

SOCIAL AND PSYCHOLOGICAL FACTORS AFFECTING FERTILITY

IV. DEVELOPING THE SCHEDULES, AND CHOOSING THE TYPE OF COUPLES AND THE AREA TO BE STUDIED¹

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ALTHOUGH the industrial revolution was followed by a phenomenal wave of population growth in countries of western civilization, it also contained the seeds of eventual population decline. In retrospect, it is clear that the wave of growth was due simply to the earlier and more rapid impact of modernization on mortality than on fertility. The increased food supply and even elementary improvements in sanitation appear to have brought almost immediate declines in mortality and these declines were accelerated with medical advances and conquest of the plagues. Declines in birth rates came later, and for a time more slowly. It is to this lagging decline of birth rates that the era of high natural increase and the consequent wave of population growth were due. As passing decades brought increasing urbanization, higher standards of living, and more education, birth rates declined much more rapidly than death rates and the previously wide margin of natural increase began to diminish. The stage of this process varies by area, but in most of the countries of northern and western Europe reproduction rates are now well below the requirements for continued population replacement and the existing increases are due only to a currently favorable age distribution. In our own country the present age-specific fertility levels barely meet permanent replace-

¹This is the fourth 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 three reports that have been published in previous issues of the *Quarterly* related primarily to the Household Survey, conducted in order to locate the couples to be included in the intensive Study. The present report is the first of several relating to the Study proper.

ment requirements and the outlook is for cessation of population growth between 1970 and 2000.

The long-standing decline in the birth rate in western countries is frequently explained in a general way as due to a network of changes in human values and modes of life inherent in the transition from rural and agricultural to urban and industrial economies. But this decline in number of children per family, representing a revolutionary change in one of the basic conditions of life, has been studied in most cases only from materials collected for other purposes. True, a marked advance in knowledge was made when recent studies of contraception served finally to undermine the thesis, still held by some biologists, that the innate reproductive power of individuals had been undercut in major degree by the sedentary life in cities and by the tempo of modern living. These studies provide strong basis for the inference that the declining fertility has been chiefly voluntary, implemented by contraception. Nevertheless, very little has been done heretofore by way of a scientific study of the individual motivations regarding size of family.

In the hope of at least making a beginning in this field the present Study of Social and Psychological Factors Affecting Fertility was organized. The primary purpose of the Study may be summarized as follows: to ascertain (a) the extent to which the actual number of children that couples have is larger or smaller than the number they want; (b) how couples are influenced by various socio-economic and psychological factors in deciding upon the number of children they want; and (c) how the size of families would be affected by various measures which might be included in a national population program aimed at checking the decline in the birth rate and improving the quality of the population. The Study had its origins in informal discussions of a group of demographers, namely, Clyde V. Kiser, Frank Lorimer, Frank W. Notestein, Frederick Osborn, Warren S. Thompson, and P. K. Whelpton. In December 1938, a request for funds to finance exploratory work was submitted

to the Carnegie Corporation, which made a grant to the Milbank Memorial Fund as sponsor of the Study. As plans and possibilities were explored, it became evident that the psychological and statistical aspects of such research would be highly important, and that it would be desirable to have these fields represented more adequately in the group. As a result, the Committee finally organized to conduct the Study included Lowell J. Reed (Chairman), Daniel Katz, E. Lowell Kelly, S. A. Switzer, and the demographers mentioned above.

When the Study was being organized (1938-1940) little exact information was available regarding the extent or effectiveness of contraceptive practices among married couples in the United States as a whole. Several valuable studies had been made of selected groups, for example, of wives who were above average in fertility, or who had attended birth control clinics,² but none had dealt with a large cross-section of couples unselected with direct reference to either fertility or an interest in contraception. In such a sample it was important to ascertain for couples with children the number of conceptions that (a) were planned, i.e., contraceptive practices were discontinued because pregnancy was desired; (b) occurred when contraceptive practices were discontinued because of other reasons; (c) occurred in spite of attempts at prevention; and (d) occurred if contraception never was practiced. For childless couples the need was to distinguish between those who were childless from choice and those who were physiologically unable to have a child, and to ascertain from the latter the reasons for their sterility. Knowledge regarding these matters is essential for judging the changes in size of family that may come about through the more effective practice

² For example, *see*:

Kopp, Marie E.: *BIRTH CONTROL IN PRACTICE*. New York, Robert M. McBride and Company, 1934, 290 pp.

Pearl, Raymond: *THE NATURAL HISTORY OF POPULATION*. New York, The Oxford University Press, 1939, 416 pp.

Stix, Regine K. and Notestein, Frank W.: *CONTROLLED FERTILITY*. Baltimore, The Williams and Wilkins Company, 1940, 201 pp.

of contraception and through better diagnosis and treatment of sterility and low fecundity.

