FERTILITY OF NATIVE WHITE MARRIED WOMEN IN VARIOUS SOCIAL CLASSES AS SHOWN BY THE CENSUS RETURNS FOR 1910*

RECENTLY much interest has been expressed in the differential rate of reproduction of the various social classes. It is pointed out that quite possibly the biological and social heritage of our future population will come predominately from a small, and some think an inferior, section of our present population. Whatever the ranking of the social classes by superiority may be, the relation between fertility and social status is important. Excellent and so far unexploited material on the subject was collected during the census of 1910 when each wife was asked the number of children she had borne. This paper, giving some of the first results obtained by sampling these returns, deals with the net effect of all those variables which, taken together, determine the fertility of various broad social classes.

The sample includes only wives who were native white of native parents and whose husbands were native white of native parents, and in this paper the data are further limited to women of child-bearing age who were married only once to husbands not previously married. This group is divided into two parts: (1) the urban sample, taken from the 33 northern cities having total populations of between one and five hundred thousand in 1910 and comprising data for about forty thousand wives; and (2) the rural sample, taken from rural parts of 74 neighboring counties, and comprising data for about thirty thousand wives.

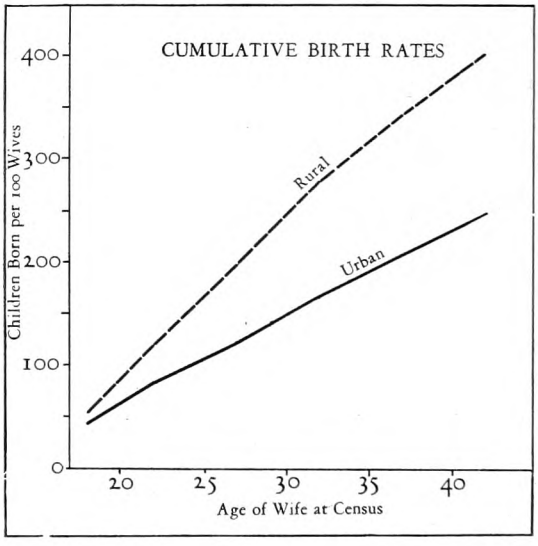
The women of the urban sample were separated, on the

*A summary of a recent study by the Fund's Division of Research appearing in the *Journal of the American Statistical Association*, March, 1930.

basis of the census returns of the husband's occupation, into the following broad social classes: professional, business, skilled workers, and unskilled laborers, and those of the rural sample into: farm owners, farm renters, and farm laborers. The rural classes are exactly what the names indicate, but the titles of the urban classes, which include a wide range of occupations, must be suggestive rather than precise. Nevertheless the urban classes are dominated by the groups from which the titles are taken, and the rates for constituent occupational groups indicate that they are relatively homogeneous with respect to fertility.

The fertility of a given social class is the resultant of many variables, among the more important of which are: age of wife, age of wife at marriage, sterility, fecundity, and a large number of mores bearing on the voluntary control of pregnancy. Of these factors, the age of the wife is unique in that it determines the length of time during which the other factors exercise their influence, and thus determines the ultimate opportunity which any group of wives has for bearing children. To obtain a fair comparison of the fertility of the social classes these ultimate opportunities must be equal, that is, comparisons must be made between groups having the same

Fig. 1. Children born per 100 wives of each quinquennial age group under 45, for the urban and rural samples.



age distributions. For example, the fact that the wives of farm renters bear, on the average, fewer children than the wives of the farm owners indicates, not that the former group is less fertile, but that it is younger. The true relation can only be obtained by comparing the average number of children born to wives of farm owners and farm renters who are the same age.

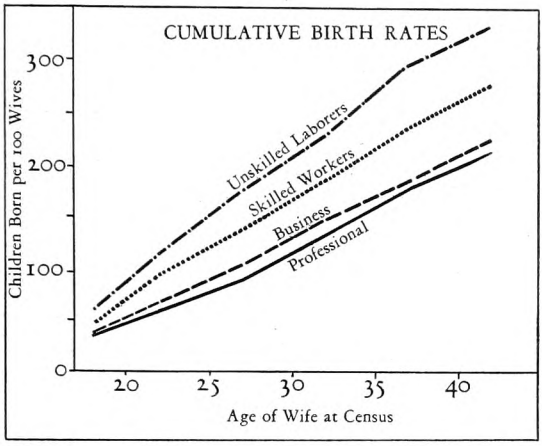


Fig. 2. Children born per 100 wives of each quinquennial age group under 45, for each urban class.

