7 per cent of the wives and 6 per cent of the husbands fall within this planning category. This question would seem to be probing both the degree of rationality (seeing cause and effect) and the extent of psychological adjustment to the personal problems of everyday life, both of which, of course, are included within the concept of "personal adequacy." The direct relation of the response to this question to fertility planning, therefore, theoretically would appear to be a function of the common denominator of rationality which is the essence of planning in general. It has already been established that "a considerable part, but not all, of the relationship between general planning and fertility planning

¹⁷ The "40-49" and the "50 and Over" socio-economic status levels were com-bined in order to enlarge the cells. These data are not presented in this report. When the wives are considered, the relation of opportunity for self-expression to fertility planning at this level ("40 and Over") presents the following pattern: 55 per cent of those who answered that they had an "excellent chance" for self-expres-sion are within the "number and spacing planned" and "number planned" classes combined, while only 22 per cent of those who replied that they have only a "poor chance" or "very poor chance" are included in these fertility-planning categories. Conversely, the percentages are 21 and 56 per cent, respectively, for wives represented in the "excess fertility" class in the "excess fertility" class.

		Per C	ent Distri	TRIBUTION BY PLANNING STATUS				
Measure of Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility		
All Couples	1,444	100	27.9	14.2	31.4	26.5		
Interviewer's Rating of Wife								
Self-Confident	271	100	31.4	20.7	29.5	18.5		
Well Satisfied	478	100	27.8	17.8	31.6	22.8		
Average	369	100	25.7	10.6	33.9	29.8		
Dissatisfied	292	100	28.1	7.5	31.2	33.2		
Strong Feelings of								
Inferiority	28	100	17.9	10.7	25.0	4 6.4		
Interviewer's Rating of								
Husbana Salf Coofident	244	100	20 7	21.2	32.0	18.0		
Well Sectored	244 564	100	28.7	21.5 15 A	31.0	20 4		
A warage	301	100	33.2	13.7	36.3	31 2		
Disection	201	100	10.0	9.7 11 A	25.9	42.8		
Strong Feelings of	201	100	17.7	11.7				
Inferiority	54	100	33.3	7.4	25.9	33.3		

Table 7. Fertility-planning status by the interviewer's rating of wife and husband on personal inadequacy.

results from their joint connection to socio-economic status.⁷¹⁸ When the index of socio-economic status is held constant, however, the original positive association of fertility-planning status and the replies to the question on frequency with which "things go wrong for no reason at all" remains relatively intact. In other words, this criterion of "rationality" is directly related to fertility planning within each socio-economic status group as well as to socio-economic status itself.¹⁹ The intensity of the original relationship is again weakened, however, and this indicates the intervening influence of socio-economic status.

The interviewer's rating of personal adequacy similarly reveals a marked positive association with fertility planning, particularly when the rating of the wife is considered (Table 7). With the exception of the husband's opinion of the wife, a

¹⁸ Freedman, Ronald and Whelpton, P.K.: Social and Psychological Factors Affecting Fertility. XII. The Relationship of General Planning to Fertility Planning and Fertility Rates. The Milbank Memorial Fund *Quarterly*, April, 1951, xxix, No. 2, p. 233 (Reprint p. 564).

¹⁹ The coefficients of correlation for the replies to this question and socio-economic status are +.28 and +.27 for wives and husbands, respectively.

		Per C	PER CENT DISTRIBUTION BY PLANNING STATUS				
Measure of Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility	
ALL COUPLES	1,444	100	27.9	14.2	31.4	26.5	
Upset Easily:							
Replies of Wives							
Very Calm	43	100	30.2	11.6	44.2	14.0	
Quite Calm	245	100	29.0	13.1	28.6	29.4	
Ordinary	694	100	29.3	14.1	33.0	23.6	
Easily	324	100	27.5	13.9	30.2	28.4	
Very Easily	138	100	19.6	18.1	27.5	34.8	
Replies of Husbands							
Very Calm	170	100	35.3	8.8	32.4	23.5	
Quite Calm	472	100	29.2	16.3	32.4	22.0	
Ordinary	602	100	23.1	15.1	32.6	29.2	
Easily	165	100	31.5	12.1	26.1	30.3	
Very Easily	35	100	40.0	5.7	20.0	34.3	
Wife's Opinion of Husband							
Very Calm	245	100	35.1	16.3	29.8	18.8	
Quite Calm	459	100	24.4	17.0	31.4	27.2	
Ordinary	493	100	31.6	11.8	31.8	24.7	
Easily	167	1 0 0	22.8	9.0	37.1	31.1	
Very Easily	80	100	13.8	17.5	22.5	46.3	
Husband's Opinion of Wife							
Very Calm	64	100	26.6	17.2	23.4	32.8	
Quite Calm	300	100	29.3	15.0	32.7	23.0	
Ordinary	635	100	29.0	12.9	31.3	26.8	
Easily	319	100	24.5	16.6	33.2	25.7	
Very Easily	126	100	28.6	11.1	28.6	31.7	

Table 8. Fertility-planning status by self-rating of wives and husbands, and rating of the spouse, regarding tendency to get upset easily.

relatively consistent relationship is manifested when tendency to get upset easily is used as the measure of personal adequacy (Table 8).

The pattern of association between feeling of adequacy and fertility planning does not maintain equal intensity or consistency for all of the individual questions. Although the data do not afford a single instance of a relationship of the type stated in the hypothesis, there are a number of instances in which the positive relationship is very weak and a few cases in which no relationship of any kind is evident. Illustrations of the former type may be seen in Table 9, where only a slight

N; N R. 33 • 39 ----s invie. CORONNO SIL id constant. entire 2 iency TE STITUS T itensi: " and this tatus. similarly: ; plann red (Tai he wile ical Fact y Plann caria, No.

ini ini

A BA

· E b

11 1 5. ' 11

-economy

trend is discernible in the self-ratings of the wife and the husband to the question on inclination to worry. An example of a lack of any trend is found in the same table in the rating of the wife by the husband on her tendency to worry. Apparently, inclination to worry is only slightly related to fertility planning. The same conclusion can be drawn with respect to the ex-

Table 9. Fe	ertility-planning	status by	self-rating	of	wives	and	husbands,
and rating of th	he spouse, on inc	dination to	worry.				

		Per C	CENT DISTRI	BUTION BY	PLANNING	STATUS
MEABURE OF Personal Adequacy	NUMBER of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Exces Fertility
ALL COUPLES	1,444	100	27.9	14.2	31.4	26.5
Inclination to Worry:					{	
Replies of Wives						
Very Little	90	100	27.8	22.2	31.1	18.9
Little	169	100	30.2	13.0	34.3	22.5
Less Than Average	119	100	21.0	20.2	35.3	23.5
About Average	522	100	28.9	11.7	32.2	27.2
More Than Average	225	100	31.1	14.2	32.0	22.7
Much	131	100	23.7	7.6	32.8	35.9
Very Much	188	100	26.6	19.1	22.9	31.4
Replies of Husbands					l	1
Very Little	226	100	25.7	19.5	35.0	19.9
Little	208	100	31.7	13.0	28.4	26.9
Less Than Average	163	100	31.3	12.9	33.1	22.7
About Average	471	100	23.1	14.2	33.5	29.1
More Than Average	226	100	33.2	13.7	30.5	22.6
Much	88	100	36.4	10.2	14.8	38.6
Very Much	62	100	19.4	9.7	35.5	35.5
Wife's Opinion of Husband						
Very Little	160	100	31.3	15.6	32.5	20.6
Little	232	100	28.9	15.9	29.7	25.4
Less Than Average	165	100	33.9	17.0	25.5	23.0
About Average	576	100	24.8	13.7	33.9	27.0
More Than Average	159	100	35.2	6.9	35.2	22.0
Much	69	100	17.4	8.7	24 6	49.
Very Much	83	100	22.9	22.9	27.7	26.
Husband's Opinion of Wife						1
Very Little	55	100	21.8	23.6	30.9	23
Little	186	100	31.2	14.0	28.5	26
Less Than Average	139	100	27.3	16.5	36.0	20
About Average	597	100	20.5	11.4	31.8	30
More Inan Average	2/6	100	26 1	15.6	32.2	21
Much Much	111	100	20.1	15.3	35.1	23
very widen	00	100	20.0	10.8	20.0	32

I Wan Kan

· nin

Sa Jan

Ł

11. 5 31 \mathbb{L}^* 21 3. ġ 'i 🖞 31 2

8.1 E 24: 11 ·*# <u>نقربا</u>. Ľ.; E 21 lli. 1. 5

نلا دند 5.9 ; N 10 | 11 7 | 11 2 51/1 46/1 1.11

30,9 28.5 36.O N 1.8

1 .2 t b

<u>11</u> j

2

2 20 (ME) 24 2

pressed self-confidence level of the respondents and its relation to fertility planning (Table 10). The ratings of husbands and wives on the "pep and energy" scale exhibit only a weak positive relation to fertility planning. The bearing of this particular variable on fertility planning has been discussed in a previous report.²⁰ The self-ratings of husbands on the kind of man-

> Table 10. Fertility-planning status by self-rating of wives and husbands, and rating of the spouse, on extent of self-confidance.

••••••••••••••••••••••••••••••••••••••		Per Cent Distribution by Planning Status							
MEASURE OF Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility			
All Couples	1,444	100	27.9	14.2	31.4	26.5			
Self-Confidence									
Replies of Wives Very Much Much Above Average Below Average Little Replies of Husbands Very Much Much Above Average About Average Below Average	123 139 131 881 121 49 281 248 248 248 616 40	100 100 100 100 100 100 100 100 100 100	32.5 23.7 38.2 27.0 24.0 26.5 28.5 32.3 30.6 23.5 40.0	23.6 12.9 18.3 12.8 7.4 24.5 18.9 13.7 10.5 14.4 2.5	26.8 25.2 23.7 32.3 47.9 24.5 27.0 29.4 38.7 32.0 25.0	17.1 38.1 19.8 27.8 20.7 24.5 25.6 24.6 20.2 30.0 32.5			
Little	11	•	-	-	-	-			
Wife's Opinion of Husband Very Much Much Above Average About Average Below Average Little	219 234 197 720 51 23	100 100 100 100 100 100	26.0 30.8 33.5 26.8 23.5 13.0	23.7 14.1 13.2 11.7 15.7 8.7	29.7 30.3 29.9 33.1 27.5 30.4	20.5 24.8 23.4 28.5 33.3 47.8			
Husband's Opinion of Wife Very Much Much Above Average About Average Below Average Little	183 183 270 693 76 37	100 100 100 100 100 100	29.5 35.0 27.4 25.4 31.6 24.3	13.7 15.3 17.8 13.3 9.2 13.5	29.5 26.2 31.9 32.6 38.2 29.7	27.3 23.5 23.0 28.7 21.1 32.4			

* Percentages not computed.

