

# BIRTH RATES AND SOCIO-ECONOMIC ATTRIBUTES IN 1935<sup>1</sup>

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THANKS to official data and to analyses based thereon our knowledge of certain broad demographic aspects of the declining birth rate has been kept abreast of the times. It is known, for instance, that birth rates of foreign populations in this country were conspicuously high twenty years ago but are not now much higher than among native whites in the same areas. The substantial Negro migration from farms to urban centers since the World War has apparently been accompanied by marked reductions in birth rates, and the traditional characterization of Negroes as highly prolific is undergoing a change. The gap between reproductive levels of urban and rural populations is wide and will probably remain so for a long time. Nevertheless, there is evidence that the present declines in the birth rates are more pronounced among rural than among urban populations.

Concerning the question of relative trends in the birth rates among populations classified along socio-economic lines, however, our knowledge is far less definite. A bench-mark of class differences in fertility in this country was afforded by the well-known analysis of Census data collected in 1910.<sup>3</sup> That study indicated that thirty years ago there was, among native-white populations, a sharp and consistent inverse relation between fertility and occupational status. Since that time, and especially since 1920, there have been substan-

<sup>1</sup> A progress report based upon National Health Survey data for married women of childbearing age. The author wishes to express his gratitude to the United States Public Health Service for its cooperation in making these data available.

<sup>2</sup> From the Milbank Memorial Fund. The writer wishes to thank Mr. Robert B. Reed and Miss Dorothea Schramm for their painstaking work in computing rates for this study.

<sup>3</sup> Sydenstricker, E. and Notestein, F. W.: Differential Fertility According to Social Class. *The Journal of the American Statistical Association*, March, 1930, xxv, New Series, No. 169, pp. 9-32.

tial declines in the general birth rate. Have those declines left unchanged the pattern of the birth rates for the several social classes and, if not, what has been the nature of the modification?

Recently, two preliminary reports based upon independent sets of data have provided similar indications of a change in the pattern of class differences in fertility among native-white urban marriages in selected areas. This change consisted in the failure of the classes ranking topmost socially and economically to maintain lowest birth rates. One of these studies was Notestein's analysis of unpublished family data from the 1930 Census for the East North Central States.<sup>4</sup> The other was by the writer<sup>5</sup> and pertained to fertility data collected in five cities during the course of the *National Health Survey*.

Since the present paper is a further progress report on the analysis of fertility data collected by the *National Health Survey*, a brief statement of the nature of that material may be in order at this point. The main purpose of the *Survey* was to collect comprehensive data concerning incidence and severity of illness in various elements of urban populations. Detailed records were secured in a house-to-house enumeration of about 740,000 families residing in eighty-four cities of nineteen states.<sup>6</sup> This work was conducted by the

<sup>4</sup> Notestein, F. W.: Differential Fertility in the East North Central States. The Milbank Memorial Fund *Quarterly*, April, 1938, xvi, No. 2, pp. 173-191.

<sup>5</sup> Kiser, C. V.: Variations in Birth Rates According to Occupational Status, Family Income, and Educational Attainment. The Milbank Memorial Fund *Quarterly*, January, 1938, xvi, No. 1, pp. 39-56.

<sup>6</sup> The cities included in the *Health Survey* are listed below by size and by area. Baltimore was included in the *Survey* but not in the fertility tabulations by virtue of atypical sampling procedure in that City.

*500,000 and Over*

*East:* Boston, Mass.; Buffalo, N. Y.; New York, N. Y.; Philadelphia, Pa.; Pittsburgh, Pa.

*Central:* Chicago, Ill.; Cleveland, Ohio; Detroit, Mich.; St. Louis, Mo.

*Pacific:* Los Angeles, Cal.

*100,000-500,000*

*East:* Fall River, Mass.; Newark, N. J.; Trenton, N. J.; Syracuse, N. Y.

*Central:* Cincinnati, Ohio; Columbus, Ohio; Flint, Mich.; Grand Rapids, Mich.; Minneapolis, Minn.; St. Paul, Minn.

*South:* Birmingham, Ala.; Atlanta, Ga.; New Orleans, La.; Dallas, Tex.; Houston, Tex.; Richmond, Va.

*Mountain:* Salt Lake City, Utah.

*Pacific:* Oakland, Cal.; Portland, Ore.; Seattle, Wash.; Spokane, Wash.

*25,000-100,000*

*East:* Pittsfield, Mass.; Lebanon, Pa.

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United States Public Health Service with funds from the Works Progress Administration.

A detailed account of the methods of selecting cities and the sampling procedures is available elsewhere.<sup>7</sup> Suffice it to say that the procedure was designed to yield geographic representativeness of the urban populations for the broad East, South, Central, and Western areas. On the other hand, for reasons of administrative expediency, the *Survey* was not designed to be representative in so far as distribution of the urban population by size of community is concerned. The proportion of schedules from cities of 100,000 population or over is too high and the proportion in cities of smaller size too low. Nevertheless, it is believed that within each surveyed city<sup>8</sup> a cross-section of families was secured with respect to socio-economic status and demographic attributes. In all except one of the cities under 100,000 population selected for the *Survey* attempts were made at complete enumeration and in cities of larger size the sampling was designed to yield internal representativeness.

The schedules used in the *Survey* afforded data concerning number of births, by type of issue, to surveyed women during the twelve months preceding enumeration. By utilizing available descriptive data, it was possible to compute annual birth rates, approximately

*Central:* Lima, Ohio; Port Huron, Mich.; Springfield, Mo.

*South:* Montgomery, Ala.; Monroe, La.; Amarillo, Tex.; Wichita Falls, Tex.

*Pacific:* Salem, Ore.

*Under 25,000*

*East:* Greenfield, Mass.; Ipswich, Mass.; Bridgeton, N. J.; Lambertville, N. J.; Somerville, N. J.; Hudson, N. Y.; Newark, N. Y.; Penn Yan, N. Y.; Duryea, Pa.; Indiana, Pa.

*Central:* Benton, Ill.; Normal, Ill.; Houghton, Mich.; Chisholm, Minn.; Willmar, Minn.; Winona, Minn.; Chillicothe, Mo.; Clinton, Mo.; Franklin, Ohio; Wilmington, Ohio.

*South:* Eufaula, Ala.; Gadsden, Ala.; Greenville, Ala.; Brunswick, Ga.; Abbeville, La.; Bossier, La.; Minden, La.; Weatherford, Tex.; Covington, Va.; Farmville, Va.

*Mountain:* Bingham Canyon, Utah; Eureka, Utah; Tooele, Utah.

*Pacific:* Chico, Cal.; Grass Valley, Cal.; Jackson, Cal.; Napa, Cal.; Vallejo, Cal.; La Grande, Ore.; St. Helens, Ore.; Ellensburg, Wash.; Olympia, Wash.

<sup>7</sup> The National Health Survey 1935-1936 (Significance, Scope and Method of a Nation-Wide Family Canvass of Sickness in Relation to its Social and Economic Setting). Preliminary Report J-1303, Division of Public Health Methods, National Institute of Health, The United States Public Health Service, Washington, 1938 (11 pp. mimeographed).

<sup>8</sup> Throughout this report when reference is made to "each" or to "combined" urban areas of the *Survey*, Baltimore is excluded for reasons indicated in footnote 6. The *Survey* also collected relatively small samples from rural counties in three states but the report on the fertility data from those areas will appear at a later date.

as of the year 1935, among married women of childbearing age classified with reference to color and nativity of the wife and with respect to selected socio-economic attributes. It is the purpose of this progress report to make available the broad results of some of the computations preliminary to the issuance of a contemplated monograph, which will cover additional materials and will aim at more critical appraisal of the data herewith presented.