Information about the reasons why couples want one, two, or some other number of children was even less adequate than that regarding the above topics; in fact, except for a recent study of Army aviators,³ it was almost nonexistent. Various studies had shown conclusively the presence of important differentials in fertility when the population was grouped according to rural and urban residence, occupation, income, education, and other characteristics. The problem was to analyze the factors causing these group differences from the standpoint of their effect on particular couples. To what extent, for example, is the number of children that a couple wants determined by their financial history and aspirations, their social outlook, their family background, their liking for children, their health and marital adjustment, their interest in religion, their feeling of personal adequacy, their need for ego satisfaction, and other socio-economic and psychological characteristics? How would these influences be modified by certain proposals which might be included in a program designed to check the decline in birth rates and size of family? Among the proposals already suggested or adopted here or in Europe had been (1) relieving parents of more of the cost of raising children, especially the cost of medical and dental care, and higher education; (2) providing adequate housing for families with several children at rentals within their means; (3) opening nursery schools so as to reduce the extent to which children interfere with their mother's freedom; and (4) paying a so-called "mother's wage," based on the number of children. Would any of them prove practical and effective?

Answers to these questions were wanted not merely to satisfy scientific curiosity, but because of their practical utility. Public

³ Flanagan, John C.: A Study of Factors Determining Family Size in a Selected Professional Group. *Genetic Psychology Monographs*, 1942, xxv, pp. 3-99.

concern regarding population matters in this country had been steadily and rapidly increasing, in part because of the attempts to develop national population programs in various European countries before World War II, and because of the publicity which had been given to the slowing up of our population growth and the decline in our birth rate. It was expected that this concern would be stimulated in the future by the spreading realization that 1938-1940 birth rates by age of mother would not quite maintain a stationary population in the long run, and that a decline in these rates in the twenty years after 1938-1940 as great as that in the twenty preceding years would bring about a rapidly decreasing population before the end of the present century.*

Once an important portion of the public is aroused over population matters, there is sure to be a powerful demand that something be done about them on a nation-wide scale. When the Study was being planned, two lines of attack already had been suggested. In the first place, it was becoming recognized that various measures which had been adopted or were being advocated in housing, health, taxation, and other fields, while not aimed at influencing the size or quality of our population, would nevertheless affect them significantly and in some cases harmfully. The feeling was growing that the programs in such fields should be oriented to the population needs of the Nation. Secondly, it was beginning to be realized that progress in improving the population situation would be slow by this indirect attack alone; hence, that measures aimed directly at bringing about certain changes in the number and quality of our people should be developed and put into effect. Even then there

* The net reproduction rate of the white population averaged slightly under 100 during 1938-1940. The gross reproduction rate of the white population was 147 in 1918-1920 (according to estimates of the Scripps Foundation for Research in Population Problems) and 107 in 1938-1940; it declined over 27 per cent. At this rate it would be 78 in 1958-1960, and the net reproduction rate about 72.

The much higher crude birth rates of 1941-1944 than of 1938-1940 should not be interpreted as reversing the long-time downward trend, for they result in large measure from births postponed because of the depression, and births (especially first births) moved ahead because of the war. Whelpton, P. K.: Effect of Increased Birth Rate on Future Population. *The American Journal of Public Health*, April, 1945, xxxv, No. 4, pp. 326-333.

were groups urging the establishment of some sort of national population commission to develop such a program. Much stronger support for such a commission is to be expected in the future.

If a sound and comprehensive population policy is to be developed by a commission or by other means, it is essential to know more about the optimum rate of growth and size of the population and the hereditary background and environmental surroundings that make for optimum quality in the population. In addition, if couples are to be encouraged to have families of the size which is desirable for them and for society as a whole, both quantitatively and qualitatively, it is essential to know the relative importance of the socio-economic and psychological factors that have influenced them in deciding on the number of children they want, and the changes in these factors which would lead to a different decision as to size of family. Although it was realized that more research was needed regarding the quantity and quality of the population, it was believed that there was a greater immediate need for research regarding the motivations back of the fertility pattern. The Study deals with the latter problem. It should not be expected, of course, to furnish all the information which should be available on these matters. The Committee hopes, however, that the Study will prove worth while not only with respect to factual data for a large group in a representative area, but also with respect to its contribution to methodology in a new field of study.

The present report relates to questions of procedure that faced the Committee and Staff in planning and conducting the Study. For example, what questions should be asked? What type of couples should be included? In what area should the Study be conducted? How should specific couples be located and how could their cooperation be secured?

DEVELOPING THE SCHEDULES AND INTERVIEWING PROCEDURE

From the outset the Committee realized that its problem lay in

a new field in which the instruments of research themselves would have to be evolved. It is therefore not surprising that the development of the schedules and the interviewing procedure was by far the most important phase of the preparation for the Study. As a first step, Dr. Warren S. Thompson prepared a list of socio-economic and psychological factors affecting the size of planned families, the hypotheses to be tested in the Study. Under each hypothesis he suggested a number of questions designed to obtain information bearing on that hypothesis. His suggestions and those of other Committee members were discussed at a series of meetings. The hypotheses and questions which seemed least helpful were dropped; the others were developed into a schedule which was tested on a small scale. Some questions were found to be undifferentiating, some to be misinterpreted, and some to be too difficult for the respondent to answer. A discussion of the findings led to the rewording of some questions and the elimination of others. Usually, however, the latter were heavily outnumbered by questions which had occurred to Committee members or had been suggested by others since the previous meeting, and which appeared to merit a test. A revised schedule was then prepared, tested on a small scale, and changed again in accordance with the experience thus gained, the process being repeated several times.

