

VARIATIONS IN BIRTH RATES ACCORDING TO OCCUPATIONAL STATUS, FAMILY INCOME, AND EDUCATIONAL ATTAINMENT¹

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WITH but little interruption, the birth rate in this country has declined sharply during the past fifteen years. Family incomes were drastically reduced after the economic debacle of 1929. Have the dual influences of declining birth rates and declining income tended to alter in any way the pattern of socio-economic variations in birth rates among representative urban groups? Data bearing on this question are not available from official sources, but some relevant preliminary material is now obtainable from a comprehensive health survey.

During the latter part of 1935 and early part of 1936 the United States Public Health Service, with funds from the Works Progress Administration, conducted the field work for the National Health Survey. The chief object of the investigation was to secure comprehensive data concerning incidence and severity of illness in various elements of urban populations.³ Detailed records were secured from a total of 740,000 families residing in eighty-four cities of nineteen states. In addition to the quantity of material collected, a valuable feature of the survey was its inclusion of all classes of people. It was by no means confined to poorer sections of cities.⁴

¹ A preliminary report based upon National Health Survey data for 16,831 native-white married women of childbearing age in five selected cities. The author wishes to express his gratitude to the United States Public Health Service for its cooperation in making these data available. He wishes to thank Mr. G. St.J. Perrott and Mr. Clark Tibbitts for their suggestions during the preparation of this report.

² From the Milbank Memorial Fund.

³ Further details of the survey may be found in a preliminary report, Perrott, G. St.J. and Holland, D. F.: Chronic Disease and Gross Impairments in a Northern Industrial Community. *Journal of the American Medical Association*, May 29, 1937, 108, No. 22, pp. 1876-1886.

⁴ A valuable study of depression differentials in fertility among residents of poor areas in selected cities was made on the basis of "Health and Depression" data collected in 1933.

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Complete enumeration was attempted in all except one of the surveyed cities under 100,000 population. In larger surveyed cities, including those considered here, the sampling procedure was planned to yield representatives from all groups or strata.⁵

In addition to items on morbidity the schedules used in the enumeration provided excellent data concerning number of live births to surveyed women during the twelve months preceding enumeration. Hence, it was possible to compute annual birth rates, approximately as of the year 1935, among groups classified with respect to selected socio-economic attributes. It is regrettable that facts were not secured concerning the total number of children ever born to married women. Annual rates, however, are more sensitive to current conditions than are rates based upon the total number of children born. Since rural migrants are also encountered in urban populations, and are probably not represented equally in the various socio-economic classes, for present purposes the annual rate has distinct advantages over one based upon total past fertility.

The present report is preliminary in nature. It is confined to the five cities listed in Table 1, and in the main is restricted to the 16,831 women 15-44 years of age who were native white and living with husbands of similar nativity at the time of the enumeration. The major purpose of the report is to examine the variations in birth rates among these women with respect to occupational class of husband, family income, and educational status of husbands and wives. More limited data concerning variations according to nativity and color will also be presented.

See Griffin, Helen C. and Perrott, G. St.J.: *Urban Differential Fertility during the Depression. The Milbank Memorial Fund Quarterly, January, 1937, xv, No. 1, pp. 75-89.*

⁵In Oakland the survey was planned to include one-eleventh of the households; in Newark, one-eighth; in Grand Rapids, one-ninth; in St. Paul, one-seventh; and in Fall River, one-third. Census Enumeration Districts were used as bases for selection of areas in sampled cities. The Enumeration Districts, or approximately equal portions of them, were listed in serial order, and random selection was made by application of the pre-determined sampling ratio, i.e., by selecting every third or fourth unit. Areas thus chosen were scheduled for complete enumeration. Continued re-visits and evening calls were made to avoid the potential bias inherent in missing families in which the wife worked or was away from home at the time of the first visit.