Table 1. Number of married women 15-44 years of age canvassed in the urban<sup>1</sup> areas of the *National Health Survey* and embraced in this report, by color, nativity, area, and size of city.

SIZE OF CITY, NATIVITY AND COLOR OF WIFE	ALL AREAS	EAST	CENTRAL	SOUTH	MOUNTAIN	PACIFIC
<i>All Sizes</i>						
TOTAL	375,658	125,434	125,427	76,799	5,681	42,317
Native White	284,246	88,219	99,693	55,171	5,167	35,996
Foreign White	51,901	29,587	17,112	822	446	3,934
Colored	39,511	7,628	8,622	20,806	68	2,387
<i>500,000 and Over</i>						
TOTAL	158,953	81,224	65,674	a	b	12,055
Native White	108,529	53,922	45,595			9,012
Foreign White	36,380	21,502	13,681			1,197
Colored	14,044	5,800	6,398			1,846
<i>100,000-500,000</i>						
TOTAL	116,450	23,401	30,302	41,796	4,116	16,835
Native White	90,429	16,706	26,573	28,855	3,735	14,560
Foreign White	10,490	5,356	2,240	604	348	1,942
Colored	15,531	1,339	1,489	12,337	33	333
<i>25,000-100,000</i>						
TOTAL	55,233	9,230	19,017	23,412	b	3,574
Native White	46,926	7,810	17,712	17,984		3,420
Foreign White	2,366	1,347	712	160		147
Colored	5,941	73	593	5,268		7
<i>Under 25,000</i>						
TOTAL	45,022	11,579	10,434	11,591	1,565	9,853
Native White	38,362	9,781	9,813	8,332	1,432	9,004
Foreign White	2,665	1,382	479	58	98	648
Colored	3,995	416	142	3,201	35	201

<sup>1</sup>Exclusive of Baltimore and exclusive of wives of unreported color or nativity.

<sup>2</sup>Cf. footnote 1 above.

<sup>b</sup>No cities this size or no survey.

Specifically, the paper presents an analysis of birth rates among all native-white, foreign-white, and colored married women of childbearing age in the combined and classified urban areas of the *Survey*, by occupational class of the heads, educational status of the wives, and amount of family income during the twelve months preceding the enumeration. The total number of cases involved was 375,658 and these were distributed by nativity, color, area, and size of city as indicated in Table 1. For interpretation, chief reliance should be placed upon the data classified by area and size of community, because the rates based upon the combined data have not yet been adjusted for the over-weighting of large cities in the sample.

#### BIRTH RATES BY NATIVITY AND COLOR, AREA, AND SIZE OF CITY

Perhaps the most radical change in the pattern of group differences in fertility during the past twenty years is that wrought by the rapid decline in birth rates among our foreign born. This may not be commonly realized despite its emphasis in the literature during the past decade. Another popular misconception is that birth rates among our colored populations are universally high.

In the combined data for all urban areas included in the *Survey*, the standardized birth rate<sup>9</sup> in 1935 per 1,000 wives of childbearing age was 96 among native whites, 111 among foreign whites, and 86 among the colored. The rate for the foreign whites was, therefore, about 16 per cent higher than that for native whites of similar age, and the rate for native whites, in turn, surpassed that for the colored wives by 12 per cent. A further characteristic of the comparisons by nativity and color emerges from the plotting of age-specific rates in Figure 1. It is seen that the birth rate among colored wives of youngest ages (under 20) was conspicuously high.<sup>10</sup>

<sup>9</sup> Adjusted to the age distribution of all married women 15-44 in the United States, as computed from the 1930 Census.

<sup>10</sup> This situation is also found in data compiled by Whelpton for the National Resources  
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Throughout ages 20-34, however, the rates for native whites were 12 to 38 per cent higher than among colored wives, and at these same ages the rates for foreign-white wives surpassed those of native whites by 11 to 22 per cent.<sup>11</sup>

More valid comparisons of birth rates by nativity and color are those presented by broad region and size of community in Figure 2. In the four groups of Eastern and Central cities of 100,000 population or more, where the foreign whites are numerically most important (see

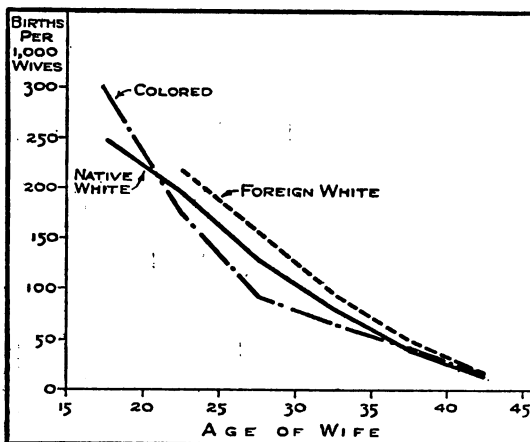


Fig. 1. Age specific birth rates in 1935 among wives 15-44 years of age in the *Health Survey*, by nativity and color. Surveyed cities combined.

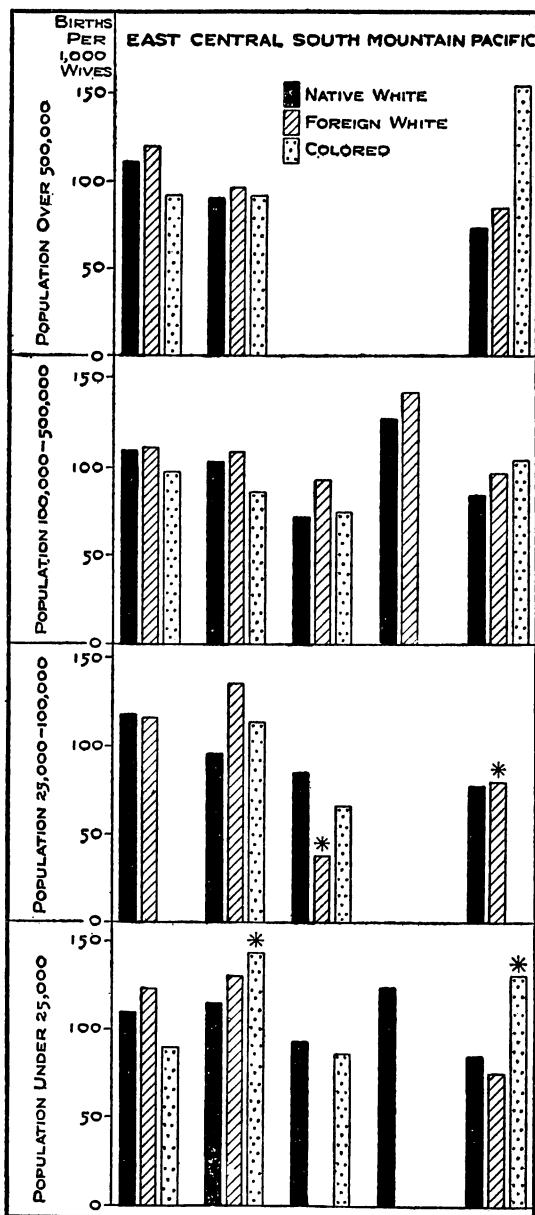
Table 1), the standardized birth rates among alien women of child-bearing age ranged from only 2 to 8 per cent higher than among the native whites. Wider discrepancies were found in several of the other groups of cities.