By the spring of 1939 it was believed that the schedules were in shape for tests on a somewhat larger scale. One set of schedules was tested in Hamilton, Ohio, by Mrs. Martha Sampson Herrick under the direction of Dr. Warren S. Thompson, and a somewhat different set in New Brunswick, New Jersey, under the direction of Dr. Frank W. Notestein and Dr. Daniel Katz. The material collected was worked over by Miss Mildred Parten. On the basis of this experience a revised set of schedules was tested on a still larger scale in the summer of 1940 by Mrs. Herrick in Hamilton, and by Mrs. Emily Marks Skolnick in Trenton, New Jersey. The analysis of these data led to the final revision of the schedules.

In the course of schedule testing it became evident that the amount of information desired was too great to be obtained at a single interview. Several alternative plans were considered and tested: (a) two interviews on different days; (b) two interviews plus a questionnaire to be filled out during the interim; and (c) three interviews, the second consisting chiefly of a questionnaire to be filled out with the interviewer present to explain any items not clear. As experience was gained regarding the feasibility of interviewing wives, a second modification was suggested, namely, the securing of certain information from husbands as well as wives. It was realized that in many families the number of children born reflects the ideas of the husband on family size more closely than those of the wife. In such cases an analysis of the relation between the actual and the desired number would show much less agreement if based on the wife's attitudes alone than on hers and her husband's together. Subsequent tests indicated that the most successful plan was (1) a short interview with the wife, using a schedule (Form A) containing questions designed primarily to enlist her interest and cooperation in the Study, to secure some simple demographic information about the family, and to ascertain how the couple should be classed as to fecundity, i.e., the physiological ability to have children; (2) an interview with the wife and husband together at which each of them independently checked categories on a questionnaire (Forms B or B2 for the wife and C or C2 for the husband) dealing primarily with attitudes,⁵ and answered orally certain questions (on Form D) relating to education, employment, economic status and family background; and (3) a third interview with the wife dealing primarily with a history of pregnancies and contraceptive practices (Form E).

The hypotheses which it was hoped could be partially or wholly proved or disproved, and the number (approximate) of questions

⁵To encourage frankness, the interviewer always emphasized at the outset that the husband would not see the wife's schedule nor the wife the husband's.

bearing on each hypothesis (but scattered throughout the final schedules) are as follows:

1. The greater the difference between the actual level of living and the standard of living desired, the higher the proportion of couples practicing contraception effectively and the smaller the planned families. Nineteen questions.
2. The greater the feeling of economic insecurity, the higher the proportion of couples practicing contraception effectively and the smaller the planned families. Twelve questions.
3. The higher the socio-economic status, the higher the proportion of couples practicing contraception effectively and the smaller the planned families. Fifty-five questions.
4. The greater the extent of doubling-up within families, the higher the proportion of couples practicing contraception effectively and the smaller the planned families. Ten questions.
5. The stronger the interest in, and liking for, children, the lower the proportion of couples practicing contraception effectively and the larger the planned families. Twenty-four questions.
6. The interest of children in, and their desire for, brothers and sisters affects the size of the family. Four questions.
7. The stronger the feeling that children interfere with personal freedom, the higher the proportion of couples practicing contraception effectively and the smaller the planned families. Twenty-three questions.
8. The belief that an only child is handicapped is an important reason for having a second child. Four questions.
9. The desire to insure against childlessness is an important reason for having a second child. Four questions.
10. Preferences regarding the sex of children affect the size of the family. Eleven questions.
11. The number, size, and location of communities in which couples have lived affects the proportion practicing contraception effectively and the size of planned families. Twenty questions.
12. Family and childhood situations and attitudes affect the propor-

tion of couples practicing contraception effectively and the size of the planned families. Sixty-six questions.

13. Conformity to group patterns affects the proportion of couples practicing contraception effectively and the size of the planned families. Sixteen questions.

14. The greater the adherence to traditions, the lower the proportion of families practicing contraception effectively and the larger the planned families. Twenty-eight questions.

15. The greater the interest in religion, the lower the proportion of couples practicing contraception effectively and the larger the planned families. Twenty-eight questions.

16. The stronger the feeling of personal inadequacy, the higher the proportion of couples practicing contraception effectively and the smaller the planned families. Thirty-five questions.

17. The greater the tendency to plan in general, the higher the proportion of couples practicing contraception effectively and the smaller the planned families. Eighteen questions.

18. The greater the extent to which interest in children is a matter of personal satisfaction, the higher the proportion of couples practicing contraception effectively and the smaller the planned families. Sixteen questions.

19. That member of the couple who is dominant in general family matters tends also to be dominant in determining whether conception shall be controlled and the size of the planned family. Twenty-six questions.