20 Cf. Herrera, Lee F. and Kiser, Clyde V.: Social and Psychological Factors (Continued on page 260)

		PER CENT DISTRIBUTION BY PLANNING STATUS								
MEASURE OF Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Erces Fertility				
ALL COUPLES	1,444	100	27.9	14.2	31.4	26.5				
Kind of Manager:										
Replies of Husbands										
Excellent	29	100	34.5	6.9	24.1	34.5				
Very Good	99	100	29.3	15.2	27.3	28.3				
Good	336	100	39.0	14.6	27.4	19.0				
About Average	871	100	24.2	14.1	33.5	28.1				
Less Than Average	59	100	18.6	15.3	37.3	28.8				
Poor	48	100	18.8	14.6	29.2	37.5				
Type of Job Could Do in Raising Several Children										
Replies of Wives										
Excellent	97	100	34.0	22.7	30.9	12.4				
Very Good	295	100	25.4	20. 7	27.1	26.8				
Good	648	100	29.5	12.3	33.5	24.7				
Fair	378	100	24.3	10.8	32.5	32.3				
Poor	25	100	48 .0	-	16.0	36.0				
Replies of Husbands										
Excellent	203	100	28.1	19.7	27.1	25.1				
Very Good	394	100	24.9	15.7	33.0	26.4				
Good	554	100	31.9	13.0	30.1	24.9				
Fair	267	100	23.2	10.9	34.1	31.8				
Poor	26	100	34.6	7.7	42.3	15.4				

Table 11. Fertility-planning status by the self-rating of the husband on his abilities as a manager and by self-rating of wife and husband on the type of job they could do in raising several children.

ager they feel they are presents a similar situation (Table 11).²¹

A rather curious pattern of association with fertility planning is present in the distribution of responses to the question concerning the type of job the wife and husband felt they could do in raising several children (Table 11). The replies of the wives exhibit a relatively consistent, direct relation to fertility planning except in the "poor" category which is represented by only twenty-five cases. The replies of the husbands, on the other

²¹ See also Freedman and Whelpton, op. cit. XII. Pp. 218-243 (Reprint pp. 549-574).

Affecting Fertility. XIII. Fertility in Relation to Fertility Planning and Health of Wife, Husband, and Children. The Milbank Memorial Fund Quarterly, July, 1951, XXIX, No. 3, p. 337-338, 345.

hand, exhibit little or no relation to fertility-planning status. A clue to this anomaly may lie partially in the fact that whereas 41 per cent of the husbands rated themselves as capable of doing an "excellent" or "very good" job in raising several children (aside from financial matters), only about 27 per cent

Table 12. Fertility-planning status by self-rating and by rating of the spouse on feeling of cheerfulness and optimism.

3		PER CENT DISTRIBUTION BY PLANNING STATUS							
Measure of Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility			
All Couples	1,444	100	27.9	14.2	31.4	26.5			
Feel Cheerful									
Replies of Wives Extremely Very Rather Ordinary Rather "Blue" Very or Extremely "Blue" Replies of Husbands Extremely Very Rather Ordinary Rather "Blue"	55 221 496 607 61 4 68 214 547 554 59	100 100 100 100 100 • • 100 100 100 100	43.6 30.3 31.7 22.2 32.8 • 42.6 30.4 30.0 22.9 28.8	18.2 17.6 14.3 12.0 16.4 * 5.9 22.9 16.1 10.1 13.6	25.5 29.9 29.4 34.1 34.4 • 38.2 21.5 32.7 35.2 13.6	12.7 22.2 24.6 31.6 16.4 • 13.2 25.2 21.2 31.8 44.1			
"Blue"	2	•	•	•	•	•			
Wife's Opinion of Husband Extremely Very Rather Ordinary Rather "Blue" Very or Extremely "Blue"	77 241 499 526 85 16	100 100 100 100 100	32.5 34.9 28.3 25.9 17.6	15.6 19.9 13.2 13.5 7.1	33.8 31.5 37.1 26.4 30.6	18.2 13.7 21.4 34.2 44.7			
Husband's Opinion of Wife Extremely Very Rather Ordinary Rather "Blue" Very or Extremely "Blue"	44 257 552 488 96 7	100 100 100 100 100	29.5 38.1 26.3 22.7 33.3	13.6 13.6 16.3 12.9 11.5	27.3 27.2 30.4 35.2 32.3	29.5 21.0 27.0 29.1 22.9			

aly, E 1p. 39

· King Ing

> 27 1

1 | B. 1. 7 | E. 11 1 | D.1 | 1

ROZZ V REM

S. d.L.

* Percentages not computed.

261

The Milbank willing a wind a wind

J.

ï

3

of the wives so evaluated themselves. The difference may reflect the fact that a mother spends much more time with the children than does the father and because of her greater experience in facing the problems of child-rearing she may tend to be

Table 13. Fertility-planning status by the self-rating of wives and husbands on questions regarding share of good breaks and luckiness in friends, and by self-rating of husbands on whether they have been lucky in the people for whom and with whom they have worked.

		PER CENT DISTRIBUTION BY PLANNING STATUS							
MEASURE OF Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility			
ALL COUPLES	1,444	100	27.9	14.2	31.4	26.5			
Share of Good Breaks:									
Replies of Wives Definitely Yes Probably Yes Doubtful	280 850 198	100 100 100	39.3 29.5 14.1	14.6 15.1 11.1	27.5 30.9 35.4	18.6 24.5 39.4			
Probably No	77	100	10.4	10.4	35.1	44.2			
Definitely No	39	100	15.4	15.4	43.6	25.6			
Replies of Husbands Definitely Yes Probably Yes Doubtful Probably No Definitely No Lucky in Friends: Replies of Wives Very Lucky Bather Lucky	260 817 238 83 46 457 633	100 100 100 100 100	34.3 31.0 19.3 14.5 6.5 34.4 28 0	15.0 13.2 13.0 15.7 30.4	28.8 29.9 40.3 37.3 17.4 33.0 29.5	21.9 25.9 27.3 32.5 45.7			
Neither	297	100	18.5	11.8	33.3	36.4			
Rather Unlucky Very Unlucky	36 21	100 100	22.2 28.6	22.2 9.5	30.6 28.6	25.0 33.3			
<i>Replies of Husbands</i> Very Lucky Rather Lucky Neither Rather Unlucky Very Unlucky	368 649 320 64 41	100 100 100 100 100	33.7 25.0 26.6 23.4 36.6	10.3 15.7 15.9 14.1 12.2	31.0 35.3 22.5 42.2 29.3	25.0 29.0 35.0 20.3 22.0			
Lucky in Employment:									
<i>Replies of Husbands</i> Very Lucky Rather Lucky Neither Rather Unlucky Very Unlucky	447 625 248 83 37	100 100 100 100 100	34.0 24.3 25.0 27.7 27.0	13.6 14.7 12.5 20.5 10.8	30.9 35.8 26.2 16.9 35.1	21.5 25.1 36.3 34.9 27.0			

262



less presumptuous than her husband about success in child-rearing.

Of the four questions asked about feeling of cheerfulness and optimism, only two were retained in the summary index of personal adequacy. The responses to these two questions, opinions of each spouse about cheerfulness of the other spouse (Table 12) exhibit only a moderate direct relation of "cheerfulness" to fertility-planning status. The marked skewness of the distributions, with only sixteen and seven cases in the two "very or extremely blue" categories is again noteworthy. The self-ratings of wives and husbands on "cheerfulness" present a similar situation. The slight relationship that does exist virtually disappears when socio-economic status is held constant.

With respect to the other items excluded from the summary index on the basis of the item analysis, only the responses to the questions regarding "share of good breaks" bear a fairly consistent positive relation to fertility planning (Table 13). It seems clear that whether or not a person considers himself lucky in this respect would be at least partially influenced by his socio-economic status. When socio-economic status is held constant, the direct association of "share of good breaks" with fertility planning is considerably weakened but it persists. It is, of course, impossible to determine whether the feeling that one has had his or her "share of good breaks" precedes or reflects effective planning of family size. The same may be said of many of the other questions yielding positive associations with fertility planning. The remaining excluded questions which presume to measure luck in friendships and in employment situations (Table 13), and difficulty in making up one's mind (Table 14) all fail to reveal any pronounced relationship to fertility planning.

It is significant to note that the positive relationship between fertility-planning status and feeling of personal adequacy, as measured by the questions in Tables 6–14, is most marked and most consistent when the replies of the wives and their

		PER CENT DISTRIBUTION BY PLANNING STATUS							
Measure of Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility			
ALL COUPLES	1,444	100	27.9	14.2	31.4	26.5			
Difficulty Making Up Mind:									
Replies of Wives									
Very Seldom	440	100	32.7	16.6	29.5	21.1			
Seldom	460	100	27.4	13.5	32.2	27.0			
Sometimes	414	100	24.4	15.0	30.4	30.2			
Often	82	100	22.0	9.8	39.0	29.3			
Very Often	48	100	29.2	-	37.5	33.3			
Replies of Husbands									
Very Seldom	401	100	25.9	18.0	32.7	23.4			
Seldom	605	100	28.1	14.2	32.7	25.0			
Sometimes	348	100	27.3	10.6	30.2	31.9			
Often	59	100	44.1	16.9	10.2	28.8			
Very Often	31	100	25.8		45.2	29.0			
Wife's Opinion of Husband									
Very Seldom	573	100	33.7	15.0	29.7	21.6			
Seldom	511	100	23.1	13.3	36.2	27.4			
Sometimes	280	100	27.5	12.1	27.9	32.5			
Often	59	100	13.6	23.7	30.5	32.2			
Very Often	20	100	35.0	10.0	15.0	40.0			
Husband's Opinion of Wife									
Very Seldom	386	100	28.5	15.3	32.6	23.6			
Seldom	60 4	100	27.6	16.9	30.1	25.3			
Sometimes	355	100	26.5	10.4	32.1	31.0			
Often	68	100	32.4	10.3	39.7	17.6			
Very Often	29	100	27.6		17.2	55.2			