In regard to the colored wives, there is the indication from Figure 2, that within specific urban areas sampled (except on the

Committee. The excessive fertility of Negroes over whites at youngest ages has also been found to be enhanced when the analysis is made with reference to all women of child-bearing age. Involved in this situation are the relatively high proportions married and relatively high rates of illegitimacy among Negro females under 20 years of age.

See: National Resources Committee: POPULATION STATISTICS (2). State Data, October, 1937. U. S. Government Printing Office, Washington, D. C., pp. 1-8.

<sup>11</sup> A description of present-day differences in birth rates by nativity would be incomplete without calling attention to the diminishing numerical importance and changing age structure of foreign-white married women in our population. Since immigration restrictions, of course, foreign-white wives have passed into the older ages of- and out of the childbearing period. Only 4 per cent of the foreign-white wives enumerated were under 25 years of age as compared with 17 per cent among the native whites and 20 per cent among the colored. The actual birth rates unadjusted for age were substantially lower among the foreign-white wives of childbearing age than among the native whites or colored, being 69, 93, and 88 respectively.



\*In this and succeeding charts: rate based on 100-300 cases. (Rates based on fewer than 100 cases not shown.)

Fig. 2. Standardized birth rates in 1935 among wives 15-44 years of age by nativity and color of the wife and by area and size of surveyed cities.

Pacific Coast where Mexicans and yellow races were included in larger proportions) the birth rates of the colored wives were in most instances as low as or lower than those exhibited by the native-white women. This held true even in the Southern cities and towns included in the *Survey*.<sup>12</sup>

The rates depicted in Figure 2 do not conform in all respects to the traditionally observed types of variation by area and size of community. The observance of lowest rates for native whites on the Pacific Coast and highest in the Mountain

<sup>12</sup> Notestein, using 1930 family Census data for the East North Central States, also found that fertility rates were universally lower among Negro marriages than among native-white marriages in all types of communities except the rural farm. He also discovered that the relatively low rates among urban Negroes in that area arose exclusively from the higher proportions of childless families among the Negroes.

See Notestein, F. W.: *op cit.*, pp. 179-185.

area (Utah) are in accord with expectations. Somewhat surprising may be the indications of relatively low birth rates among native whites and Negroes in the urban South. Likewise, although the average birth rates observed in cities of 100,000 or more population were generally lower than in cities of smaller size, there was little further refinement in the indicated inverse relation between fertility and size of community.

An adequate appraisal of the data from the above points of view must await more intensive study of the situation than has been possible for this report. There may have been less complete enumeration of births in the South than in other areas. Furthermore, the nature of the comparisons may be inherent in the choice of the particular cities in given area-size groups. It must be borne in mind, however, that we are concerned here with *urban married* women. Other data have indicated that important factors in the high general birth rate in the South as a region are early marriages and high fertility levels in rural areas (especially in rural areas where poverty is prevalent) and the high proportion of the Southern population thus affected. In fact, data prepared for the National Resources Committee have indicated birth rates too low for population replacement among native-white women in cities of 25,000 population or more in each Southern state represented in the *Survey*. This situation held for Negro women in urban areas of all sizes in the same states even after making allowances for under-enumeration.<sup>18</sup>

<sup>18</sup> See: National Resources Committee:

(a) THE PROBLEMS OF A CHANGING POPULATION. U. S. Government Printing Office, Washington, D. C., 1938, pp. 132-133.

(b) POPULATION STATISTICS (1). National Data. U. S. Government Printing Office, Washington, D. C., 1937, pp. 40-50.

*Note:* The report (b) above included data for individual cities of 100,000 population and over. The data concerned number of children under 5 years of age per 1,000 women aged 20-44 years, by nativity and color. (Rates standardized and data corrected for under-enumeration.) When the rates for individual cities of 100,000-500,000 population represented in the *Survey* for Eastern, Central, and Southern areas, respectively, were examined it was found that the average rates for both the white and colored women in the surveyed large cities of the South were somewhat lower than the corresponding averages in Eastern and Central areas. (In computing average rates for native-white and colored women in the

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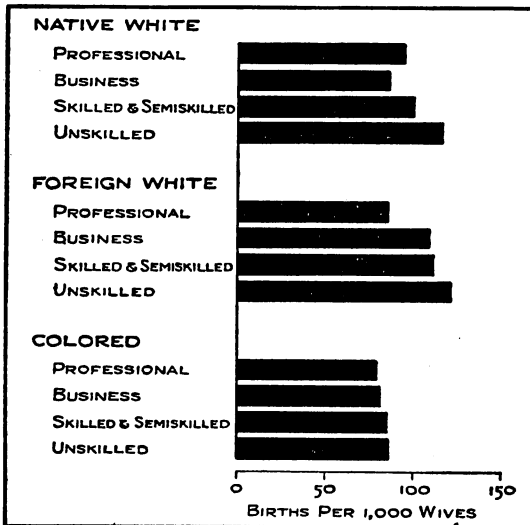


The bearing of the above possible factors will be investigated as fully as possible for the final analysis.

#### BIRTH RATES BY OCCUPATIONAL CLASS OF THE HEAD

The data from the entire *Survey* generally confirm the indications from the preliminary report concerning the present nature of occupational differences in birth rates among native-white urban marriages. Contrary to the situation revealed by studies of 1910 Census materials, in the present survey, the combined data for the native whites indicated higher rates for wives of professional men than for wives of business men. Aside from this the picture was one of inverse association between occupational status and fertility. The birth rates among all wives 15-44 in the urban areas of the *Survey* are given by occupational class of the head and by nativity and

Fig. 3. Occupational class of the head in relation to birth rates in 1935 among wives 15-44 years of age, by nativity and color of the wife. Rates standardized for age and surveyed cities combined.



color of the wife in Figure 3.<sup>14</sup>

In the classification of the data for native-white wives by area and by size of community, Figure 4, it was also found that in most instances the rates for wives of business men were as low as or lower than those found for wives of professional men. Actually, in most cases there was little or no statistical significance to the

three respective areas, the rates for the individual cities were weighted according to the distribution, by city, of surveyed females within the respective area-size groups.)

<sup>14</sup> To avoid duplicate publication of many detailed tables, the actual rates and numbers of women involved in the several socio-economic classifications are not contained in this preliminary report but will appear in the completed monograph.