20. The more satisfactory the marital adjustment, the higher the proportion of couples practicing contraception effectively and the larger the planned families. Thirty-two questions.

21. The poorer the health of husband and/or wife, the higher the proportion of couples practicing contraception effectively and the smaller the planned families. Sixteen questions.

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

23. The greater the fear of pregnancy, the higher the proportion of

couples practicing contraception effectively and the smaller the planned families. Ten questions.

In addition to the questions⁶ assigned to a hypothesis there were others relating to the following topics:

1. Attitudes toward hypothetical inducements to have more children. Sixteen questions.
2. Demographic information about the couple and each child. Twenty-seven questions.
3. Contraceptive practices, menstruation, and lactation. Twenty-three questions (many of them repeated for each practice and for each interpregnancy interval).

To supplement the information obtained by questioning the wife and husband, the interviewer herself recorded certain facts and opinions. While the wife and husband were checking categories on the questionnaires the interviewer checked the items on Chapin's Social Status Scale. Soon after the last schedule (Form E) was completed for each couple, she rated the husband and wife with respect to ten of the hypotheses and three other items. Finally she wrote a short analytical summary of the case.

According to the early concepts, the Study was to deal with fecund couples; hence the interviews with those who were found to have had important periods of sterility were to be discontinued as soon as such a situation was discovered. Merely to ascertain the

⁶In the preceding and following lists a question asked separately about husband and wife is counted twice. Questions applying to each child or to each sib are counted once. Few if any wives and husbands were asked all the questions. For example, if a wife replied "None" to the questions "How many years did you work before marriage?" and "How many have you worked since marriage?" she was not asked the questions regarding dates of employment, occupation, industry, hours per week, earnings, and reasons for working and quitting. Similarly, if the husband's answer to the question "Have your earnings been cut off by sickness or unemployment for several months since marriage?" was "No" he was not asked the questions regarding dates of such periods, the reasons for them, nor how family expenses were met. On the other hand, if there was more than one period of employment for the wife or unemployment for the husband these questions were asked for each period.

It should be emphasized, however, that these counts of questions refer only to those printed on the schedules. To obtain an accurate answer to one such question it may have been necessary for an interviewer to ask several others.

proportion of these couples in a group of the type to be studied would be a marked step forward. Several physicians had stated their opinion as to the prevalence of sterility,⁷ but there was little statistical information for typical groups of the population. As successive drafts of schedules were tested, however, it became obvious that a considerable amount of additional information could be secured from sterile couples at a small additional cost. Because so little was known about the characteristics of such couples and their attitudes toward sterility it was decided to expand this phase of the Study. A special schedule (Form S) was prepared, containing questions to be asked the wife at the first interview (as soon as Form A was completed), though in some cases a second call might be required. It was designed to secure (a) the same information as for fecund couples on parents, siblings, education, pregnancies, and contraceptive practices; (b) abridged information on socioeconomic status and employment history; and (c) special information on duration and causes of sterility. It was realized that adequate facts on the last-mentioned topics could not be obtained from wives by interviewers without medical training but it was hoped that something worth while might be learned.

A fundamental question raised at an early stage of the planning was whether a representative group of women, such as was wanted for the Study, would be willing to answer the essential questions of a highly personal nature. To lessen the likelihood of a refusal, considerable attention was given to means of arousing the wife's interest at the beginning of the interview. The first method adopted was the obvious one of going from the general to the specific—from questions about the ideal size of a family and attitudes toward childless families to questions about the wife's liking for children and her contraceptive practices. A second device was the inclusion

⁷ For examples, *see* Reynolds, Edward and Macomber, Donald: *FERTILITY AND STERILITY IN HUMAN MARRIAGES*. Philadelphia, W. B. Saunders Company, 1924.

Lane-Roberts, Cedric: *STERILITY AND IMPAIRED FERTILITY: PATHOGENESIS, DIAGNOSIS, AND TREATMENT*. New York, Paul B. Hoeber, Inc., 1939.

in Form A (the first schedule) of stories about hypothetical couples. The socio-economic and demographic characteristics of certain couples and their attitudes towards various matters were described by the interviewer, who then asked whether the couple should be advised to have a (another) child and why. This approach proved to be exceedingly helpful in interesting wives and securing their cooperation. A third device, giving the wife something for her time and trouble, also was found helpful in many cases. Moreover, it proved beneficial to the interviewer's morale, an advantage not anticipated at the outset. Knowing that the wife was to receive some money for cooperating, the interviewer felt less hesitant about asking so many questions.