CITY	TOTAL	WHITE			NEGRO	OTHER OR UNKNOWN
		Nativity Head and Wife				
		Both Native	Both Foreign	Dissimilar		
TOTAL	26,176	16,831	3,783	4,311	1,150	101
Oakland	3,936	2,929	301	558	105	43
Newark	7,866	3,491	1,943	1,459	968	5
Grand Rapids	2,574	1,990	221	341	21	1
St. Paul	6,772	5,549	375	758	39	51
Fall River	5,028	2,872	943	1,195	17	1

Table 1. Number of married women 15-44 years of age in Health Survey samples for five cities, by color and nativity. Nativity grouping applies only to whites and refers jointly to heads and wives.

It is believed that virtually complete enumeration was attained for births within the year to women included in the survey. Two unrelated parts of the schedule were designed to elicit such information. In the first place, if a birth occurred to any woman of the household, it was shown in the record of her illness during the year. Quite detailed data were secured for all illnesses which disabled the individual for seven days or longer. In the case of illness due to childbirth, provisions were made for recording type of birth, such as one live birth, one stillbirth, live-born twins, etc. Also, such births were identifiable from the family roster. Enumerators were required to state ages of infants in terms of months, and to include all individuals who had lived in the household during the past twelve months regardless of whether such persons were deceased or away from the household at the time of the enumeration. The editors of schedules in each local office were instructed to examine the roster and illness data for consistency of the above returns. Inconsistent schedules were returned to the enumerators for re-visits.

When the total numbers of live births⁶ enumerated are related with the surveyed populations in the five cities considered here,

⁶ In this instance only, the numbers related to confinements resulting in one or more live births. Twins and triplets appear as one birth. For all remaining rates, referring to married women of childbearing age, the data have been analyzed completely with respect to type of issue.

crude birth rates of the following orders were secured: Oakland, 12.1; Newark, 13.6; Grand Rapids, 14.3; St. Paul, 13.8; and Fall River, 14.5. These figures are equivalent to resident birth rates for the respective cities. In 1935, the crude rate for the total rural and urban population of this country was 16.9.⁷ On the basis of this rate for the total United States, the computed birth rates among residents of cities of the above type would appear to signify reasonably complete enumeration of births. The low-ranking position of Oakland is consistent with the generally low birth rates of California cities. If there was under-enumeration it would seem to have been too small to have bearing on the present analysis of internal variations.

BIRTH RATES BY NATIVITY AND COLOR

For reasons to be presented later, the data for native-white marriages in the five cities were combined. Since Negroes appeared in substantial numbers in only one of the cities considered here, and foreign-white marriages in only two cities, the comparisons of birth rates by color and nativity must be made for such cities separately.

The Newark and Fall River samples afforded good and substantial evidence that by 1935 the birth rates among foreign-white marriages were no higher than those among comparable native-white marriages. Due to the very small numbers of foreign-white wives under 25 years old, a comparison presented in Table 2 is in the form of standardized rates per 1,000 married women 25-44 years of age.⁸ For Newark this rate was 71 per 1,000 native-white wives and 75 among foreign-white wives. In Fall River the rates were 98 and 97, respectively. The picture is not changed substantially

⁷ Bureau of the Census, *Vital Statistics, Special Reports*. Washington, Department of Commerce, January 19, 1937, iii, No. 1, p. 1.

⁸ Standardized by applying the age distribution of all married females, 25-44 years of age, in the United States, as computed from the 1930 Census. The standardized rate for this age range was used only for comparisons by nativity and color. See footnote 10.