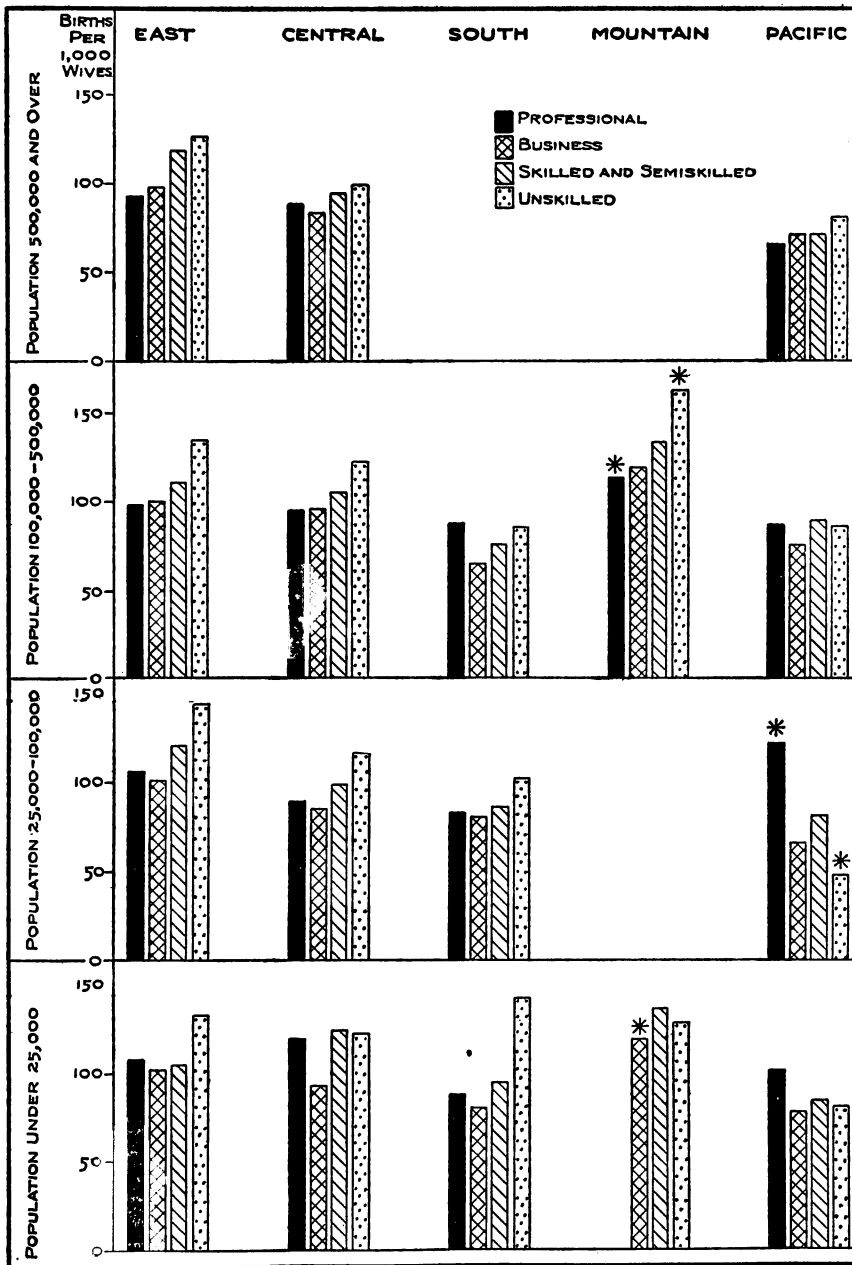


Fig. 4. Occupational class of the head in relation to birth rates in 1935 among native-white wives 15-44 years of age, by area and size of surveyed cities. Rates standardized for age.

difference between the birth rates for those two classes. It seems fairly definite, however, that the native-white urban wives of professional men can no longer be characterized as being less fertile than comparable groups of women married to business men. Aside from this situation the more frequent picture was that of inverse association between occupational status and birth rates. Even in this respect, however, the exceptions are noteworthy. In the Pacific Coast samples, for instance, low levels of fertility seem to characterize all classes, with the result that occupational differences in fertility appear to be of minor importance. In certain groups of cities under 25,000 population in other areas, too, the principle of inverse relation between fertility and occupational status appears to have been manifested in only a crude manner.

Among foreign whites in the combined areas of the *Survey*, Figure 3, the birth rates were lowest among the wives of professional men and advanced with lowering of occupational class. The rate for foreign-white wives of business men was relatively high, about as high as that for skilled and semi-skilled workers. The above two characteristics of differential fertility among foreign-white wives, however, were not consistently found in the different area-size groups.

Due to the small number of foreign-white wives under 25 years of age in the *Survey* it was found necessary to restrict to women 25-44 years of age the subdivisions by socio-economic status within specific groups of cities. The rates plotted in Figure 5 are, therefore, not comparable with those in Figures 3, 4, and 6. Figure 5 is also restricted to Eastern, Central, and Pacific cities of 500,000 population and over and for cities 100,000-500,000 in size, the most important centers of foreign-white residence. Only in the cities of largest size in Eastern areas was there manifested a straight inverse association between birth rates and occupational status. From consideration of the numbers of foreign women in the various area-size groups (see Table 1), it is apparent that the results observed in

Eastern cities of largest size heavily influence the average picture for foreign whites in the *Survey* shown in Figure 3. In Central cities of 500,000 population or more all classes except the professional were represented by substantial numbers and yet little in the way of class variations was observed in the fertility of the business, skilled, and unskilled classes. In other groups of cities the small numbers in extreme classes prohibit generalization but afford at least suggestive evidence that birth rates among foreign-born wives of business men are as high as those of skilled workers.

Several points of interest emerged from the analysis of data for colored wives. In the first place it should be stated that the great majority of cases were in the two laboring classes. Of the approximate 40,000 colored wives of childbearing age in the *Survey*, only 2 per cent reported that heads of the families were professional men, 8 per cent business, 37 per cent skilled and semi-skilled workers, and 53 per cent unskilled laborers. Stated in another manner, 10 per cent of the colored heads were in "white-collar" pursuits as compared with 44 per cent reported by the native-white wives and 30 per cent reported by the foreign-white wives.

The combined data for the colored sample, Figure 3, would appear to indicate virtual uniformity of low birth rates among urban

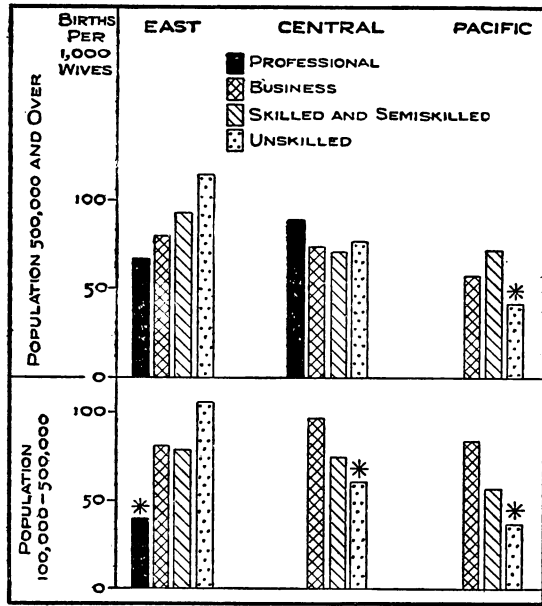


Fig. 5. Occupational class of the head in relation to birth rates in 1935 among foreign-white wives 25-44 years of age, in selected groups of surveyed cities. Rates standardized for age.

colored families rather than differentiation of fertility by occupational class. The slight variations that did exist, however, were in