In spite of the foregoing attempts to secure cooperation, the proportion of couples in the 1940 field trials who refused to cooperate (approximately 33 per cent in Hamilton and 18 per cent in Trenton) was sufficiently high to be disturbing.⁸ In both cities the husband and wife were offered fifty cents each for cooperating. It was thought that raising this to \$1.00—putting it on the basis of paper money instead of change—might lower the refusal rate somewhat. A more promising suggestion was believed to be the securing of local sponsorship for the Study. In Hamilton and Trenton the interviewers introduced themselves, and had as their only credential a letter from a Committee member. It was hoped that a significantly higher proportion of couples would cooperate if they could be shown that the Study had the approval and support of local people whose opinions carry weight.⁹

Although the large number of refusals in the trial surveys was

⁸ The lower proportion in Trenton was due in important degree to a difference in interviewing procedure. In Hamilton, if a wife said at the end of the first interview that she would cooperate but she was positive her husband would not, the interviewer's instructions were to make no attempt to see the husband. In Trenton, however, the interviewer was instructed to try to see the husband, explain the Study to him, and secure his cooperation. She accomplished the latter in about half of the cases of this type.

⁹ That these changes in procedure were worth while is borne out by the experience in Indianapolis, to be discussed in the next article.

discouraging, the amount of interest shown by the cooperating couples was highly gratifying. A large majority of the husbands and wives seemed to be genuinely interested in the questions and to enjoy answering them. Many wives in particular were glad to have a chance to discuss family planning and contraceptive practices with an intelligent person. Apparently they had thought these matters were not proper subjects for conversation according to the *mores* of their group, hence had not discussed them at all, or had done so with a feeling of guilt. To have them presented naturally as topics for decent discussion was pleasing. Typical of a less frequent, but not uncommon, reaction was the comment "It's about time that someone paid attention to the difficulties faced by ordinary people in raising a family, and that something be done to make it easier for them."

Calls made to secure supplementary information from some Hamilton couples a few weeks after their schedules presumably were completed showed the excellent *rapport* usually established. In most cases the interviewer was greeted as an old friend. At one home an unexpected influence of the Study came to light. Although there were two children in this family the husband and wife had never talked about the number of children they desired. During recent years, the wife had come to think that the husband did not want a third child, hence that they would not have another even though she herself wanted it. The husband, on his part, had formed a similar opinion. As a result of being interviewed, however, the couple talked over some of the questions that had been asked, and discovered that each was mistaken as to the other's attitude. When last seen they were planning to have a third child.

THE TYPE OF COUPLES TO BE STUDIED

The expense of an intensive study of the type described above imposes sharp limits on the number of couples that can be included. It was highly desirable, therefore, to restrict the expensive

interviews to a group sufficiently homogeneous that in the final analyses of socio-economic and psychological factors affecting fertility it would not be necessary to subdivide the couples by such factors as color, nativity, religion, type of community of residence since marriage, duration of marriage, and age. With a limited number of couples such subdivisions could easily result in groups too small to yield valid results.

In order to avoid subdividing by the foregoing factors, it was necessary to decide on the type of couples to be included in the Study. In so far as color and nativity were concerned the answer was obvious. Many studies had shown that native-white, foreign-born white, and Negro women differ with respect to fertility. Since this initial Study could not be conducted on a sufficiently large scale to secure an adequate sample of each group, it seemed desirable to concentrate on the largest group, the native white.

A corresponding situation prompted restriction to Protestant couples.³⁰ In this instance, however, there was an additional factor, namely, the possibility that too many Catholic couples would not discuss frankly their experiences with contraception.

Since size of family³¹ for most fecund couples is subject to change until the wife reaches age 45 or thereabouts, it is obvious that there are certain advantages in limiting a study of the factors influencing the number of live births to couples in which the wife is 45 or older. An important disadvantage, however, is the remoteness of the most decisive period. Birth statistics for recent prewar years show that more than three-fourths of the first births to native-white women occurred before age 27, more than three-fourths of the third births before age 32, and over three-fourths of the fifth births before age 35.³² In other words, the reasons leading to the last live birth to

³⁰ A few persons reporting "no religious preference" were included but nearly all of them were of Protestant background.

³¹ Size of family, or parity, as used in this article is based on number of live births.

³² U. S. Bureau of the Census: *VITAL STATISTICS OF THE UNITED STATES, 1938*. Part I. Washington, U. S. Government Printing Office, 1940, pp. 116-117.

women aged 45-49 in 1941 were based on conditions of 1907-1922 for about three-fourths of those with one live birth, conditions of 1910-1927 for about three-fourths of those with three live births, and conditions of 1913-1930 for about three-fourths of those with five live births. Such remoteness would not be so important if birth rates had been relatively stationary since these periods. But between 1920 and 1940 rates for third births to native-white women aged 15-49 fell by over 30 per cent and rates for fifth births by nearly 50 per cent.¹³

Other advantages of studying younger couples arise from the fact that most of them are still facing the problem of whether to have another child—the problem is current rather than historical. Unless they are sterile or simply letting nature take its course, they are still practicing contraception or are trying to have another pregnancy. And because they believe that conception can occur their attitude toward it should be realistic, and relatively devoid of the wishful thinking indulged in by some couples when they realize that having another baby is physiologically impossible.

On the other hand, to select women who are too young would be as objectionable as selecting the too old. For example, barely 10 per cent of the native-white girls aged 15-19 in 1940 had married, and only a corresponding proportion of the women 25-29 had been married ten years. To study wives in the 25-29 age group as a whole would mean including a high proportion of women married less than ten years, which is a rather short period of married life to use as a base in judging the conditions determining family size. To select from the wives in the 25-29 age group those who had been married ten years or longer would introduce all the biases connected with early marriage.