AGE OF WIVES, NATIVITY, AND COLOR	BIRTHS PER 1,000 WIVES			
	All Classes		Laboring Classes	
	Newark	Fall River	Newark	Fall River
25-44				
Native-White	71	98	78	96
Foreign-White	75	97	77	89
Negro	52	—	57	—
15-44				
Native-White	104	—	115	—
Negro	93	—	95	—
	NUMBER OF WIVES			
25-44				
Native-White	2,883	2,348	1,523	1,563
Foreign-White	1,890	923	1,301	775
Negro	805	—	728	—
15-44				
Native-White	3,491	2,872	1,902	—
Foreign-White	1,943	943	1,342	—
Negro	968	—	869	—

Table 2. Comparison of standardized birth rates among native-white, foreign-white and Negro marriages in Newark and Fall River. Data are classified with reference to age of wife, and in section at right are restricted to laboring classes.

when the comparison by nativity is restricted to wives of laborers in similar age groups.

Negro-white comparisons are available only from the Newark data. In that city birth rates among Negro wives, especially those 25-44, were considerably lower than among native-white marriages in which the ages of the wives and occupational class were comparable. The total standardized birth rate for women in the complete childbearing span, 15-44, was about 12 per cent higher in native-white marriages than in Negro unions. This total, however, disregards the differences in social class composition and conceals significant variations by age. Native-white wives in the laboring class, and 15-24 years of age, were only 4 per cent more fertile in 1935 than were Negro wives of similar age and station. On the

other hand, native-white wives 25-44 were about 38 per cent more fertile in that year than were comparable groups of Negro wives. One must remember, of course, that in the above comparisons we are dealing with birth rates among married women and that rates of illegitimacy are relatively high among Negroes. Whatever alterations that factor would produce, the outstanding results of these comparisons are that birth rates among Negro marriages in a northern industrial city were lower than those found among comparable native-white marriages and that the current birth rates of foreign whites in two cities were no higher than those of native whites.

COMBINATION OF DATA FOR NATIVE-WHITE MARRIAGES

As previously stated, the major emphasis of this preliminary report is upon socio-economic variations in birth rates among native-white unions. Specifically, these variations will be examined with reference to occupational class of the head, family income and relief status, and educational attainment of the head and wife. In the interest of maintaining sufficiently substantial numbers to yield reliable birth rates in the desired subdivisions of data, tests were made to ascertain the validity of combining the native-white samples in the several cities.⁹

The standardized¹⁰ birth rate per 1,000 women of childbearing age (all occupational classes combined) was found to be 76.9 in Oakland, 103.9 in Newark, 105.5 in Grand Rapids, 115.6 in St. Paul, and 126.1 in Fall River. When the two predominant occupational classes are separately considered, Oakland still ranked significantly lower than the other cities but there were no significant differences between the remaining four cities.¹¹ On the basis of this situation

⁹ See Table 1 for distribution by city of the 16,831 native-white marriages in the surveys.

¹⁰ Standardized by applying the age distribution of all married females 15-44 in the United States, as computed from the 1930 Census reports.

¹¹ The following indicates the significant differences observed between Oakland and
(Continued on page 45)

it would appear that for the present purpose the samples for Newark, Grand Rapids, St. Paul, and Fall River might justifiably be combined, and that Oakland should be handled separately. This procedure was in fact originally carried out, but actual experimentation demonstrated that the inclusion of Oakland with the remaining cities did not change the essential pattern of the variations whatsoever, and served merely to lower all rates somewhat. All samples were therefore combined for the present report. In presenting the material, mention will be given of any important deviations by specific cities from the general pattern of variations in birth rates.

BIRTH RATES BY OCCUPATIONAL CLASS OF HEAD¹²

If the preliminary findings presented are borne out by the complete survey, there may be emerging an interesting deviation from the traditional pattern of inverse association between birth rates and occupational status. In the combined samples for five cities, Table 3 and Figure 1, the lowest birth rate was not found among wives of professional men, but among those of business men, and more specifically among those of proprietors. This situation held true in three of the cities considered separately.

Newark, the latter city showing next lowest rates. No significant difference is shown between Newark and Fall River, the latter city exhibiting highest rates.