In a sense age at marriage also determines the opportunity for child bearing. But this no less than the various other mores governing the sex relation, is a recognized means by which all societies condition the biological factors governing reproduction. Since the purpose of this paper is to determine the *net effect* of all the factors bearing on the fertility of a given class, age at marriage must be included with these others factors as a variable.

Two methods of expressing the net fertility of the social classes are employed below, both of which conform to the requirements that age of the wife be eliminated, but that all the other factors influencing the average number of children born be included as variables. The first is the cumulative birth rate for specific age groups; that is, the number of children born per 100 wives for each quinquennial age group. By means of these ratios the fertility of the classes may be compared for each age group. It is also desirable to obtain a sin-

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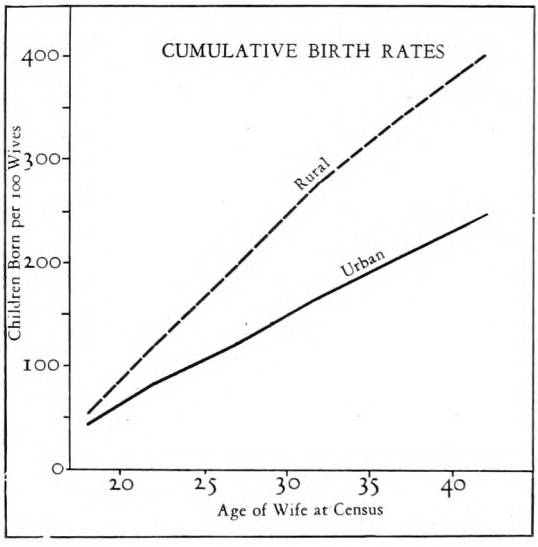

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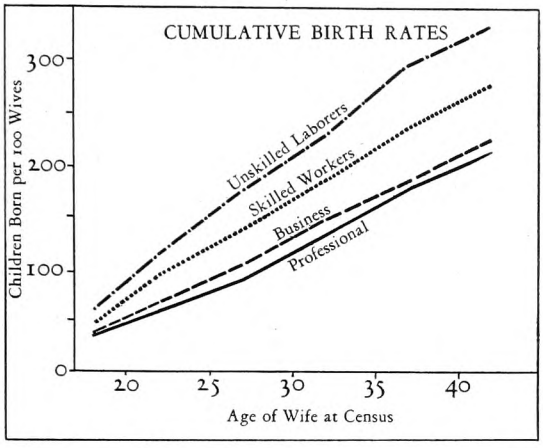

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gle figure which will summarize this series of ratios for each class. Such a figure is to be had in the standardized cumulative birth rate. This rate is to be interpreted as indicating the number of children which would have been born to the wives of a given class, if the age distribution of the wives of that class had been the same as that of a standard population —the standard in this case being the combined urban and rural samples.

It is apparent from Fig. 1 that the wives of the rural sample are more fertile than those of the urban. The rates for the rural sample are from 20 to 67 per cent higher than those for corresponding age groups of the urban sample, and the standardized rural rate is 63 per cent higher than that for the urban sample. Or to put it another way, if the age distribution of the urban and rural samples were the same as that of the standard, 358 rural wives would have borne the same number of children as 625 urban wives.

Fig. 3. Children born per 100 wives of each quinquennial age group under 45, for each rural class.

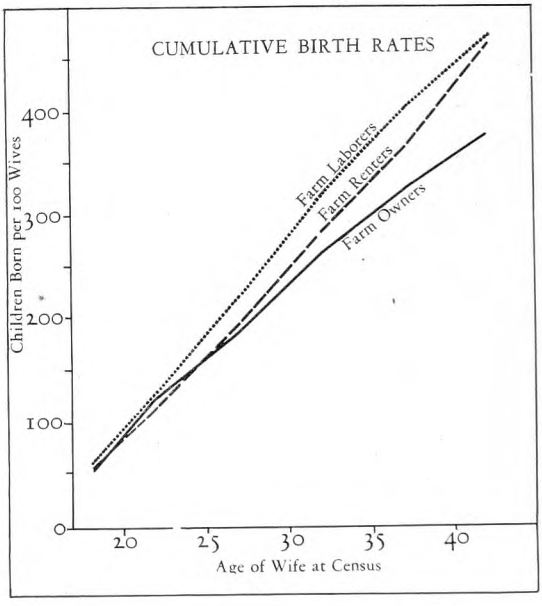

Fig. 2 presents the rates by age groups and Fig. 4 the standardized rates for each urban social class. It should be noted that the order of the classes is the same in each age group, and indicates a definite inverse relation between fertility