The final decision was to restrict the Study to couples who were married in 1927, 1928, or 1929, and in which the wife was under

¹³ From unpublished estimates of the Scripps Foundation for Research in Population Problems, made for a current study financed by a grant from the Rockefeller Foundation.

30 and the husband under 40 at marriage. Since the field work was carried on from April 1, 1941 to January 31, 1942, these marriage dates mean that all the marriages not broken by death or divorce had lasted eleven to fifteen years with a large majority between twelve and fourteen years. The restrictions on age at marriage mean that all the wives were between 27 and 44 when interviewed and, because of the high proportion of first marriages occurring at ages 18-23, that a majority of them were between 30 and 38. For husbands the total range in age was from 29 to 54, the majority being 32-40.

Since the Study could not be on a sufficiently large scale to include a representative group of couples with husband and/or wife married more than once, it seemed best to eliminate the effect of broken marriages and confine the Study to couples married once only.

For reasons explained above it was desirable to concentrate the Study on couples who had at least tried to plan size of family to some extent. A strong inverse relation between education and size of family had been brought out in previous studies. Because it was believed that this was due in large measure to a relation between education and attempts to plan size of family, a fairly effective means of raising the proportion of planners among couples interviewed was to exclude wives and husbands who had not completed at least the 8th grade. An additional reason for excluding such couples became evident while the schedules were being developed and tested. Experience showed that many persons with less schooling had too much difficulty in answering the questions, especially the 175 questions on Forms B and C¹⁴ which called for the checking of the appropriate category by the respondent.¹⁵

At an early stage of planning it was hoped that couples meeting

¹⁴ Forms B and C were checked by wives and husbands who had children; Forms B₂ and C₂ by those without children. The latter contained about 150 questions.

¹⁵ After two husbands had completed Form B it was discovered that their wives were incorrect in reporting on Form A that they had finished the 8th grade. In view of the progress already made in the interviewing the schedules for these couples were completed.

the above requirements could be studied in both urban and rural areas in order to throw light on the motivating factors which were believed to be responsible for an important part of the differences between urban and rural birth rates. As successive drafts of the schedules were tested, however, it became evident that the Study would be more expensive than had been anticipated, and that the funds available would not permit completing an adequate number of schedules in more than one type of area. In selecting the type, the majority of considerations favored a fairly large city. Most important was the fact that the decline in the United States birth rate, which dates back at least to 1800, apparently began in the cities of those times, and resulted in a long-standing inverse relation between birth rates and size of community when allowance is made for differences in race, nativity, sex, and age. In other words, the specific birth rates of the large cities at a given time have indicated what the national birth rates probably would be a few decades later. A second reason stems from the first. The information available indicates that the lower specific birth rates of large cities than of smaller communities are due chiefly to the more widespread and effective use of contraceptives, and hence that cities contain a higher proportion of families planned as to size. Since the Study was directed primarily at such families, it could be conducted most efficiently in a large city.

Because of the variations in fertility by size of community, the question arose as to whether all married couples residing in the selected city and meeting the requirements discussed above should be included, or whether those who had moved in from smaller places in recent years should be ruled out. There is little direct information on the extent to which married couples who have migrated to large cities from smaller places take their fertility pattern with them. In view of the relationship just mentioned, however, it seemed reasonable to assume that the number of live births to couples currently residing in a large city would tend to

be larger for couples who had lived in small places or in the country most of the time since marriage than for those who had lived in large cities all of the time since marriage.³⁶ To make certain that the influence of such migrants was not important, eight years of residence since marriage in a city of 25,000 or over was finally chosen as a minimum requirement. Since the year of marriage restriction required eleven to fifteen years of married life, the residence restriction required that at least 53 to 72 per cent of the years since marriage be spent in cities of 25,000 or over.

In summary, the decision was made that eligibility for study would be restricted to couples with the following characteristics: husband and wife native white; both Protestant; married in 1927, 1928, or 1929; wife under 30 and the husband under 40 at marriage; neither previously married; residents of a large city most of the time since marriage; and both elementary school graduates.

The choice of the particular city to be studied was influenced greatly by the eligibility requirements outlined above. Preliminary tests indicated that a city of less than 300,000 population probably would not contain the desired number of eligible couples. Among such cities the ease of locating eligible couples would vary primarily with the proportion of the population which was native white and Protestant. According to the 1930 Census the proportion of native-white persons in cities of 250,000 or more in 1930 was highest for Indianapolis (84.1 per cent), followed closely by Denver, Toledo, Kansas City (Missouri), Columbus (Ohio), Akron, Portland (Oregon), St. Paul, Louisville, Cincinnati, Minneapolis, and Dallas (each above 80 per cent).³⁷ A combination of this information with that from the 1926 Census of Religious Bodies indicated that the

³⁶ The place of residence of individuals before marriage may have little influence on the fertility of couples residing in cities exclusively after marriage. One study, though based upon small samples, has suggested that among couples residing in cities since marriage there is little difference between the fertility rates of those born in cities and those born in smaller places. See Kiser, Clyde V.: *Birth Rates Among Rural Migrants in Cities*. *The Milbank Memorial Fund Quarterly*, October, 1938, xvi, No. 4, pp. 369-381.