Table 14. Fertility-planning status by the self-rating and rating of spouse on difficulty making up mind.

opinions of their husbands are considered. In decreasing order of positive correlation are the replies of the husbands and their ratings of their wives. The relation of fertility-planning status to husband's opinion of the wife's adequacy is extremely weak in all of the six instances presented.²²

The summary indices of personal adequacy which were constructed for the wives and husbands represent the totals of their respective scores on all the separate questions presented above with the exception of those specifically noted otherwise. The relation of these summary scores to fertility planning is pre-

²² The interrelation of questions of these types is discussed in the Appendix.





sented in Figure 2, Table 15. It is readily apparent that the relationship is direct, and that it is very consistent throughout the intermediate scale intervals. There is even a marked consistency in the direct relation between adequacy and proportions classified as "number planned"—a fertility-planning category which has been very irregular in previous instances. Thus, if we consider all "planned families" (the "number and spacing planned" and the "number planned" categories combined) we see that within the "90 and Over" interval, 62 per cent of the wives are represented, as contrasted with only 34 per cent in the "Under 60" class. The distribution by the scores of the husbands is similar, with 55 per cent of the "90 and Over" class having "planned" their families and only 21 per cent classified

		PER CENT DISTRIBUTION BY PLANNING STATUS							
Index of Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility			
All Couples	1,444	100	27.9	14.2	31.4	26.5			
Summary Index (Wife) 90 and Over 80-89 70-79 60-69 Under 60 Summary Index (Husband) 90 and Over 80-89 70-79 60-69 Under 60	171 273 375 417 208 302 355 399 297 91	100 100 100 100 100 100 100 100 100	39.2 26.7 28.5 27.8 19.2 36.1 32.4 24.6 21.9 17.6	22.8 16.9 12.8 10.1 14.4 18.5 15.5 15.0 10.4 3.3	25.7 33.0 33.3 31.4 30.8 28.1 32.1 30.6 36.0 28.6	12.3 23.4 25.3 30.7 35.6 17.2 20.0 29.8 31.6 50.5			
Summary Index (Joint) Will Hushend									
High High Low High High Low Low Low	453 205 368 418	100 100 100 100	35.3 31.2 24.0 21.8	19.2 11.7 12.5 11.5	28.0 35.6 36.1 28.9	17.4 21.5 27.4 37.8			

Table 15. Fertility-planning status by index of personal adequacy of the wife, husband, and couple.

as "planners" in the "Under 60" category. The relation is also sharply pronounced with reference to proportions within the "excess fertility" category.²³

When the scores on adequacy of husband and wife are jointly considered,²⁴ an interesting pattern appears (Figure 2, Table

²³ A face examination of the criteria for inclusion in the various fertility-planning categories suggests that the "quasi-planned" group (454 couples who did not deliberately plan their last pregnancy but who either wanted the last pregnancy or wanted another pregnancy) probably has the most heterogeneous composition of all four categories. It would seem that the above definition presents the greatest opportunity for post-factum rationalization (the unwanted pregnancy becomes the wanted child). This unavoidable weakness of the "Quasi-planned" category probably accounts partially for the lack of consistent relationships that have been apparent when presented for this group. Its intermediate status is another factor. ²⁴ This joint index was constructed by dichotomizing the distributions of scores

²⁴ This joint index was constructed by dichotomizing the distributions of scores for husbands and wives and adjusting for the skewness of the distribution of the husbands' scores. Thus the "both high" class is composed of the wives who scored from 70 to 119 and whose husbands scored from 80 to 119 on the summary index of personal adequacy; the "wife low, husband high" category represents the wives who scored from 30 to 69 and their husbands who scored from 80 to 119; the "wife (Continued on page 267)

		PER CENT DISTRIBUTION BY PLANNING STATUS							
Index of Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility			
All Couples	1,309	100.1	21.2	15.4	34.4	29.1			
Summary Index (Wife)									
90 and Over	147	100.1	30.6	26.5	28.6	14.3			
80-89	253	100.0	22.1	17.4	35.2	25.3			
70–79	336	100.0	20.5	14.3	36.9	28.3			
60–69	385	99.9	22.3	10.4	34.0	33.2			
Under 60	188	100.0	11.2	15.9	34.1	38.8			
Summary Index (Husband)									
90 and Over	268	100.0	30.6	20.9	31.3	17.2			
80-89	339	99.9	23.9	15.6	33.0	27.4			
70–79	364	100.0	17.9	15.9	33.5	32.7			
6 069	248	99.9	16.1	12.5	42.7	28.6			
Under 60	90	100.0	10.0	3.3	28.9	57.8			
Summary Index (Joint)									
Wife Husband									
High High	401	100.0	28.2	21.2	30.9	19.7			
Low High	191	100.0	26.2	12.6	38.2	23.0			
High Low	336	100.0	17.0	13.7	39.3	30.0			
Low Low	381	100.0	14.9	12.1	31.8	41.2			

Table 16. Fertility-planning status among fertile couples, by index of personal adequacy of the wife, husband, and couple.

15). A comparison of two extreme "personal adequacy" groups —husband and wife both high, and both low—exhibits the nowexpected direct relation to fertility planning. A comparison of the two intermediate combinations indicates that the "wife low-husband high" group is above the "wife high-husband low" group with respect to fertility planning. The joint classifications, contrary to the results of the component items, suggest that the feeling of adequacy of the husband is a slightly more important consideration in determining the effectiveness of planning the size of family.

It has been suggested that since the childless couples are by definition virtually restricted to the "number and spacing planned" category and since childless couples are presumably

high, husband low" class combines the wives with scores from 70 to 119 with their husbands who scored from 30 to 79; and finally, the "both low" class represents wives scoring from 30 to 69 and their husbands who scored from 30 to 79.

very different from families with children with respect to social life, interests, home life, mobility, etc., they should be excluded from analyses concerning the relation of personal adequacy to fertility-planning status. Although this position can be argued,²⁵ it is felt that it is a sufficiently important criticism to merit presenting the relation of feeling of personal adequacy to the fertility-planning status of the *fertile* couples only. The data (Table 16) do not support the view of the presumed importance of the childless families, at least with respect to personal adequacy. Essentially the same pattern of association with fertility planning emerges for fertile couples as for "all couples": 57 per cent of wives in the "90 and Over" category are classified in the two highest fertility-planning groups, and only 27 per cent of wives in the "Under 60" category are so classified; 52 per cent of the husbands in the "90 and Over" category as contrasted with only 13 per cent in the "Under 60" group are in "planned families." The results by the joint index of personal adequacy are also the same for fertile couples as for all couples.

A partial answer to the question of whether planning family size is related more to economic security or to personal adequacy is provided in Table 17. With feeling of economic security held constant, the percentage of planned families *still* varies directly with position on the personal adequacy index. The direction of the relationship is completely consistent for both wives and husbands within each economic security class. On the other hand, when feeling of personal adequacy is held constant, the direct relation of economic security to effective fertility-planning is considerably weakened and becomes irregular. Feeling of personal adequacy would thus appear to be independent of feeling of economic security with reference to fertility-planning.

²⁵ The opposing argument is that the "number and spacing planned" category includes not only those couples who plan "positively," i.e., who plan the number and the spacing of their children and actually have children, but also "negative" planners, i.e., those who consistently and effectively take precautions *not* to have any children. In terms of both the degree of rationality employed and contraceptive success, the two groups may be viewed as basically the same.

Previous investigations have revealed that a definite relationship between fertility planning and a given variable tends to be either weakened or to disappear completely when socioeconomic status is introduced as a test factor.²⁶ In the preceding sections of this report, we have seen that a direct relation exists between feeling of personal adequacy and socio-economic status. We have also noted a direct relation between adequacy and fertility planning. Is this latter relationship a real association, with one variable to be explained in terms of the other,

Joint 1	Rating	Number	Number Per Cent Distribution by Planning Status							
Economic Security	Personal Adequacy	of Couples	Total	Planned Families	Quasi- Planned	Excess Fertility				
WI	FE									
High High Medium Medium Low Low Low	High Medium Low High Medium Low High Medium Low	186 140 132 177 146 226 81 89 267	100 100 100 100 100 100 100 100	54.3 45.7 38.6 48.0 39.0 35.8 48.1 38.2 36.0	29.0 32.1 34.1 31.1 32.2 31.9 30.9 37.1 29.2	16.7 22.1 27.3 20.9 28.8 32.3 21.0 24.7 34.8				
HUSI	BAND									
High High Medium Medium Medium Low Low Low	High Medium Low High Medium Low High Medium Low	278 101 79 258 198 143 121 100 166	100 100 100 100 100 100 100 100	55.8 44.6 38.0 47.7 34.3 30.1 47.1 45.0 25.3	29.5 30.7 36.7 31.0 33.8 36.4 30.6 24.0 31.3	14.7 24.8 25.3 21.3 31.8 33.6 22.3 31.0 43.4				

Table 17. Per cent distribution by fertility-planning status, according to joint rating of each spouse on index of economic security and index of personal adequacy.¹

¹In this table the categories are as follows: *Index of Economic Security*: High, 80 and over; Medium, 60-79; Low, under 60. *Index of Personal Adequacy*: High 80 and over, Medium, 70-79; Low, under 70.

²⁶ Cf. Freedman, Ronald and Whelpton, P.K.: Social and Psychological Factors Affecting Fertility. x. Fertility Planning and Fertility Rates by Religious Interest and Denomination. The Milbank Memorial Fund *Quarterly*, July, 1950, xxviii, No. 3, p. 318 (Reprint p. 441). See especially *op. cit.*, Kiser and Whelpton. xt. The Interrelation of Fertility, Fertility Planning and Feeling of Economic Security. Pp. 62–69 (Reprint pp. 488–495).