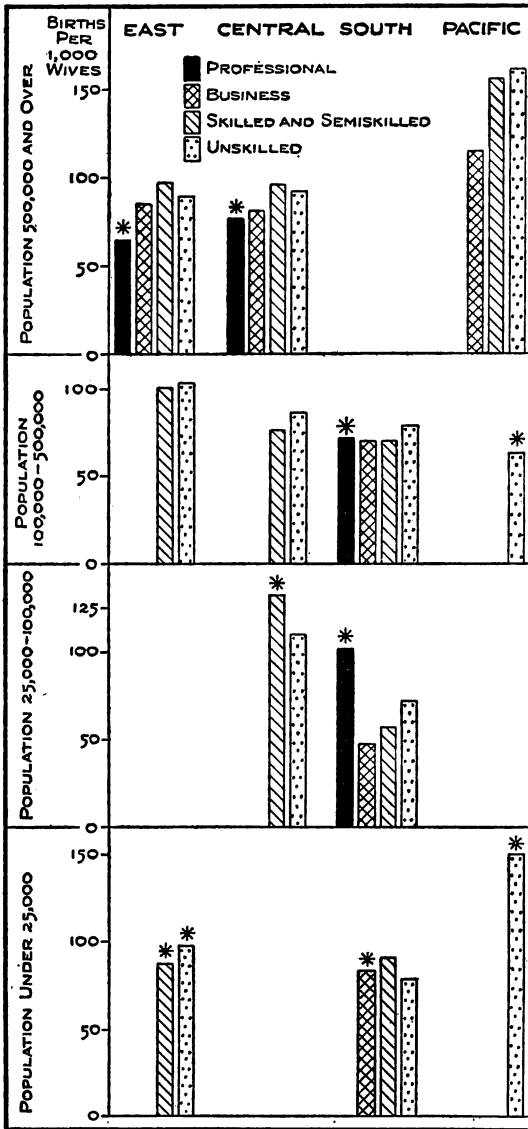


Fig. 6. Occupational class of the head in relation to birth rates in 1935 among colored wives 15-44 years of age, by area and size of cities. Rates standardized for age.

the direction of inverse association with occupational status. The classification of the data by area and size of community, Figure 6, perhaps affords a somewhat more accurate picture of the situation. On the whole, the relatively few "white-collar" workers were characterized by somewhat lower birth rates than the laboring classes in urban areas. On the other hand, there appeared to be little difference between the birth rates among wives of skilled or semi-skilled workers and those among wives of unskilled laborers, the two predominant groups. In general, then, it would appear that the facts of outstanding importance are the relatively low fertility<sup>15</sup> of

<sup>15</sup> As previously stated, the

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Negro wives under urban conditions, the heavy concentration in the laboring classes, and the lack of consistently manifested skilled-unskilled differences in birth rates.

BIRTH RATES BY EDUCATIONAL ATTAINMENT OF THE WIFE

Returns concerning educational status of wives provided for only a two-fold division of those reporting more than common school education, i.e., "entered college" and "entered high school." For wives who never entered high school, however, detailed data were recorded and tabulated according to last grade attained. In the present report on the relation between educational status and birth rates of wives the subdivisions by grade status are shown in fairly detailed form only for the combined cities. For the breakdown of data by area and size of community, only four broad classifications by educational attainment were used.

A generalized picture of the association between birth rates and amount of schooling received by the wives is given in Figure 7, based upon data for the combined cities. With certain qualifications it is apparent that birth rates varied inversely with educational status among wives in the three nativity-color groups. In the broad classification of native-white wives, the lowest birth rate was found among women who had entered college and in successive order were the rates for women of high school status, 8th grade, 7th grade, and under 7th grade (collectively). A matter of striking interest is the virtual absence of internal variations in birth rates among women who reported less than 7th grade attainment in school. Also, only a small disparity appeared to exist between the birth rates of wives of college and high school status, respectively.

In the main, the foregoing generalizations for the native whites appear to be substantiated in the analyses by area and size of city,

high birth rates shown for colored women on the Pacific Coast are doubtless due to the influence of Mexicans and yellow races. In Los Angeles, the only Pacific Coast city over 500,000 in the *Survey*, the enumerated colored females 15-44 years of age were distributed as follows: Negro, 23 per cent; Mexican, 59 per cent; "other," 18 per cent.

Figure 8. However, in the samples drawn from Pacific Coast cities and from one or two groups of smaller cities in other areas, there appeared to be virtual equality of birth rates among wives reporting

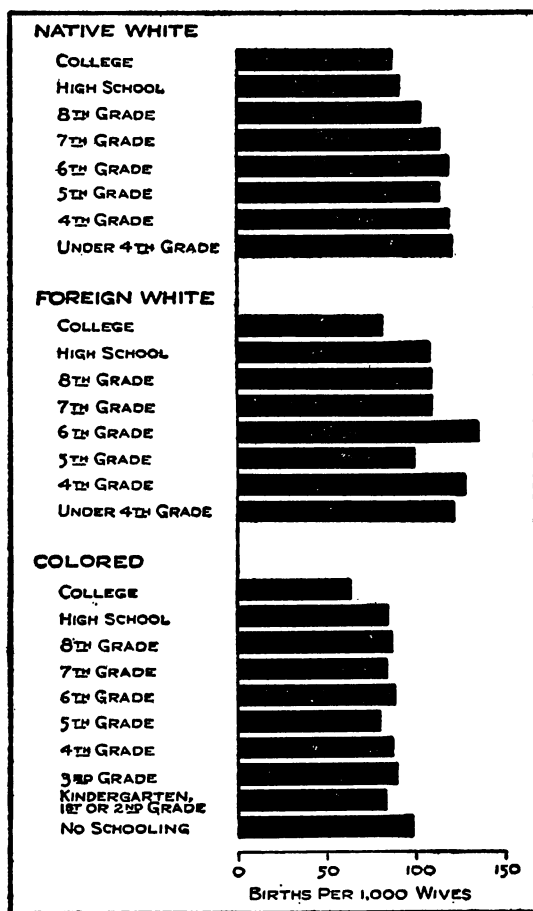


Fig. 7. Educational status in relation to birth rates in 1935 among wives 15-44 years of age, by nativity and color. Rates standardized for age and surveyed cities combined.

wives by area and size of city, however, affords no basis for facile generalization on the question of the relation between birth rates and educational status of these women. Figure 9 presents the data for foreign-white wives 25-44 surveyed in cities of 100,000 population or more. The Eastern cities of 500,000 or more, represented by

ing college attendance, high school attendance, or 7th-8th grade status.

The gross average situation for foreign whites 15-44 years of age did not differ greatly from that described for the native-whites, Figure 7. The foreign-white married women reporting college attendance ranked lowest in birth rates, and those reporting less than 7th grade attainment collectively ranked highest in birth rates. Within the latter group, again, there appeared no indication of increased birth rates with lowered educational status.