³⁷ Some information, but not the foregoing percentages, had been released from the 1940 Census at the time when it was necessary to select the city to be studied.

proportion of the population which was native white and belonged to a Protestant Church was highest in Dallas (60-65 per cent), second in Indianapolis (53-58 per cent), and lower (40-50 per cent) in Kansas City, Columbus, Minneapolis, Portland, Akron, Louisville, and Denver. Although Indianapolis did not head the latter list it had certain advantages over Dallas, as well as the other cities mentioned. Its economy appeared most normal, for the proportion of workers in manufacture, transportation, trade, professional services, and other types of industries resembled most closely that of the urban portion of the Nation. In addition, Indianapolis is an older city than Dallas and is located nearer the center of the Nation's population. It is perhaps as "typically American" as any city of comparable size.

LOCATING ELIGIBLE COUPLES

How to locate the couples meeting the eligibility requirements of the Study was another problem requiring considerable attention during the planning stage. The ideal method from the standpoint of the Study would have been to secure from the 1940 Census the addresses of couples meeting the requirements for race, nativity, age, education, and (for those in the Census sample) previous marriage of wife, and to interview them to ascertain which met the remaining requirements. Since Census data for individuals and couples must be kept confidential, this approach was out of the question. The first plan tested called for (a) listing from the marriage records the couples married for the first time in 1927, 1928, or 1929, the ceremony performed by a Protestant clergyman or a public official, the husband and wife native white, and the husband under 40 and the wife under 30 at marriage; (b) looking through the latest city directory for the addresses of the husbands; and (c) ascertaining by interviews which of those who were listed met the remaining requirements. The chief disadvantage was the automatic exclusion of couples who met all the requirements but (a) who had

married in the City but no longer resided there, or (b) who resided there but were married elsewhere. Although some of the eligibility restrictions were adopted primarily to increase the homogeneity of the couples to be studied (as explained above), it was realized that a line had to be drawn somewhere. The final decision of the Committee was that an important number of couples probably moved between large cities, and that such couples should not be omitted from the Study.

The second plan tested called for a house-to-house survey of the City, using a short schedule consisting primarily of questions necessary to determine eligibility. Obviously, it met most of the objection to Plan 1 just discussed. Although a test of Plan 2 indicated that the cost would be substantially larger than that of steps (a) and (b) of Plan 1, it was believed that much of the excess would be offset by a saving of the interviewers' time. An important proportion of the couples visited by the interviewers in step (c) of Plan 1 would be found ineligible because of insufficient education, the marriage broken by divorce or death of wife, one spouse not a Protestant, or insufficient residence in a city of 25,000 or over. Moreover, even though the directory in Plan 1 was fairly recent, more time would be lost than with Plan 2 in finding couples who had moved within the City. According to tests of Plan 2 the interviewers would call on few ineligible couples—only those for whom the information on the short survey schedules was incorrect to a certain degree.¹⁸

An important advantage of Plan 2 was the fact that the information available from the Survey would add greatly to the store of knowledge about the variations in fertility between the main

¹⁸ For various reasons, however, the proportion of such couples actually was 15.1 per cent, considerably larger than was anticipated. It is estimated that the number of couples apparently eligible on the basis of the survey schedule entries should be increased by approximately 6.7 per cent to allow for those apparently ineligible but actually eligible. See Whelpton, P. K. and Kiser, Clyde V.: *Social and Psychological Factors Affecting Fertility*. III. The Completeness and Accuracy of the Household Survey of Indianapolis. *The Milbank Memorial Fund Quarterly*, July, 1945, xxiii, No. 3, pp. 254-296. (Reprint, pp. 95-137.)

religious groups—Protestant, Catholic, and Jewish—when allowance was made for variation in highest grade of school completed by husband and wife, in socio-economic status as measured by tenure and monthly rent or rental value of home, and in various demographic factors (nativity, age, and duration of marriage).¹⁹ Plan 2 finally was adopted resulting in the Household Survey of Indianapolis.

Experience gained during the testing of schedules showed that the house-to-house canvassing for the Survey could be done by relatively inexperienced people but that the intensive Study would require skilled and carefully trained interviewers. The Household Survey was begun March 1, 1941 with seven persons who were given a few hours of training on procedure and schedule content²⁰ by Mrs. Emily Marks Skolnick, and who worked under her direction. Early in June the group was increased to forty-three, most of the additional persons being college seniors recommended by members of Social Science departments. By the latter part of August 1941, the Survey field work was completed.