Hİ,

or are both variables functions of a third factor, socio-economic status? The answer is not altogether clear. The data indicate (Table 18) that when socio-economic status is held constant,

		PER CENT DISTRIBUTION BY PLANNING STATUS							
Index of Personal Adequacy	Number of Couples	Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility			
Summary Index		I	NDEX HIGH	80CI0-EC01	OMIC STAT				
Wife				(UNDER 20)				
90 and Over 70–89 Under 70	45 111 68	100 100 100	51.1 52.3 41.2	11.1 19.8 8.8	24.4 15.3 39.7	13.3 12.6 10.3			
		INDEX MEDIUM SOCIO-ECONOMIC STATUS (20-39)							
90 and Over 70–89 Under 70	73 290 203	100 100 100	41.1 28.3 32.0	27.4 15.2 11.3	26.0 36.6 36.0	5.5 20.0 20.7			
		I	NDEX LOW : (4	socio-econ O and over	OMIC STATU	s			
90 and Over 70–89 Under 70	53 247 354	100 100 100	26.4 16.2 17.8	26.4 11.3 12.1	26.4 37.2 26.8	20.8 35.2 43.2			
Summary Index Husband		I	NDFX HIGH	socio-econ (under 20)	OMIC STATU	'S			
90 and Over 70-89 Under 70	67 123 34	100 100 100	50.7 49.6 41.2	22.4 11.4 11.8	14.9 28.5 29.4	11.9 10.6 17.6			
		INDEX MEDIUM SOCIO-ECONOMIC STATUS (20-39)							
90 and Over 70–89 Under 70	137 31 4 115	100 100 100	35.0 29.9 30.4	17.5 17.5 7.0	32.8 36.0 34.8	14.6 16.6 27.8			
		INDEX LOW SOCIO-ECONOMIC STATUS (40 AND OVER)							
90 and Over 70–89 Under 70	98 317 239	100 100 100	27.6 18.3 13.4	17.3 14.5 9.2	30.6 27.8 34.7	24.5 39.4 42.7			

Table 18. Fertility-planning status by index of personal adequacy of the wife, husband, and couple, subdivided by socio-economic status.

270

			PER CENT DISTRIBUTION BY PLANNING STATUS							
I Person	Index of Personal Adequacy		Total	Number and Spacing Planned	Number Planned	Quasi- Planned	Excess Fertility			
Joint Index	for the Couple ¹		index high socio-economic status (under 20)							
Wife	Husband									
High Low High Low	High High Low Low	108 42 48 26	100 100 100 100	50.0 47.6 56.3 30.8	21.3 9.5 8.3 7.7	15.7 40.5 22.9 38.5	13.0 2.4 12.5 23.1			
			INDEX MEDIUM SOCIO-ECONOMIC STATUS (20-39)							
Wife	Husband									
High Low High Low	High High Low Lo w	194 87 171 114	100 100 100 100	33.0 37.9 28.7 27.2	19.6 12.6 15.2 10.5	33.0 35.6 36.2 36.0	14.4 13.8 19.9 26.3			
			11	NDEX LOW S	OCIO-ECON	OMIC STATU R)	18			
Wife	Husband									
High Low High Low	High High Low Low	151 76 149 278	100 100 100 100	27.8 14.5 8.1 18.7	17.2 11.8 10.7 12.2	30.5 32.9 40.3 25.2	24.5 40.8 40.9 43.9			

Table 18. (Continued)

¹See text footnote 24 for meaning of high, medium, and low categories in the joint classification.

much of the original association of fertility planning to personal adequacy disappears, although the positive direction of the relationship is, for the most part, still maintained. Chi squares were computed for the distributions of fertility-planning status by the indices of personal adequacy for the couple and each spouse separately, with socio-economic status controlled. With the exception of the distributions for the wives and husbands in the "Under 20" socio-economic group, the association of the two variables (at the extremes)²⁷ is statistically significant at the .01 level.

²⁷ Instead of making individual tests of the significance of the differences between successive personal-adequacy classes with respect to fertility planning, chi squares were computed only for the relation of extremes of the indices—the "both high" and (Continued on page 272)

The Milbank Memorial Fund Quarterly

Thus, although the original relationship is considerably weakened, it is not sufficiently reduced (nor are the differences encountered statistically nonsignificant) to permit attributing the relationship entirely to socio-economic status. Unfortunately, intensive analysis of these detailed data is impossible since the numbers involved become very small with successive subdivisions. This obviously renders impossible any definitive conclusion about the independence of the relation of fertility planning to personal adequacy. On the other hand, Table 18 indicates that fertility planning consistently bears a positive relation to socio-economic status when personal adequacy is held constant. Thus a considerable part, but not all, of the relationship between personal adequacy and fertility planning is due to their joint connection to socio-economic status. The index of scio-economic status only abbreviates a wide variety of cultural and psychological phenomena, such as competitive effort, success-drive, social mobility, sensitivity to social pressures, and the like. It appears then, finally, that success in planning family size is positively correlated with both feeling of personal adequacy and the many factors reflected by the index of socio-economic status, although the latter seem definitely to be the more important.

Personal Adequacy and Fertility

The second part of the hypothesis states: "The stronger the feeling of personal inadequacy . . . the smaller the planned families." Or restated in a positive fashion—the stronger the feeling of personal *adequacy* . . . *the larger* the planned families.

We have already seen that several relationships exist: a direct relation between feeling of personal adequacy and fertilityplanning status which, we recall, is the opposite of the association presumed in the first part of the hypothesis; a direct

[&]quot;both low" groups in the case of the couple, and the "90 and Over" and "Under 70" categories for the husbands and wives separately—to the "planned families" (the "number and spacing planned" and "number planned" categories combined) and the "excess fertility" group. This resulted in four-fold tables.

relation between feeling of personal adequacy and socio-economic status; and a direct relation of feeling of personal adequacy to feeling of economic security.

With reference to fertility, previous analyses have also demonstrated a direct relation of fertility to socio-economic status and feeling of economic security within the "number and spacing planned" group and an inverse relation within the "excess fertility" group, with little or mixed association within the "number planned" and "quasi-planned" groups. It is well to re-emphasize that most of the hypotheses (including the present one) throughout the Indianapolis Study are concerned with the reproductive behavior of the *planned* families, the most important component of which is the "number and spacing planned" group. The rationale of this is embodied in the attempt to isolate the social and psychological factors affecting fertility with planning differences eliminated as intervening variables.

These foregoing findings suggest the expectation of a similar direct relation of personal adequacy to fertility for the planned families, and an inverse relation for the less effectively planned families, i.e., a verification of the second part of the hypothesis. This is not an inevitable outcome, however, because, as we have seen, the interrelations of personal adequacy and socio-economic status and economic security are far from perfect.

For purposes of comparison, the fertility rates of all couples in the sample will be considered first, although the reproductive behavior of the planned families is of primary concern. The relation of fertility to the various indicators of personal adequacy among all couples is either non-existent or inverse. For the questions included in the summary indices, an inverse relationship characterizes about half. For the ten questions excluded from the indices, eight exhibit an inverse relation. The data for the fertility of all couples are contained in the "total" columns (Tables 19-22). Only in the responses to the question about the type of job the husband and wife feel they could do in raising several children, is a direct relation to ferTable 19. Births per 100 couples by fertility-planning status by ratings of husbands and wives on chance for self-expression, the frequency with which things seem to go wrong for no reason at all, interviewer's rating on personal inadequacy, and inclination to worry.

	F	or Ra	ring o	F WIF	e	For	RATI	NG OF	Нузвл	ND
		FERTI	LITY B	ATES I	BY FER	FILITY-	PLANN	ING ST	ATUS	
Measure of Personal Adequacy ^a	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
Chance for Self-Expression Excellent Good Fair Poor or Very Poor	186 193 218 229	127 103 101	227 224 236	192 200 202 •	248 281 313 286	199 201 201 230	127 116 89 65	244 244 204 227	204 196 201 •	283 296 291 338
Things Go Wrong for No Reason At All Very Seldom Seldom Sometimes Often Very Often	190 191 209 225 248	112 118 99 73	223 235 214 • 242	207 195 196 200 218	242 294 314 294 303	178 182 210 242 283	116 111 96 105 •	205 229 233 •	175 201 205 207 205	278 255 304 317 387
Interviewer's Rating on Personal Inadequacy Self-Confident Fairly Well-Satisfied Average Dissatisfied; Feels Inferior	196 204 202 206	129 100 97 101	220 241 195 256	199 195 212 188	296 32 4 280 295	211 197 208 201	143 114 78 65	215 237 247 204	212 186 214 189	318 318 285 276
Self-Rating on Inclination To Worry Very Little or Little Somewhat Less Than Average About Average Somewhat More Than Average Much or Very Much	198 191 207 179 223	104 72 121 93 104	224 238 216 231 241	211 188 204 192 192	289 261 297 247 330	204 213 213 172 205	100 112 122 96 98	217 195 240 232	217 211 188 180 200	305 368 299 239 275
Rating by Spouse on Inclination To Worry Very Little or Little Somewhat Less Than Average About Average	199 188 209	113 105 115	223 222 243	197 174 194	28 4 300 293	207 195 205	99 109 108	216 229 234	212 205 189	333 285 299
Average Much or Very Much	195 213	100 83	230 206	212 222	280 336	194 202	127 87	• 216	198 208	264 255

*Rates not computed for base less than 20. •See Appendix for exact wording of questions.

Table 20. Births per 100 couples by fertility-planning status by ratings of husbands and wives on tendency to get upset easily, confidence, and cheerfulness.

	F	'or Ra	TING C	F WIF	E	For	For Rating of Husband				
		FERT	ILITY I	RATES	BY FER	TILITY-	PLANN	ING ST	ATUS		
Measure of Personal Adequacy [®]	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	
Self-Rating on Tendency to Get Upset Easily Very Calm Quite Calm Ordinary Easily Very Easily	205 213 197 199 223	* 89 118 84 141	• 209 232 227 236	205 203 201 199 184	• 346 271 297 294	205 202 202 208 208	110 114 98 112 •	• 226 226 235	222 195 191 219 •	320 310 285 288 *	
Rating by Spouse on Tendency to Get Upset Easily Very Calm Quite Calm Ordinary Easily Very Easily	213 204 198 207 210	* 121 111 90 94	* 247 224 226 *	* 195 192 198 233	281 296 287 318 298	212 199 201 201 214	129 94 106 105 *	218 222 235 *	215 188 210 179 *	357 295 294 269 265	
Self-Rating on Confidence Very Much Much Somewhat More Than Average About Average Somewhat Less Than Aver- are to Very Little	206 199 179 211	93 88 78 119	210 • 246 218 267	224 203 187 204	391 247 300 303	212 199 178 213	109 101 100 110	225 218 246 230	205 203 178 204	322 313 260 298	
Rating by Spouse on Confidence Very Much Much Somewhat More Than Average About Average Somewhat Less Than Aver-	191 192 184 192 217	89 91 111 117	188 204 225 237	174 180 210 190 210	318 281 266 302	208 193 193 209	110 100 104 126 110	227 258 196 223	205 194 190 200 214	329 266 291 305 243	
Rating by Spouse on Cheerfulness Extremely or Very Cheerful Rather Cheerful Ordinary Rather, Very, or Extremely Blue	206 191 213 205	100 121 96 108 100	256 224 219	223 173 214 188	296 285 292 383	198 194 211 220	114 97 110 *	215 221 239 •	212 201 191 189	345 294 293 265	

1

E I D

н Н

H

*See Appendix for exact wording of questions. *Rates not computed for base less than 20.