Examination of the data for foreign-white

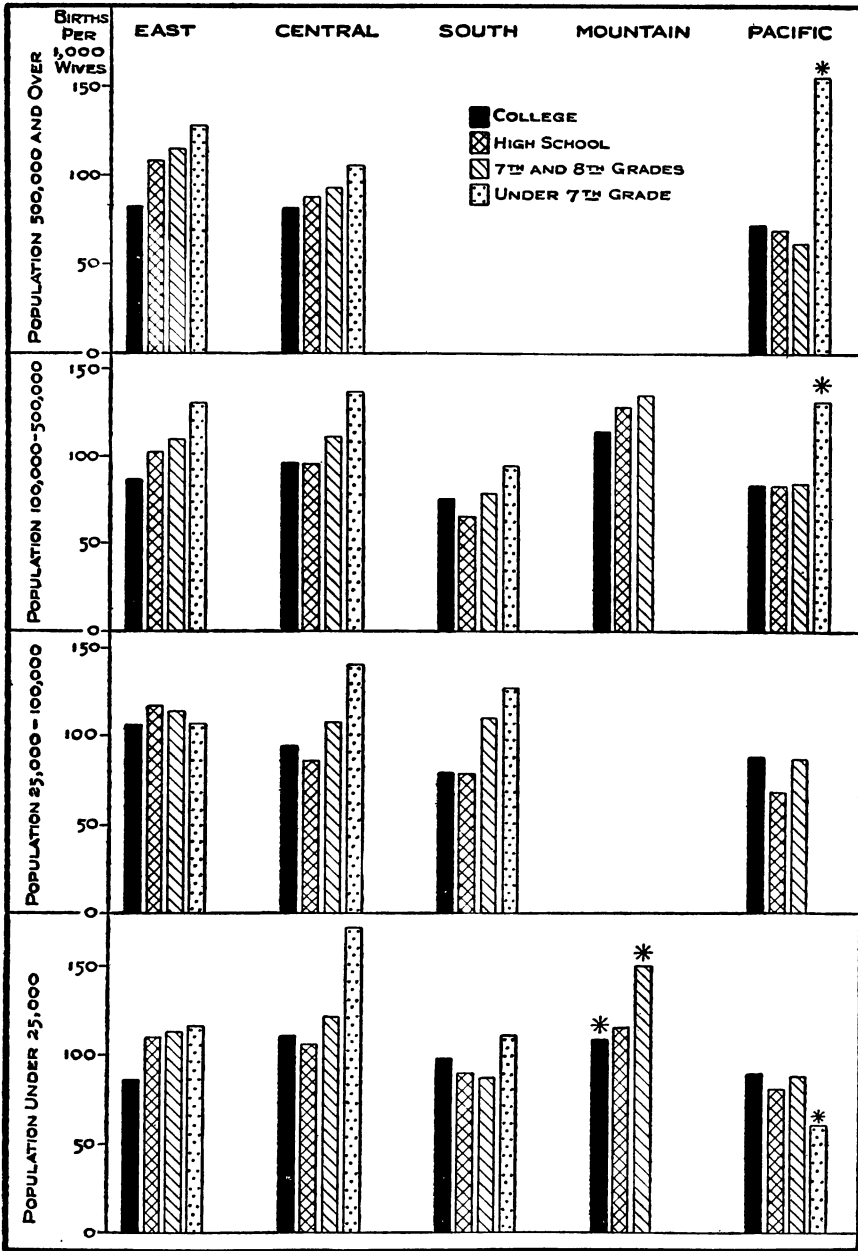


Fig. 8. Educational status in relation to birth rates in 1935 among native-white wives 15-44 years of age, by area and size of surveyed cities. Rates standardized for age.



practically 21,000 cases, exhibited a clear-cut case of negative correlation between birth rates and educational status. On the other hand, for Central cities of equal size (also represented by substantial numbers)

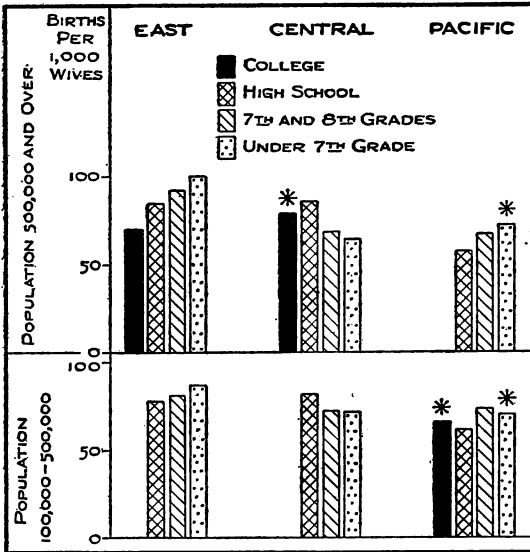


Fig. 9. Educational status in relation to birth rates in 1935 among foreign-white wives 25-44 years of age, in selected groups of surveyed cities. Rates standardized for age.

in Figure 7 suggest that educational status has bearing on birth rates only in so far as extremes are concerned. The relatively few reporting college attendance were characterized by birth rates well below the level of those for women who did not entrance into college. On the other hand, the rate for women reporting some high school training was almost as high as that for any lower group except the sheer illiterate, those reporting no schooling whatsoever.

When the classification by educational status of colored wives is made on a four-fold basis for the groupings by area and size of community, the lack of differentiation in fertility among women below the college level seems fairly consistent, Figure 10. The conspicuous exception is afforded by Los Angeles where the rate for

almost the opposite result was secured. In remaining cities the variations of fertility with educational status were of small magnitude or based on too few cases to be of significance. In substance, the data yield no uniform picture of differences in birth rates by amount of schooling among foreign wives 25-44 years of age.

The combined data for urban colored wives

colored women of high school status was considerably lower than that for women who did not go beyond grammar school.

BIRTH RATES ACCORDING TO FAMILY INCOME

The foregoing sections have considered birth rates, first, in relation to an attribute of the husband, and next, in relation to an attribute of the wife. The family as a whole, however, is concerned in the analysis of birth rates according to the amount of income earned during the year preceding enumeration. Furthermore, in contrast to the rather stable nature of the two factors previously considered, especially educational status, family income is subject to change. It is of interest, therefore, to examine the relationship between birth rates and income status during an identical year, 1935.

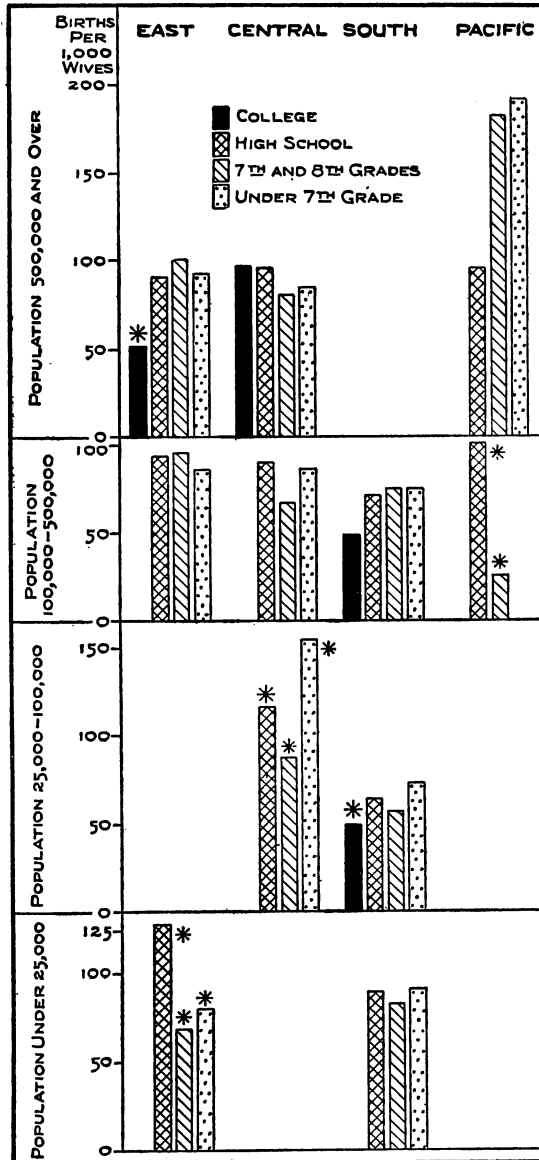


Fig. 10. Educational status in relation to birth rates in 1935 among colored wives 15-44 years of age, by area and size of surveyed cities. Rates standardized for age.

the relationship between birth rates and income status during an identical year, 1935.