OCCUPATION OF HEAD	NUMBER WIVES 15-44			STANDARDIZED RATE PER 1,000 WIVES			DIFFERENCE \pm P.E.	
	Oakland	Newark	Fall River	Oakland	Newark	Fall River	Oakland-Newark	Newark-Fall River
Business	1,265	1,286	723	65.1	93.1	106.8	28.0 \pm 7.2	13.7 \pm 9.4
Skilled	1,212	1,670	1,765	79.1	110.6	121.3	31.5 \pm 7.6	10.7 \pm 7.4

¹² The punch card for each person in the survey includes in the family data the occupational class of the head. The head is always the husband of the married woman considered except in cases typified by a married daughter living with her parents. Since the data are confined to unbroken unions, such cases are few.

For coding occupational classes, the 1930 Census occupational manual was used in connection with Edwards' classification. See Edwards, Alba M.: A Social Economic Grouping of the Gainful Workers of the United States. *The Journal of the American Statistical Association*, December, 1933, xxviii, No. 184, pp. 377-387.

OCCUPATIONAL CLASS OF HEAD	LIVE BIRTHS PER 1,000 WIVES, BY AGE					
	Total 15-44 Standardized	15-24	25-29	30-34	35-39	40-44
Professional	101	175	142	94	67	15
Business	93	184	133	89	37	8
<i>Proprietors</i>	85					
<i>Clerks-Salesmen</i>	96					
Skilled and Semi-Skilled	112	241	134	95	53	15
<i>Skilled Workers</i>	101					
<i>Semi-Skilled—not in M'fg.</i>	110					
<i>Semi-Skilled in M'fg.</i>	122					
Unskilled	137	271	170	131	82	14
	NUMBER OF WIVES					
Professional	1,113	103	289	267	255	199
Business	6,281	761	1,428	1,414	1,389	1,289
<i>Proprietors</i>	2,207					
<i>Clerks-Salesmen</i>	4,074					
Skilled and Semi-Skilled	8,059	1,447	1,859	1,812	1,622	1,319
<i>Skilled Workers</i>	3,689					
<i>Semi-Skilled—not in M'fg.</i>	2,009					
<i>Semi-Skilled in M'fg.</i>	2,361					
Unskilled	1,051	269	253	183	207	139

Table 3. Birth rates in 1935 among native-white marriages, grouped according to usual occupational class of the household-head, and by age of wife. Samples from five cities combined.

Aside from the above departure, the traditional ranking of the classes with respect to birth rates was maintained. When the broader groupings are considered, the standardized rates extended from 93 births per 1,000 wives 15-44 years of age in the business class to 137 among unskilled laborers, with the intermediate range of 112 for all skilled and semi-skilled workers combined. Perhaps the point of chief interest revealed by the more detailed division is the higher rate among semi-skilled workers in manufacturing than among semi-skilled workers outside of factories. This type of comparison was observed in each of the five cities considered separately.

The age-specific rates, shown in Table 3 and Figure 2 for the four broad classes in the five cities combined, indicate several points of

interest. Occupational differences in birth rates during 1935 were greatest among women under 25 years of age. In this age group the lowest rates were observed among wives of professional men, so the previously observed higher average rate shown for the professional class as compared with the business class must be attributed to older wives. Only among wives under 25 was the rate for skilled workers high in comparison with that of the white collar classes. The relatively high level of the rates for unskilled laborers, however, was maintained throughout the 15-40 age range.

In considering the professional-business comparison of birth rates indicated in this sample, one should keep in mind that in previous studies based upon total number of children born the birth rates of professional families have been only a little lower than those of families of business status. Larger disparities in birth rates have generally been observed in the comparison of business groups and skilled workers and in the comparison of skilled workers and unskilled laborers. It is possible that the relatively low birth rates for those engaged in business during 1935 was only a temporary situation associated with the depression. Data from further tabulations are awaited with interest to ascertain whether or not there is a recent tendency, general or localized, for birth rates of professional families to surpass those of comparable families of business status.