Table 21. Births per 100 couples by fertility-planning status by ratings of husbands and wives on feeling of cheerfulness, pep and energy, type of job couple could do in raising several children, and share of good breaks.

	F	'OR RA	TING O	of Wif	B	For	R RATI	NG OF	Низв	AND
	FERTILITY RATES BY FERTILITY-PLANNING STATUS									
Meabure of Personal Adequacy ^a		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
Self-Rating on Cheerfulness Extremely or Very Cheerful Rather Cheerful Ordinary Rather, Very, or Extremely Blue	192 194 218 177	99 112 112 65	241 216 229 •	198 204 200 167	295 275 308	217 196 205 185	107 117 98 67	225 231 216	222 194 196 •	368 285 288 226
Self-Rating on Pep and Energy Very Much Much Somewhat More Than Average About Average Somewhat Less Than Aver- age, Little, or Very Little	202 189 182 215 193	97 90 91 120 105	222 • 226 237 222	190 212 203 205 162	365 283 27 4 297 293	205 196 192 209 197	109 92 102 108 125	238 * 251 215 •	195 218 185 201 210	298 331 287 303 235
Rating by Spouse on Pep and Energy Very Much Much Somewhat More Than Average About Average Somewhat Less Than Aver- age, Little, or Very Little	207 201 188 205 216	83 117 107 105 118	215 204 255 228 234	203 216 183 200 204	337 282 268 293 343	208 187 187 212 201	103 81 101 113 118	241 208 238 222 •	189 209 193 204 168	322 265 279 305 283
Type of Job Could Do in Raising Several Children Excellent Very Good Good Fair or Poor Share of Good Breaks	214 209 202 198	112 97 111 104	214 233 235 215	277 209 195 183	• 296 302 283	208 213 196 199	116 101 112 93	213 234 225 245	206 206 203 181	309 316 282 287
Definitely Yes Probably Yes Doubtful Probably or Definitely No	184 197 225 256	111 108 96	237 231 196	212 197 189 207	256 284 313 371	206 194 210 240	125 106 74	215 233 226 230	212 191 210 203	318 284 297 321

*Rates not computed for base less than 20.

*See Appendix for exact wording of questions.

tility manifested (Table 21). This verifies the common-sense expectation that couples who believe that they could do an "excellent" job would have more children than those who as-

Table 22. Births per 100 couples by fertility-planning status by ratings of husbands and wives on difficulty making up mind, lucky in friends, and ratings of husbands on how lucky they are in the people for whom or with whom they have worked, and on the question of how good a manager he is.

	FOR RATING OF WIFE FOR RATING OF HUSBAND									
	FERTILITY RATES BY FERTILITY-PLANNING STATUS									
Measure of Personal Adequacy•		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
Self-Rating on Difficulty Making Up Mind Very Seldom Seldom Sometimes Often or Very Often	188 201 223 197	107 113 108 75	219 218 237	203 199 202 182	271 284 329 288	202 195 208 240	108 99 112 124	228 222 216	196 193 212 210	296 290 284 381
Rating by Spouse on Difficulty Making Up Mind Very Seldom Seldom Sometimes Often or Very Often	191 198 219 226	104 98 130 97	212 239 230	195 198 208 194	276 281 305 407	195 203 218 209	109 114 91 93	227 218 247	215 187 199 181	277 291 334 278
Lucky in Friends Very Lucky Rather Lucky Neither Lucky nor Unlucky, Rather Unlucky, or Very Unlucky	197 203 212	116 106 87	240 218 227	205 194 201	312 295 288	190 206 210	111 101 107	221 244 208	186 198 215	288 302 294
Lucky in Employment Very Lucky Rather Lucky Neither Lucky nor Unlucky Rather Unlucky or Very Unlucky						197 201 218 207	105 117 95 85	243 227 210 219	199 187 237 215	313 287 292 297
Kind of Manager Excellent or Very Good Good About Average Below Average						209 190 203 238	113 119 98 115	• 241 223	185 206 197 217	321 275 292 334

*Rates not computed for base less than 20. *See Appendix for exact wording of questions.

sumed a more negative position. Thus, as far as the fertility of all couples regardless of planning status is concerned, where a visible association can be observed it is of an inverse nature; fertility increases with lowering of personal adequacy.

The association of fertility to ratings on measures of personal adequacy presents an entirely different picture within the "number and spacing planned" group. The responses to the majority of questions for this planning group exhibit a positive relation of personal adequacy to fertility-as personal adequacy increases fertility tends also to increase. Again there are some questions that yield no relationship between personal adequacy and fertility and even among the others the direct relation is not usually exhibited with complete consistency. It is also recognized that the interclass differences in fertility rates are not always statistically significant. Because of the skewness of the responses toward high personal adequacy the fertility rates for the groups at the other extreme, in particular, are based upon numbers too small to yield reliability. This holds true despite the combinations of response categories that were made. With these several limitations, then, we may say that the latter part of the hypothesis ("The stronger the feeling of personal inadequacy . . . the smaller the planned families") is supported by the data for the "number and spacing planned" couples.

It is significant to note that the direct relation of fertility to adequacy is strongest for certain questions for which the relationship between fertility-planning status and adequacy was also very strong. These items are: chance for self-expression, the self-rating of wives on how frequently things go wrong for no reason at all, and the share of good breaks the couple felt they had received. High personal adequacy, therefore, is directly associated with effective planning and, moreover, even though successful contraceptive practice is inversely related to size of family generally, those couples who do rate themselves "adequate" and who claim successful planning have larger families than couples of similar fertility-planning status

:

who rate themselves "inadequate." Thus, with planning deficiencies eliminated as variables, those couples with a healthier personal adjustment are likely to be more motivated to have large families.28 As indicated above, Kiser and Whelpton previously demonstrated a similar association to exist for socioeconomic status. Socio-economic status, although generally inversely related to the fertility of "all couples,"29 is directly related to the fertility of the planned families.

On the other hand, items in which the association with fertility-planning status was weak also maintain an irregular and inconsistent relation to fertility. Such items are the "pep and energy" rating scale, ratings on self-confidence, inclination to worry, and tendency to get upset easily. The responses to the questions on amount of pep and energy even suggest an inverse relationship with the fertility rates of the "number and spacing planned" families. Herrera and Kiser³⁰ report traces of this inverse relation for the self-rating of the couple and the rating of the spouse, but a *direct* relation of the interviewer's rating on "pep and energy" (not included in the present analysis) to fertility of the "number and spacing planned" couples. In the face of this seeming contradiction, it is difficult to judge just what the actual, if any, relationship is. It is possible that the interviewer, in rating the couple on this trait, was influenced by the number of children the couple actually had. A home with several children may produce an effect of bustling ac-

²⁸ The position of cause and effect is again empirically an "imponderable." Theo-retically, it would appear that feeling of personal adequacy and satisfactory adjust-ment are reflections of personality traits which are well structured by the time of marriage, although obviously one's personality is never a static entity. Certainly, factors of marital adjustment are involved.

See Reed, Robert B.: Social and Psychological Factors Affecting Fertility. VII. The Interrelationship of Marital Adjustment, Fertility Control, and Size of Family. The Milbank Memorial Fund *Quarterly*, October, 1947, xxv, No. 4, p. 383-425 (Reprint pp. 259-301).

²⁹ More exactly, the association for "all couples" takes the form of an oblique "J" curve with the inverse trend stopping at the "20–29" socio-economic level. Above

Socio-economic level. Above this level, the trend takes the form of a direct relation.
 See Kiser and Whelpton, op. cit. IX. Fertility Planning and Fertility Rates by Socio-Economic Status. P. 238 (Reprint p. 409).
 ⁸⁰ Herrera and Kiser, op. cit. XIII. Fertility in Relation to Fertility Planning and Health of Wife, Husband and Children. Pp. 399-401 (Reprint pp. 599-601).



Fig. 3. Number of children ever born per 100 couples, by fertility-planning status and rating of the wife on the index of personal adequacy.

tivity. On the other hand, the constant demands of children on the energy of their parents (particularly the mother) may produce a feeling of inadequacy.

Since a large percentage (31) of the "number and spacing planned" group is composed of childless couples, the question naturally arises as to whether the direct relation between adequacy and fertility can be explained in terms of this select group. Although they are not presented here, fertility rates computed for the fertile couples alone in this planning category, indicated, with some minor exceptions, a persistence of the direct relation. Consequently, we cannot say that the childless couples alone are responsible for the confirmation of the

Index of	Fertilit	y Rate	
of Husband	Planned	All	DIANNED FAMILIES AND ALL COUPLES
	romities	Looples	
BO - 80	150	190	
70 - 79	141	207	AND SPACING PLANNED AND
60 - 69	149	202	NUMBER PLANNED COMBINED)
UNDER 60	126	229	ALL COUPLES
	N.	Bette	
	Couples	ROLE	
			NUMBER AND SPACING PLANNED
90 AND OVER	109	111	
80-89	115	117	A second s
70 - 79	98	103	
60 - 69	65	89	
UNDER 60	16	•	
			Number Planned
90 AND OVER	56	225	the second second second second second
80-89	55	229	and the second state of the second state of the second state of the
70 - 79	60	202	
60 - 69	31	274	・しょう ひんしょう かき なき 高かくとないなながらい
UNDER 60	3	*	
			QUASI-PLANNED
90 AND OVER	85	211	
80-89	114.	200	The second and the second s
70-79	122	201	and the second
60-69	107	183	
UNDER 60	26	219	* 「「おきにしょう」、 小学での「「「「「なななな」」
			Excess Fertility
90 AND OVER	52	333	1 (1997) - 19 (1997) - 19 (1997) 19 (1997) - 19 (1997) - 19 (1997) 19 (1997) - 19 (1997) - 19 (1997) - 19 (1997)
80-89	71	297	And the second
70-79	119	302	A CONTRACT OF AND A CONTRACT OF
60 - 69	94	277	
UNDER 60	46	276	
			0 100 200 300 400
			CHILDREN EVER BORN PER 100 COUPLES
		* Rot	e not computed

Fig. 4. Number of children ever born per 100 couples, by fertility-planning status and rating of the husband on the index of personal adequacy.

hypothesis. It is true, however, that the "number and spacing planned" couples are responsible for bearing out this part of the hypothesis. The persistence of a direct relation of fertility to adequacy for all "planned families" (i.e., the "number and spacing planned" and "number planned" groups combined) occurs only because of the greater number of couples in the former group. The relation is very irregular within the "number planned" category alone.