The eleven interviewers for the intensive Study were selected from a long list of persons with graduate training in sociology, psychology, or social work, with successful interviewing experience, and with high recommendations for the work to be done.²¹ During a two-week period they were given intensive training by Mrs. Martha Sampson Herrick and Mrs. Skolnick. The first part of the training was devoted to a study of the schedules and instructions, and to the interviewing techniques that had been found helpful

¹⁹ For an analysis of these data see the first two reports dealing with the Survey: I. Differential Fertility Among 41,498 Native-White Couples in Indianapolis, and II. Variations in the Size of Completed Families of 6,551 Native-White Couples in Indianapolis. The Milbank Memorial Fund *Quarterly*, July, 1943, xxi, No. 3, pp. 221-280 (Reprint, pp. 1-60), and January, 1944, xxii, No. 1, pp. 72-105 (Reprint, pp. 61-94).

²⁰ The short schedule used in the Survey is reproduced on page 222 (reprint p. 2), of the first report. See footnote 19 above.

²¹ The interviewers were: Mary M. Aikin, Miriam Bintz, Frances N. Butts, Margaret Creviston, Gettrude D. Davis, Vida Davison, Dorothy McMillin Gross, Helen Jennings, Margaret A. McConnell, Ruth G. Moss, and Virginia Kahn White.

during the schedule testing. Visits were made to the Indiana University Medical Center, where talks were given by Dr. Carl P. Huber on gynecological problems that might be encountered, particularly with respect to sterility and complications of pregnancy and childbirth. Similarly, time was spent at the Maternal Health Center, where types of contraceptives and techniques of using them were explained. In the next step in training, the supervisors filled out schedules for selected couples in the presence of the trainees. Finally, the trainees, themselves, called on, and filled out schedules independently for, couples who were primed to present certain types of problems. These schedules were checked and criticized by the supervisors. Actual interviewing began on April 15, 1941, and lasted until January 31, 1942.

In an attempt to keep the refusal rate at a minimum, a committee of influential citizens—the Indianapolis Committee on American Family Life—was organized to sponsor the Study.²² They agreed to have their names used in connection with publicity material, and to answer inquiries concerning the Study from people who were asked to cooperate but were skeptical as to the wisdom of doing so. In addition, a letter on committee stationery, setting forth in popular terms the purpose of the Study and the reasons why it deserved support, was prepared for use by the interviewers.²³ Altogether, the support of these civic leaders proved most helpful.

²² Members of the Indianapolis Committee were: Rev. Harry E. Campbell, First Presbyterian Church; Alex E. Gordon, Brotherhood of Locomotive Firemen and Enginemen; Mrs. Benjamin D. Hitz, Public Health Nursing Association; Ralph W. Husted, Council of Social Agencies; Hugh McK. Landon, Fletcher Trust Company; Thurman B. Rice, M.D., Indiana State Board of Health; and Daniel S. Robinson, President, Butler University.

²³ The letter reads as follows:

“Mr. Indianapolis Husband:

“Today, when dictators in many other countries are telling people what they must do and think and feel, the U. S. A. is trying harder than ever to be truly democratic. In order to accomplish this it is necessary to know what typical people think about important matters. At the present time there is a call for information about American Family Life from couples who have been married several years. You and your wife have been chosen as one of the 1000 Indianapolis couples whose opinions it is important to obtain.

“It will be worth much to the city, state, and nation to find out some things about

(Continued on page 409)

To summarize, it is evident from the foregoing that much tedious and undramatic work was involved in the preparation for the Study. In the initial stages it centered on the definition of problems, the formulation of hypotheses, and the development of the research instruments for evaluating them. Decisions regarding the scope of the Study, the type of couples to be included, and the method of locating them necessitated much thought and experimentation. Tentative schedule forms were tested in field trials, revised, retested, and revised several times over before the final forms were printed. Finally, the interviewers were carefully selected, trained, and supervised. Whatever may be the limitations in the techniques used or in the results to be presented in subsequent reports, these efforts should serve to call attention to desirable and undesirable procedures for future studies in this complex field.

American families: their likes and dislikes, their needs, the job at which they work, the kind of people they are, how many children they have, and what they would like to do for their children if they have any. Such information is needed by the public and private agencies which are trying to improve family welfare, and to lessen the financial, psychological, and health difficulties of many married couples and their children. Public concern about these family matters is steadily and rapidly growing.

"Your wife has already given one of our interviewers her opinion on a few questions. Now we would like both of you to fill out a questionnaire which asks about the things mentioned above. You will find it easy to do, for the questions are short and simple, several answers are printed, and you need only to check the one that fits your situation most closely. Our interviewer will ask a few additional questions, but will record your replies herself. Your part can all be done in about an hour. In return for your help, you and your wife will each receive \$1.00, and in addition you will have the satisfaction of knowing that you have helped in doing a useful piece of work.

"The information which you give us will be kept strictly confidential. Your answers to our questions will be used like a Gallup poll or 'straw vote.' You will not be asked to sign any papers, neither will your name or any information which might identify you be given to anyone by the person who interviews you. If you have any question concerning our work, call the Council of Social Agencies, for they are familiar with it.

"May we count on you to be one of the 1000 couples who will give the information needed about Indianapolis families?"

AMERICAN FAMILY LIFE
P. K. Whelpton
For the Indianapolis Committee"