The data for all cities combined are presented, by nativity, in Figure 11. In this case the native whites could be classified into six groups by income status (regardless of relief status), ranging from

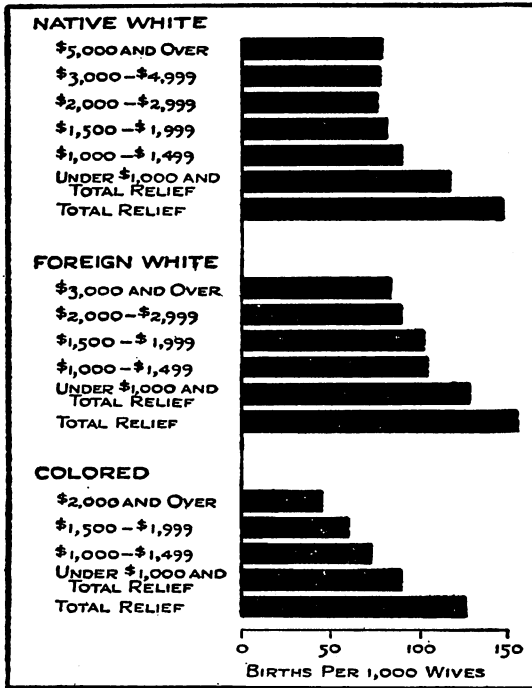


Fig. 11. Family income and birth rates in 1935 among wives 15-44 years of age, by nativity and color of the wife. Rates standardized for age and surveyed cities combined.

earning \$5,000 and more was no lower than that for wives reporting family earnings of \$3,000-\$4,999 or \$2,000-\$2,999. On a straight income basis, the most conspicuous disparity in the birth rates of successive classes was that existing between the "\$1,000-\$1,499" and "under \$1,000" group. The high birth rates among relief recipients,

<sup>16</sup> Relief cases, regardless of income, were also included in the preceding category "under \$1,000 and total relief." All families represented in higher income groups were nonrelief families because the negligible number of relief recipients reporting earnings of \$1,000 or more were consolidated into one group by coding instructions. For the purpose of this analysis they were combined with families earning under \$1,000. Native-white wives designated as relief recipients reporting family incomes of \$1,000 or over constituted only 3 per cent of the cases in the category "under \$1,000 and total relief." Corresponding rates were 3 per cent for the foreign whites and 1 per cent for the colored.

"\$5,000 and over" to "under \$1,000 and total relief." Throughout the analysis, the data are also shown separately for families reporting the receipt of public relief<sup>16</sup> at some time during the twelve months preceding enumeration. Although the general picture is one of inverse association between birth rates and amount of income, this type of relation does not appear to extend into the upper income brackets. The birth rate for all native-white wives in families

considered separately, was prominent, but this is due in part to the fact that indigent families with an expectant mother or a newly-born child are more likely to apply for and to receive public aid than are other poverty-stricken families.

The general picture described above appears to be borne out by the data given for native-white wives by broad region and size of community, Figure 12. When the material was thus broken down it was necessary to use "\$3,000 and over" as the maximum income class, but the remaining groups are similar to those previously described. With one or two exceptions the birth rates among wives in families reporting \$3,000 or over were about as high as or higher than those among wives reporting family earnings of \$2,000-\$2,999,<sup>17</sup> Figure 12. In fact, in most instances there appeared to be an absence of inverse association between birth rates and income among families earning more than \$1,500 per year.

Limitations inherent in the problem preclude a satisfactory analysis of birth rates at the various income levels among the foreign-white and colored wives in the *Survey*. In the combined data for all cities the numbers were sufficient to establish a maximum income class of \$3,000 and over for the foreign whites and \$2,000 and over for the colored wives. The plotting of these data in Figure 11 yields a picture of straight inverse association between family income and fertility. The small number of foreign women under 25 years of age, the concentration of foreign-white and colored women in certain areas, and the predominance of colored wives in the lowest income brackets, diminished considerably the opportunity to secure further tests of the above situation.

The available birth rates for foreign-white women, 25-44 years of age, are shown by family income in Figure 13. As previously

<sup>17</sup> In the previously cited analysis of 1930 Census data for the East North Central States, Notestein found that except in rural farm areas, native-white families in homes valued at \$10,000 or more were more fertile than those in residences valued at \$5,000-\$10,000. With this exception, fertility and value of home were inversely associated. (Fertility index used was mean number of resident children under 10 per wife married 5-9 years.) Notestein, F. W.: *op cit.*, pp. 186-191.

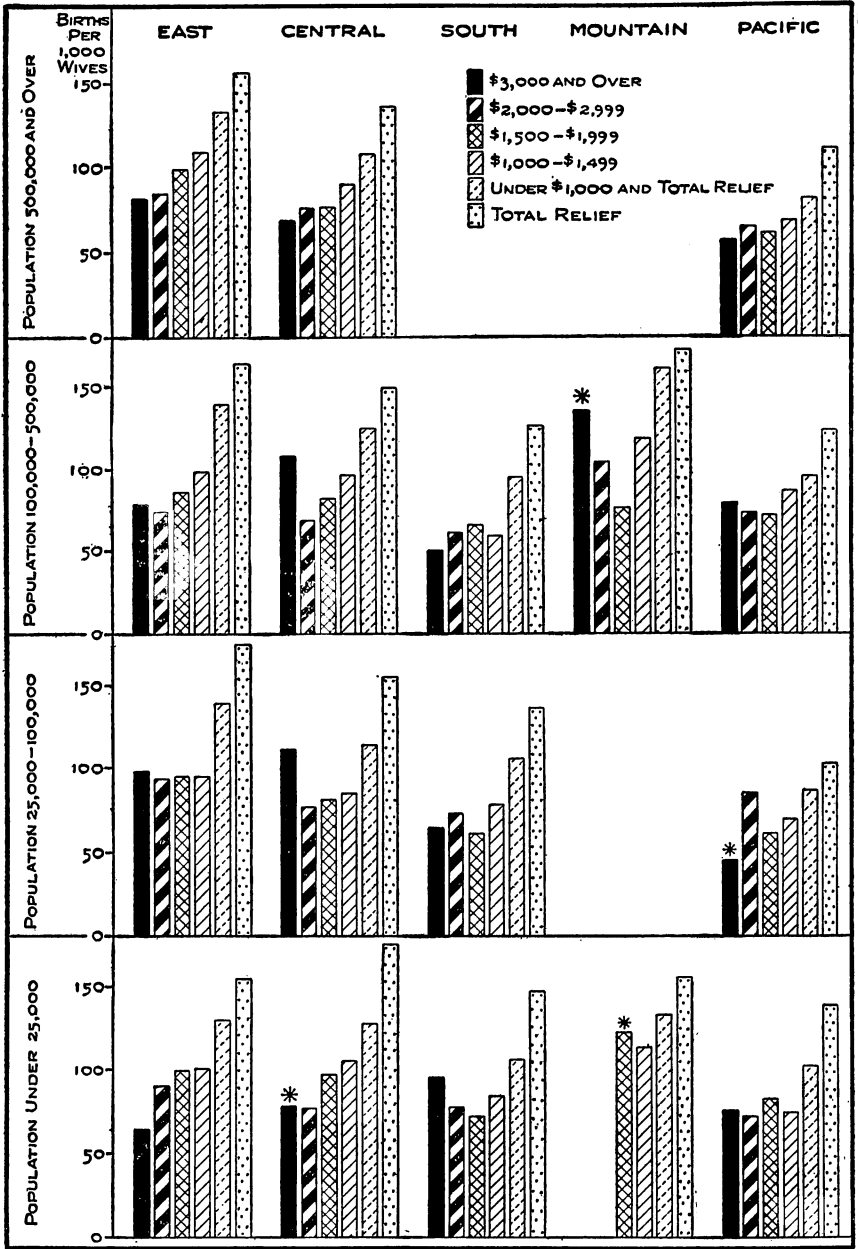


Fig. 12. Family income and birth rates in 1935 among native-white wives 15-44 years of age, by area and size of surveyed cities. Rates standardized for age.

observed with reference to educational status, the indications of

inverse association between birth rates and family income were most definitely manifested in Eastern cities of largest size. In the remaining groups of cities represented in the chart the above type of variation was only crudely shown or absent entirely.