The situation may be summarized by reference to Figures 3-5 where fertility rates are presented by planning status and by the summary indices of personal adequacy for husbands, wives, and couples. For the sample as a whole (top sections of

Inde	ex of	Fertilitu	y Rote	
rersona	Hadequocy	Planned	All	PLANNED FAMILIES AND ALL COUPLES
Wite	Husbond	140	191	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
HIGH	ngign Lucut	A	212	WWW PLANNED FAMILIES (NUMBER
LOW		140	198	
LOW	Low	145	216	
2011		N. and a	Data	MZZIAL WOPLES
		Couples	Rule	
				NUMBER AND SPACING PLANNED
HIGH	HIGH	159	108	<u>A 11 a.</u>
Low	HIGH	65	131	
HIGH	Low	- 68	99	all the state of the
Low	Low	91	95	And the second sec
				Number Planned
HIGH	HIGH	87	225	2016
Low	HIGH	24	233	a start a second start of the second start and the second start and the second start and the second second star
HIGH	Low	46	220	
Low	Low	48	240	
				QUASI - PLANNED
HIGH	HIGH	126	203	there is the second and the second
Low	HIGH	73	207	the state of the s
Нісн	Low	133	192	
LOW	Low	122	198	the second s
				EVERSE EEDTIL TOV
HIGH	HIGH	79	304	
Low	HIGH	44	327	
HIGH	LOW	101	281	
LOW	LOW	158.	292	The state of the s
				0 100 200 300 400
				CHILDREN EVER BORN PER 100 COUPLES



the charts) there is clearly an inverse relation of fertility to adequacy. The range of the variation is not wide, but the rates are relatively consistent for the intermediate classes on the personal adequacy scale, especially for the wives.

When each spouse is considered separately, the *direct* relation of fertility to adequacy among the "number and spacing planned" couples is more striking for husbands than for wives. (Cf. Figures 3 and 4.) The irregularities are understandable when we realize that the responses to the individual questions themselves, which make up these summary indices, did not present consistent patterns of positive association with fertility. This fact has several possible interpretations. It may be that some of the items retained were not valid measures of personal adequacy despite the various methodological precautions. It is also possible that "personal adequacy" is not a unidimensional attribute. And, of course, there is always the possibility that fertility is simply not independently and consistently related to adequacy. This possibility is strongly suggested, for example, in cross-tabulations presenting fertility rates of planned families by "personal adequacy—economic security" combinations. The rates in Table 23 show the greater relative importance of economic security than personal adequacy in relation to the size of planned families.

It will be recalled that just the *opposite* pattern prevailed with respect to fertility planning, i.e., feeling of personal adequacy and effective fertility planning were directly related within each economic security classification, but the otherwise direct relation of economic security to fertility planning was considerably weakened when personal adequacy was held constant.

When the combined index for the couple is considered, the picture of fertility rates in the "number and spacing planned" group is similar to that encountered when the relation of adequacy to planning status itself was discussed. (Figure 5.) The highest fertility rate (131) is exhibited by the "wife low—hus-

Turner or	Index of Economic Security									
INDEX OF Personal Adequacy		Wife			Husb and					
	High	Medium	Low	High	Medium	Low				
FERTILITY RATES										
High Medium Low	172 166 169	138 132 147	110 118 143	161 149 180	160 159 121	107 104 145				
	NUMBER OF COUPLES									
High Medium Low	101 64 51	85 57 81	39 34 96	155 45 30	123 68 43	57 45 42				

Table 23. Fertility rates of planned families by index of personal adequacy and index of economic security jointly considered for each spouse.¹

¹See footnote to Table 17 for meaning of high, medium, and low categories.

band high" class, again suggesting the greater importance of the personality and role of the husband in the combination of effective planning and larger families. This class manifests the highest fertility rates within each planning category except the "number planned" where it falls to second position. Within the "number and spacing planned" group, the other combinations assume a direct relation to fertility.

Feeling of personal adequacy, as measured by the various questions used in this analysis, thus would appear to be a generalized personality status which reflects not only reaction to economic circumstances but adjustment to many varieties of noneconomic interpersonal relations as well. Success in fertility planning thus would seem to be more dependent upon the pres-

•		All Co	UPLES		Planned Families					
INDEX OF Personal	Number	Number of Couples		ity Rate	Number	of Couples	Fertility Rate			
ADEQUACY	Wife	Husband	Wife	Husband	Wife	Husband	Wife	Husband		
		IND	EX HIGH	SOCIO-ECON	OMIC STAT	US (UNDER :	20)			
90 and Over	45	67	187	175	28	49	168	161		
80-89	57	83	160	169	42	52	155	167		
70–79	54	40	167	163	38	23	179	148		
6069	50	32	160	187	30	18	160	•		
Under 60	18	2	٠	•	4	-	٠	-		
		INI	EX MEDI	UM SOCIO-EC	CONOMIC S	tatus (20–3	9)			
90 and Over	73	137	155	180	50	72	120	136		
80-89	122	143	185	171	50	74	162	142		
70–79	168	171	162	171	76	75	118	125		
6069	130	84	192	155	55	38	135	113		
Under 60	73	31	149	184	33	5	112	•		
	INDEX LOW SOCIO-ECONOMIC STATUS (40 AND OVER)									
90 and Over	53	98	242	241	28	44	168	159		
80-89	94	129	230	245	27	44	126	157		
70–79	153	188	243	250	41	60	154	157		
60 69	237	181	235	226	73	40	167	160		
Under 60	117	58	263	257	33	14	161	•		

Table 24. Fertility rates among all couples and planned families by socioeconomic status of the couple and index of personal adequacy of the wife and husband.

*Rate not computed for base less than 20.

ence of the emotionally stable, self-confident, well-satisfied, rationalistic personality than the more narrowly circumscribed confidence that accompanies a feeling of economic security. On the other hand, the actual number of children decided upon by husbands and wives who effectively plan family size is related much more to feeling of economic security than to personal adequacy. In other words, successful *planning* of fertility is more related to personal adequacy than to economic security; the direct relationship persists with economic security controlled. In contrast, the actual *fertility* of planned families is more related to economic security than to personal adequacy; the direct relationship persists with personal adequacy controlled.

No systematic relation of fertility to index of personal adequacy of either the wife or husband is found when the factor of socio-economic status is held constant. This holds true for "all couples" and for the "planned families" considered separately (Table 24). These various problems militate against any definitive or conclusive statement about the relation of fertility to feeling of personal adequacy.

Summary

The hypothesis considered in this report was: "The stronger the feeling of personal inadequacy, the higher the proportion of couples practicing contraception effectively and the smaller the planned families." Feeling of personal adequacy was measured by multiple-choice questions and summary indices which were constructed from the responses. The data clearly contradict the first part of the hypothesis. Instead, a rather consistent *direct* relation of *adequacy* to fertility planning was found, although not all of the responses to individual questions presented equally positive associations. With socio-economic status controlled, the direct relationship persists but it is weakened. We interpreted this to suggest that fertility planning, although somewhat independently related to feeling of adequacy, is more strongly associated with the complex of variables reflected only in shadow form by the index of socio-economic status. 1

THE PARTY IN

I

The data on the fertility of planned families tend to support the latter part of the hypothesis. It was emphasized that this direct relationship is only slightly suggested and is, by no means, conclusively determined. With respect to both variables—fertility planning and fertility—the measures of personal adequacy possess only a very low predictive sensitivity.

Appendix

Methodology

Validity and Reliability are the primary problems involved in the use of questionnaires designed to measure a given psychological complex. In short, do the questions measure what they purport to measure (in this case "feeling of personal inadequacy") and do they elicit consistent responses? Neither of these problems was dealt with adequately in the original formulation of the questionnaire. The pretesting of the schedules that did occur was done mainly for the purpose of eliminating irrelevant questions and changing those that were ambiguous, too difficult, poorly worded, and so forth. The limited attention given to the criteria of validity and reliability consisted in general appraisals of various questions in the light of any previous use of them and subsequently on the basis of the field trials mentioned above.³¹ In so far as validity itself is concerned, this procedure was not much less sophisticated than many of the modern efforts at validating personality inventories. It must, of course, be recognized that since 1938, when the Indianapolis Study was initiated, considerable advances have been made in psychological measurement. In addition, the substantive interest in the Study was more largely sociodemographic than psychological. Nevertheless, this does not obviate the necessity for refining the tools of analysis used in the measurement of variables hypothetically related to fertility and fertility planning.

³¹ The psychologists on the Committee combed the literature such as the studies of marital happiness for reports on previous use of questions in the Study. Dr. E. Lowell Kelly prepared for the Committee special tabulations from his longitudinal study of married couples recruited from announcements of engagements and marriages (Kelly's study was interrupted by his entrance into military service and it has not been completed). In addition, Dr. John C. Flanagan made available to the Committee the preliminary results of his study of Army aviators. See Flanagan, John C.: A Study of Factors Determining Family Size in a Selected Professional Group. Genetic Psychology Monographs, 1942, xxv, pp. 3-99.

As previously indicated, the Committee developed and used thirty-five questions (including the interviewer's rating) to test the personal inadequacy hypothesis. These are presented in the following pages. What followed may be described methodologically as a sort of "post factum" validation. The field work, it will be recalled, was carried out in 1941.