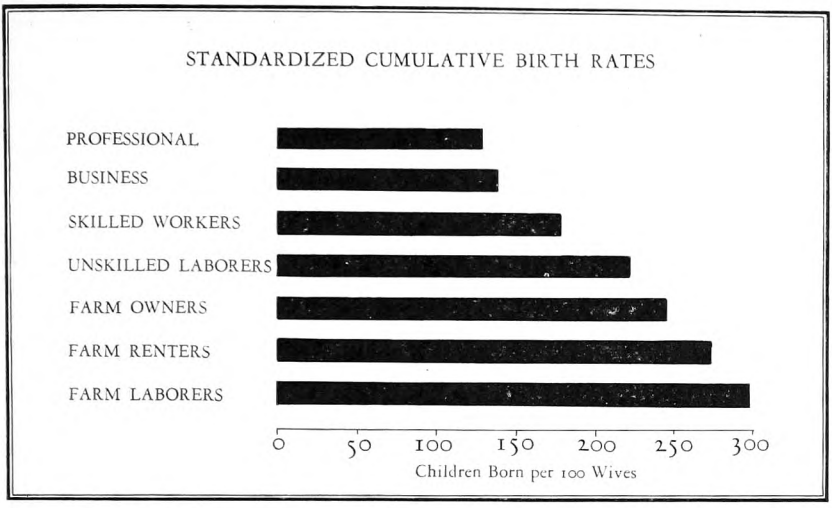

Fig. 4. Standardized cumulative birth rates for each urban and rural class. (Obtained by applying the rate for each quinquennial age group under 45 to the age distribution of the combined urban and rural samples.)

and the conventional ranking of the social classes. The specific rates for the most fertile class, the unskilled laborers, are from 58 to 97 per cent higher than the corresponding rates for the least fertile, the professional class, and the standardized rate is 73 per cent higher. In a population the age of our standard, 1,000 children would have been born to 775 wives of the professional class, 714 of the business class, 559 of the skilled worker class, and 448 of the unskilled laborer class. It should be observed that the difference between the professional and business classes is less than half those between the other classes.

The relative similarity of the environment and social standards of the rural classes might lead one to expect slight differences in their fertility. From Figs. 3 and 4 it appears however that the differences, though smaller than those of the urban classes, are still definite, and that as in the urban sample they indicate an inverse relation between fertility and the

customary ranking of social status. The rates for the most fertile class, the farm laborers, are from 3 to 25 per cent higher than the corresponding ones for the least fertile, the farm owners, and the standardized rate is 21 per cent higher. In a population the age of the standard, 1,000 children would have been born to 405 wives of farm owners, 364 wives of farm renters and 334 wives of farm laborers.

Attention has already been called to the fact that the rates for the entire rural sample are higher than those for the entire urban sample. This relation might arise in several ways, but it may be considered as characteristic of the rural population as such, only when the rates for each rural class are higher than those for the corresponding urban class. It should now be observed that, save for a single age group, the rates for the least fertile rural class, the farm owners, are higher than the corresponding rates for the most fertile urban class, the unskilled laborers, and that the standardized rate for the least fertile rural class was 247 as compared with 223 for the most fertile urban class. The higher fertility of the rural sample may therefore be considered as characteristic of the rural population.

The relation between fertility and social status, as brought out by this study may be summarized as follows:

(1) The rural population represented by this sample is definitely more fertile than the urban population.

(2) Since the rates for the least fertile rural class are higher than those for the most fertile urban class, this greater fertility of the rural sample is characteristic of the rural population as such.

(3) In both the urban and rural populations studied, there is a definite inverse relation between fertility and the customary ranking of the broad social classes, but the differences between the classes are greater in the urban than in the rural population.