In the classification of colored wives by area and size of community only a single subdivision was feasible on a straight family income basis.<sup>18</sup> As before, however, birth rates were also computed for recipients of relief, so the data in Figure 14 are shown for three designated groups. Birth rates among colored wives reporting family incomes of \$1,000 and over were fairly consistently lower than those among wives in families earning under \$1,000. Relief recipients, considered separately, generally ranked highest in birth rates. Within the narrow limits of income stratification represented in the *Survey*, therefore, the inverse association between family earnings and birth rates in the urban colored populations is clearly apparent.

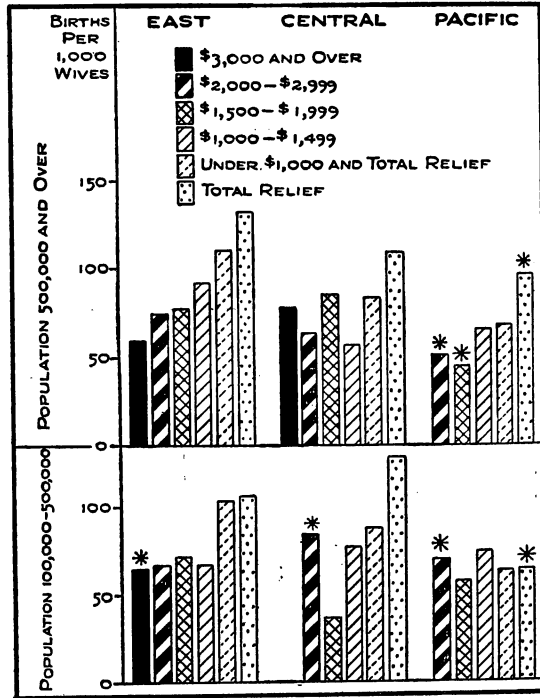


Fig. 13. Family income and birth rates in 1935 among foreign-white wives 25-44 years of age in selected groups of surveyed cities. Rates standardized for age.

SUMMARY AND CONCLUSION

In broad terms, the results described in this report would appear

<sup>18</sup> The class "under \$1,000 and total relief" comprised 82 per cent of the colored wives considered in this fertility investigation as compared with 33 per cent of the native-white wives and 39 per cent of the foreign-white wives.

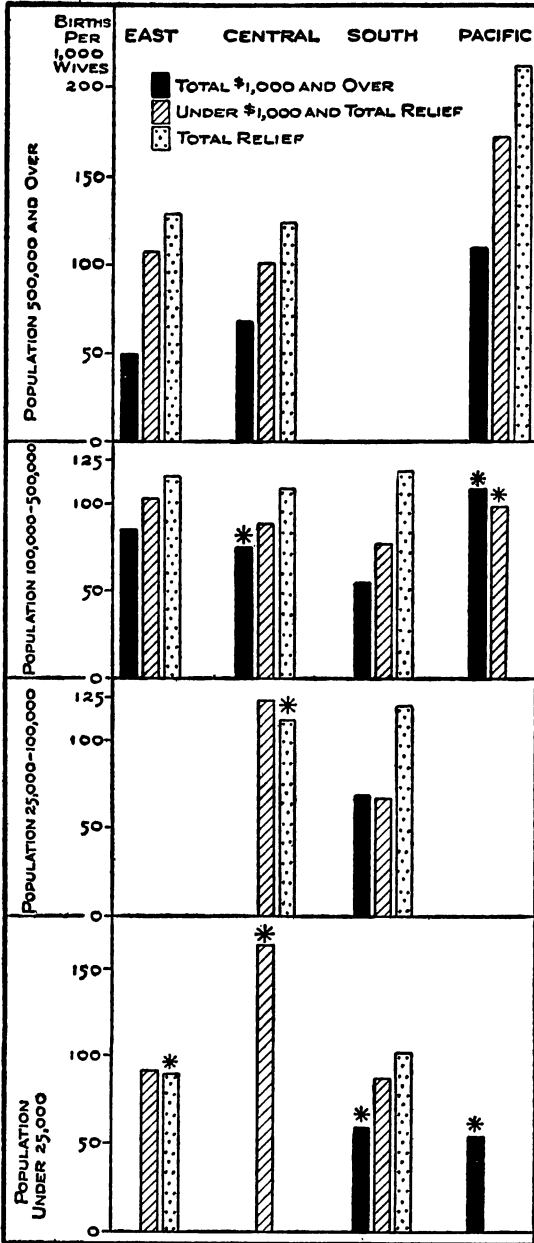


Fig. 14. Family income and birth rates in 1935 among colored wives 15-44 years of age, by area and size of surveyed cities. Rates standardized for age.

to substantiate other indications that group differences in the fertility of urban wives are becoming less important. Outstanding in this respect has been the trend toward equalization of birth rates among comparable groups of native-white and foreign-white married women.

Trends in the fertility of the various socio-economic classes cannot be so succinctly described until comparable data are available for time intervals. Nevertheless, the indications, in this and other investigations, of modifications in the traditional pattern of inverse association of birth rates with socio-economic status of urban native-white wives are suggestive of the diminishing importance of this type of relationship. The top classes in these groups were not universally characterized by

lowest birth rates. In some groups of cities, notably on the Pacific Coast where birth rates are extremely low, there was little or no indication of inverse association of birth rates with occupational status of the head or educational attainment of the wife. Among foreign-white and colored wives there seemed to be only crude or inconsistent patterns of variation of birth rates with occupational or educational status.

Such suggestive evidence of the diminishing importance of class differences in fertility is in line with the logic of the situation. If contraceptive practices originated among the upper classes in urban centers and have since tended to spread downward and outward, the process would yield first an enlargement and later a diminution of group differences in fertility. Innes<sup>19</sup> recent analysis of data for England and Wales affords some indication that such has been the trend in those countries. During the last quarter of the Nineteenth Century there was unmistakable widening of class differences in fertility. There was at least suggestive evidence of a narrowing of class differences in birth rates in the city of London from 1931 to 1934. It may be, therefore, that important class differences in fertility, as we have known them in the past, constitute a transitory phase in a long period of declining fertility.

It should be emphasized, however, that whatever changes have occurred in differential fertility among urban native-white marriages, the wives in lowest income classes were generally and conspicuously most fertile. This held true even on the Pacific Coast. It should also be borne in mind that the present report has been confined to urban areas where the average reproduction rates are too low for population replacement, and has not taken into account the wide differences existing between the urban and the rural birth rates. Finally, it must be repeated that this is only a progress report of material under analysis and that the interpretations herein offered must be regarded as provisional.

<sup>19</sup> Innes, J. W.: CLASS FERTILITY TRENDS IN ENGLAND AND WALES, 1876-1934. Princeton, New Jersey, Princeton University Press, 1938, 152 pp.