The problem of validity, in this case, was further complicated by the vagueness of the term "personal inadequacy." A brief survey of personality inventories and psychological literature revealed that the term was not in standard use either in psychiatric diagnosis, conceptual classification, or textual description. The ideal procedure might have been to submit this group of questions both to a sample of people diagnosed by psychiatrists as "personally inadequate" and to a sample of a "normal" population, and thus empirically determine their capacity to differentiate between the two groups. However, both the unconventionality of the classification and the neurotic rather than psychotic nature of the complex rendered this alternative impossible. Even if it had been feasible, the difficulty involved in the variation of psychiatrists' diagnoses would still have been a factor not easily overcome.32

The same lack of success resulted from attempts to locate similar questions in already validated tests. Not only was "personal inadequacy" rare in occurrence as a category,³⁸ but even when the inquiry was extended to include such associated classifications as "psychological inadequacy," "inferiority complex," "emotional stability," and others which did appear more regularly, only a few questions were discovered which were very similar in content or wording.

The procedure finally decided upon was to submit the questions to a group of practicing psychiatrists for their evaluation. Twelve psychiatrists in Philadelphia were contacted in 1950 and they agreed to cooperate.³⁴ The advantages of this procedure are definitely limited. Variations in the subjective definitions of personal inadequacy are still a problem. Also, the probable inexperience of many psychiatrists with objective tests possibly introduces an additional

³² For some interesting examples of this, *see* Stouffer, Samuel A., *et al.*: MEASURE-MENT AND PREDICTION. Studies in Social Psychology in World War II, Vol. IV. Prince-ton, Princeton University Press, 1950, Chapters 13–14. ³³ Of the inventories surveyed, the closest category discovered was "Feelings of Inadequacy" in "Mental Health Analysis"—Adult Series, Form A (devised by Louis P. Thorpe and Willis W. Clark with Ernest W. Tiegs, Consultant). ³⁴ These psychiatrists are of the so-called "psychoanalytically oriented" school.

limitation. Nevertheless, the procedure does have the decided advantage of supplementing the Committee's original selection with the opinion of the "expert."

The items submitted consisted of the following:35

(a) the original set of thirty-five questions reduced to 12 core items, i.e., including only the one central question in each instance instead of all the possible combinations of the same question asked of the husband, of the wife, and of one about the other, etc. There are:

1. Have you been lucky or unlucky in the people for whom or with whom you have worked?

2. Have you been lucky or unlucky in the friends you have made?

3. How often is it difficult for you to make up your mind about the things that have to be done day by day?

4. Do you get upset easily?

5. How much confidence do you have in yourself?

6. Aside from financial matters, how good a job do you think you and your wife could do in bringing up several children?

7. How much are you inclined to worry?

8. On the whole, how good a chance do you have to express yourself and show what you are worth either in your work (homemaking) or in your other (outside) interests?

9. On the whole, have you had your share of good breaks?

10. How often has everything seemed to go wrong without any reason at all?

11. How much energy and pep do you ordinarily have?

12. Do you usually feel cheerful and look on the bright side of things?

(b) an additional set of sixteen core items selected from other questions on the schedules on the basis of their possible relation to the concept of personal inadequacy. These are:

13. Are you a good manager?

14. Aside from money worries, did your parents have much trouble in bringing up their children, for example, health, children getting into trouble, etc.?

15. How happy was your childhood on the whole?

16. How much has the fear or dread of pregnancy and childbirth discouraged you from having more children?

17. How much would (has) it bother(ed) you to be tied down by (your) children?

⁸⁵ The multiple-choice responses were not included specifically but the form letter attached mentioned the type of answers provided for. All of these questions had from five to eight multiple choices. 18. How much do you think having children helps keep a marriage from breaking up?

19. When the going gets tough, is one of your greatest comforts thinking of how much your children love and need you?

20. How happy were your parents in their family life?

21. How much did a feeling that children bring husband and wife together encourage you to have your last child?

22. If you had your life to live over, do you think you would marry the same person; a different person; or, not marry at all?

23. After your first child was born did you often think how much comfort a second child would be if the first one died?

24. Everything considered, how happy has your marriage been?

25. Is one of your greatest satisfactions in being a parent knowing that after you are gone, some part of you will live on in your children?

26. How much have you been interested in religion since marriage—when you were 10 to 15 years old?—

27. Do you feel that it is fine to be able to live over again in the lives of your children?

28. Do parents have the right to expect that their children will appreciate the sacrifices parents make for them?

In the form letter attached, the psychiatrists were requested to indicate by number whether they considered the question "very relevant" (a rating of 1); "relevant, but not very important" (a rating of 2); or, "irrelevant" (a rating of 3) to the concept of "personal inadequacy."

Results. The evaluations of the psychiatrists represented an almost complete endorsement of the Committee's originally designated questions. When all the evaluated questions were ranked, the best fifteen items included ten of the total twelve original items. The two items not included in this group are—"Have you been lucky or unlucky in the friends you have made?" and "Have you been lucky or unlucky in the people for whom or with whom you have worked?"—which ranked 7th and 8th from the bottom respectively. As might be expected, no question averaged worse than 2.0 ("relevant, but not very important"). The mean evaluation for all items was 1.6. The average of the ratings for the items to be excluded was 1.8; for the items to be retained, 1.5, indicating some relative improvement.

In accord with these evaluations, the following fifteen items were included on the punch card (they are listed here in descending order of validity rank; the numbers preceding the average evaluation refer to lists of questions above): No. 3 had a mean evaluation of 1.0; Nos. 5 and 6, a mean evaluation of 1.4; Nos. 7, 8, 9, 10, 13, 14, and 17, a mean evaluation of 1.5; Nos. 15 and 16, a mean evaluation of 1.6; and Nos. 11 and 12 had a mean evaluation of 1.7. The two items referred to above (lucky in friends and in employment) which ranked relatively low in the estimation of the psychiatrists, were also included on the punch card in order to give complete coverage to the Committee's questions. They were not included in the summary indices which were later constructed. The Interviewer's Rating Scale, which was not submitted to the psychiatrists, was retained and included in the summary indices.

Item Analysis. Since the evaluations of the psychiatrists only roughly established levels of relative validity for a large group of items and provided the basis only for their tentative acceptance for inclusion in an index, it was necessary to check their judgments against the internal consistency of the responses to the questions. The procedure adopted was not intended as a test of reliability. The conventional methods of measuring reliability (the test-retest, splithalf, and odd-even item methods) were not applicable under the circumstances.³⁶ A statistical evaluation of the internal consistency of items is not a test for reliability,³⁷ although it is occasionally interpreted as such. Using the upper and lower groups of the distribution (the technique used here and described below) which is one form of item analysis, actually comes closer to an analysis of validity than reliability. In the absence of an external criterion, the total score is substituted with the assumption that the score on all the questions is a more valid index than the scores on individual questions. This type of analysis, thus, seeks only to refine the validity of the indices to be derived.

The problem was met in the following manner. After adjusting for coding, all forty-nine scores for each of the 860 couples (the uninflated sample) were simply added. No differential weights were assigned. The scores derived were those for couples.

The highest possible score, hypothetically representing the most "adequate" was 437; the highest observed score was 401. The lowest possible score, or hypothetically the most "inadequate" was 49; the

³⁶ The odd-even item method was the most feasible one of the three, but the small number of questions prohibited its use.

⁸⁷ For discussion, *cf.* Sletto, R. F.: Construction of Personality Scales by Criteria of Internal Consistency, Hanover, N. H., Sociological Press, 1937.

lowest observed score was 174. The hypothetical average score, i.e., that score in a "neutral" position with respect to the adequacy-inadequacy continuum was 235—the mean of the actual distribution of scores was 293. The distribution was thus very definitely skewed in the direction of feelings of adequacy.

The next step was to select from the sample those cards above the 90th percentile (which we shall subsequently refer to as Group A) and these below the 10th percentile (which we shall designate Group I). Group A consisted of that 10 per cent of the sample expressing the strongest feeling of *adequacy* and Group I, conversely, refers to that 10 per cent of the sample expressing the strongest feeling of inadequacy. These cards were then run on all questions, separately for husband and wife, and distributions by responses were plotted for each. The logical premise of this procedure is that any question on which Group A cards exhibit a preponderance of scores below the average or on which Group I cards exhibit a preponderance of scores above the average, is not measuring the same thing as the entire battery of questions. We are concerned here with ascertaining which questions are not consistent parts of the general constellation that we term "personal inadequacy." This method does not tell us which questions actually measure this psychological phenomenon, but only whether particular questions are correlated positively with the total score that we assume, for operational purposes, to be a valid criterion. Thus its function here is to act as a retest of the opinions of the psychiatrists and to refine further the battery of items.

Results. Group A exhibited no instance of the distribution on any question having a greater frequency below than above average. With reference to Group I, however, the most "inadequate" 10 per cent of the couples indicated feelings of above-average adequacy in responses to twenty-one out of the forty-nine questions. These questions are thus inconsistent on the basis of the above criteria. To reiterate: the level of discrimination employed was the midpoint, or neutral position, of the response-scale. To illustrate: as indicated above, one of the items ranking low in the estimation of the psychiatrists was—"Have you been lucky or unlucky in the friends you have made?" Five possible responses were provided—very unlucky, rather unlucky, neither lucky nor unlucky, rather lucky, very lucky. Among the wives in Group I, only 7 per cent scored in the "very unlucky" and "rather unlucky" categories combined, while 56 per cent appeared in

the "rather lucky" and "very lucky" categories. Since this group presumably is composed of women with strongest feeling of inadequacy, it is rather evident that this particular question is not discriminatory. Consequently, it was excluded from the index. Twenty other questions were similarly disqualified, leaving twenty-eight questions for inclusion in the index. These are evenly distributed: fourteen asked of or about the wife, and fourteen of or about the husband. Of these twenty-eight questions, listed in footnote 6 of the text twenty-seven are from the Committee's original list of thirty-seven. and one is from the additional set of twelve questions.

Relation of Psychiatrists' Ratings to Test of Internal Consistency. To determine this relationship, it was necessary to derive rank orders for the items that were: (a) evaluated by the psychiatrists and finally included on the punch card (referred to as Group P); (b) tested for internal consistency in Group I; and (c) evaluated for internal consistency in Group A. With the Interviewer's Rating Scale again excluded from consideration, each of these rank orders contained seventeen items. Coefficients of rank-order correlation were then computed. The correlation between the psychiatrists' evaluations (Group P) and items tested in Group I was +.46. Thus, items

Table 25. Percentage of identical agreement, identical and approximate agreement,¹ and no agreement between the wife's self-rating and the husband's rating of the wife and between the husband's self-rating and by the wife's rating of the husband.

	Wife's Husban	SELF-RATING A	and Wifb	Husband's Self-Rating and Wife's Rating of Husband per cent agreement			
ITEM ⁹	PER	CENT AGREEMEN	T				
	Identical	Identical and Approximate	None	Identical	Identical and Approximate	None	
Difficulty Making Up Mind	31.3	77.2	22.8	32.9	79.3	20.7	
Get Upset Easily	33.9	82.0	17.9	33.6	81.9	18.1	
Self-Confidence	42.4	71.5	28.5	48.6	75.6	24.3	
Inclination to Worry	33.1	66.7	33.2	38.1	68.8	31.2	
Kind of Manager	38.1	81.8	18.1	43.8	83.7	16.3	
Pep and Energy	43.3	75.3	24.6	41.7	77.3	22.7	
Cheerfulness	39.4	86.7	13.3	39.9	87.3	12.7	
Mean Percentage	37.4	77.3	22.6	39.8	79.1	20. 9	

"Identical and approximate agreement" includes identical agreement plus one scale point removed in both directions. The percentage of "identical and approximate agreement" plus the percentage of "no agreement" equals 100 per cent. "The multiple-choice questions having more than five-point intervals on the response-scale were converted to five points for purposes of this tabulation. Four of these items were originally on six-point scales and one item was on a seven-point scale.

that ranked high in one group as measures of inadequacy also tended to rank high in the other group. The correlation between items ranked in Group P, and those in Group A was – .49. In other words, the items rated high by psychiatrists are those capable of differentiating between adequacy and inadequacy. This is even further borne out in the correlation between the rank order of items in Group I and those in Group A, which was – .77. The net effect, therefore, of this entire process of refinement has been basically to improve the prospective index with reference to the capacity of questions to discriminate between adequacy and inadequacy.

Intercorrelation of Selected Items. An additional partial check on the validity of some questions was possible. Fourteen of the questions under consideration were accompanied by identical questions asking the husband and wife to rate their spouse on the same trait on which they had rated themselves. These fourteen questions (actually only seven items in that the same question was asked of husband and wife) are those listed in Table 25. For example, the question "Do you get upset easily?" was asked of each wife and husband. The question "Does your wife (husband) get upset easily?" was also asked of both separately. The responses to these pairs of questions were then correlated.³⁸ Each percentage is based on a total of 860 couples which is the original, uninflated sample.

It is evident from this list that the relationships between self-ratings and ratings of the spouse are relatively low and certainly fall far short of a desired high confidence level with reference to validity.

In an attempt to explore some of the possible reasons for this apparent lack of agreement, some additional tabulations were made. It is necessary, first of all, to consider the actual distribution of responses to these types of questions. These data, which are assembled in Table 26 in the form of summary mean distributions of responses for all seven items, exhibit the following patterns when the various comparisons are made:³⁹

1. The self-ratings of husbands are significantly higher than the self-ratings of wives. Although the actual pattern of relationship for each individual item is not included in this paper

³⁸ Originally, intercorrelations were prepared by the conventional Pearsonian technique. However, in view of the usual vagueness surrounding the interpretation of these coefficients and because the data lent themselves so readily to percentage analysis it was decided to use percentages of agreement.

analysis it was decided to use percentages of agreement. ³⁹ Similar comparisons of frequency distributions for these types of self-ratings (Continued on page 294)

Average Rating	Type of Question							
OF SEVEN QUESTIONS	Wives' Self-Ratings	Wives' Ratings of Husbands	Husbands' Self-Ratings	Husbands' Ratings of Wives				
TOTAL	100.0	100.0	100.0	100.0				
Very High	16.9	25.7	22.3	20.5				
High	20.8	24.0	26.0	25.1				
Neutral	46.5	40.3	41.7	39.5				
Low	9.4	6.4	6.7	10.0				
Very Low	6.4	3.6	3.4	4.9				

Table 26. Percentage distribution of average rating of responses to seven questions, by type of question.

(Table 26 only summarizes average frequencies for all seven items), the higher self-ratings of husbands are found for all traits except "kind of manager."

2. Husbands rate wives slightly higher, on the average, than wives rate themselves. This is consistent for all of the seven personality traits in question.

3. There is no appreciable difference between the distributions of husbands' self-ratings and wives' ratings of husbands.

4. Wives rate their husbands significantly higher, on the average, than wives rate themselves. This is consistent for all items.

5. Husbands rate themselves higher, on the average, than they rate their wives on all traits except "kind of manager."
6. On all traits except "kind of manager" the wives' ratings of

6. On all traits except "kind of manager" the wives' ratings of husbands are higher, on the average, than the husbands' ratings of wives.

In view of the above findings husbands would seem to have the dominant images of themselves and their self-images appear to be accepted to a considerable extent by the wives. Conversely, wives' self-images are much more modest even than the husbands' opinions of their wives' personalities. This whole pattern is completely reversed on the question concerning the kind of manager the respondent believes himself to be, i.e., wives rate themselves and are rated by husbands significantly higher than husbands rate themselves and are rated by wives. It may very well be that the perceptual frame of reference on the subject of management is more concrete and real for the wives, in terms of the domestic scene, than it is for the husbands.

and spouse ratings on personality traits were made by E. Lowell Kelly in "Marital Compatability as Related to Personality Traits of Husbands and Wives as Rated by Self and Spouse." *Journal of Social Psychology*, 13, 1941, pp. 193–198. Most of his observations, which are based on the mail-questionnaire replies of a rather heterogeneous group of seventy-six couples, do not coincide with ours.

In the light of these comparisons, perhaps part of the reason for the observed low agreements discussed above (Table 25), may be that the questions elicited different perceptual frames of reference for the wives and the husbands. Additional interpretations are afforded in Table 27. The average relationship between self-ratings of wives and self-ratings of husbands is the lowest of all (only 34 per cent identical agreement). A low relationship would be expected here (but a positive one, since the married couples have lived together 12 to 15 years), because two different people rated themselves independently.

The average percentages of identical agreement between self-rating and rating of self by the spouse on the same item are also relatively low, 37 per cent and 40 per cent identical agreement, respectively. One might expect the agreement to be higher in view of the fact that two people are rating the same person. Perhaps the results should be interpreted as a lack of agreement between two persons' perceptual images of one person. To the extent that this is true they afford no test of validation of either the self-ratings or the ratings by the spouse, since we have no external criterion for deciding which is the "correct" perception. It may be that questions of this type throw light on the way people rate each other in relation to the way they rate themselves but do not provide trustworthy information about individual personalities.

The last two pairs of interrelations in Table 27 are the most enlightening. When the interrelationships of wives' ratings of selves and their ratings of husbands and husband's ratings of selves and

	Per Cent Agreement					
Type of Interrelated Rating	Identical	Identical and Approximate	None			
Wife (Self)-Husband (Self)	34.4	70.3	29.7			
Wife (Self)-Husband (Wife)	37.4	77.3	22.6			
Husband (Self)-Wife (Husband)	39.8	79.1	20.9			
Wife (Self)-Wife (Husband)	52.4	78.5	21.5			
Husband (Self)—Husband (Wife)	52.6	80.4	19.6			

Table 27. Average¹ percentage of identical agreement, identical and approximate agreement, and no agreement between self-ratings, between self-ratings and ratings by spouse, and between self-ratings and ratings of spouse.

¹These are mean percentages representing the averages for the seven items, shown in Table 25. For instance, the second line shows the extent of agreement between wife's rating of herself and husband's rating of the wife on the same items.

their ratings of wives are considered there is a significantly high amount of agreement. (52 per cent and 53 per cent identical agreement, respectively.) In other words, when the perceiver or rater is constant and the stimulus or *ratee* is different the agreement is strongest. This suggests the possibility of a transfer of self-image, i.e., an inability to divorce one's own personality from the rating of one's spouse. Involved here may be a kind of mental or perceptual "laziness" on the part of the respondent who rates himself on a given personality trait and then immediately rates his spouse on the same trait. Unfortunately for comparative purposes the self-rating questions always preceded the spouse-rating question in the interview schedule. It seems highly likely that as a result the perceptual frame of reference already established is difficult to "break." However, some evidence that this type of agreement reflects a happy marriage, i.e., that one sees one's self in one's spouse if there is high compatibility is contained in a recent study.⁴⁰ It would seem definitely to suggest the relative strength of the perceptual reference over the stimulus.

Construction of Summary Indices of Personal Adequacy. The original plan to construct an index of personal adequacy for the couple by adding the individual scores of the husband and wife was abandoned. This procedure would result in "average" scores for couples with an extremely "adequate" husband and an extremely "inadequate" wife, and vice versa. Although this would affect only a minority of cases, it was nevertheless considered inadvisable in view of its sociological unrealism. Instead, it was decided to construct separate indices for the husband and wife and to combine these into a joint index for the couple. As previously described, the index for each spouse was derived simply by adding the fourteen rating scores. The hypothetical and actual limits of these distributions are described in the text.

The levels of adequacy are presented as numerical intervals and are to be regarded as relative rather than absolute scales. It would

⁴⁰ Preston, Malcolm G.; Mudd, Emily Hartshorne; Peltz, William L.; and Froscher, Hazel B.: Impressions of Personality as a Function of Marital Conflict. *Journal of Abnormal and Social Psychology*, Vol. 47, No. 2, April, 1952. These authors conclude that their similar results are "a direct consequence of the fact that people on the opposite side of a conflict situation have more opportunities to take note of their opponent as different rather than similar to themselves, whereas personalities with strong affective feelings (such as love) promoting a wish of identification, tend to see their partners as similar rather than dissimilar to themselves."

be highly presumptuous to identify these points on a scale in terms of absolute concepts of adequacy or inadequacy, since a definition of a cutting score is meaningless without an external criterion of validity. Also, it must be kept in mind that these indices reflect a selfexpressed, subjective *feeling* of personal adequacy.

Evaluation. The various attempted checks on the validity of the items used in this analysis have been described in some detail. The technique of utilizing the judgments of psychiatrists for validating questionnaires is not orthodox procedure and is at best only a very rough check. The tests of internal consistency revealed a large number of items to be deficient with respect to the criteria established. And finally, the correlation of selected items involving self-ratings and ratings of the spouse indicated relatively low relationships. As explained above, tests of reliability were impossible under the circumstances. These methodological limitations, therefore, preclude conclusive interpretations of the relationships between "personal adequacy" and the variables discussed.