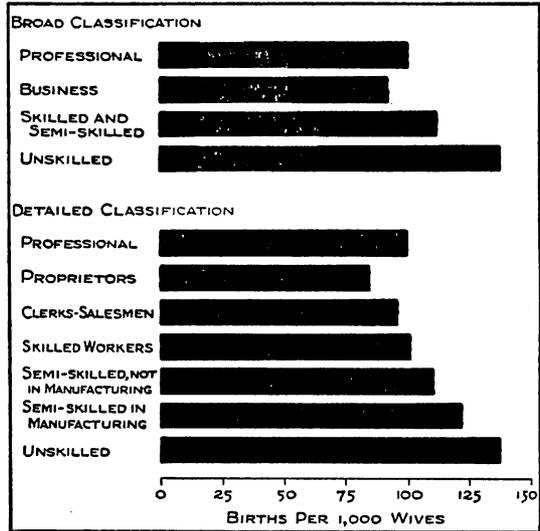


Fig. 1. Standardized birth rates in 1935, according to usual occupational class of the household-head. See Table 3.

Furthermore, since fifteen of the cities included in the Health Survey were also contained in a previous analysis based upon 1910 Census material,¹³ it is hoped that eventual comparisons of the

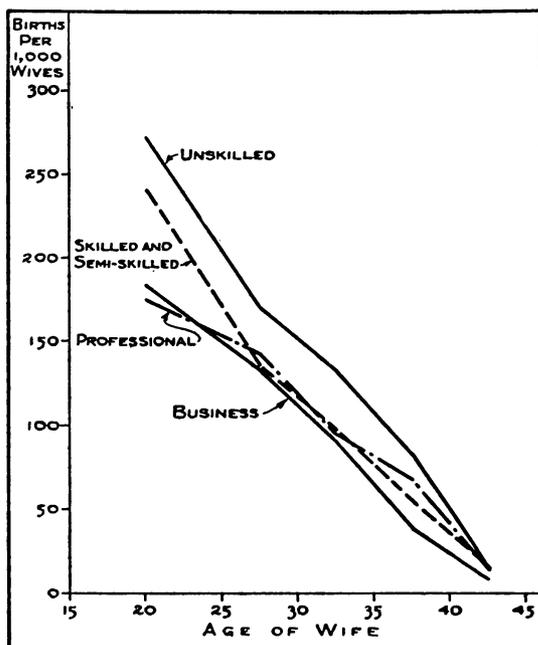


Fig. 2. Births per 1,000 wives in 1935, according to usual occupational class of the household-head, and by age of wife. See Table 3.

early and recent data may afford some valid indications as to diminution or increase of socio-economic differences in fertility.

FAMILY INCOME, RELIEF STATUS, AND BIRTH RATES

The forms used in the survey provided for data concerning the total family income during the year preceding enumeration. The information was not recorded in specific figures. Instead, it was designated by checking one of

six family-income categories ranging from "under \$1,000" to "\$5,000 and over." It was believed that such procedure would minimize opposition to the question from families in higher-salaried classes. Income data were recorded for almost 99 per cent of the native-white families constituting the present sample. The enumerators also asked of each family whether any resident member in the household had received "relief" (including "work relief") during the past twelve months. These data were used for establishing the family income-relief classes employed in this report. For

¹³ 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.

present purposes the "\$3,000-\$4,999" and "\$5,000 and over" groups were combined, due to small numbers of families reporting as much as \$5,000 per year.

In view of certain characteristics of the data, special interest attaches to the relation between family income and birth rates. In this case both variables refer to the year preceding enumeration¹⁴ and the independent variable, income, is itself peculiarly sensitive to depression conditions. In the nature of the case, the advent of a depression brings more immediate and drastic changes in the status of families with respect to income than with respect to "usual" occupational status, and depressions presumably have little bearing on the educational status of husbands and wives. In a sense, therefore, the observed relation of birth rates to family income in a given recent year should be especially sensitive to current conditions.

In the first place, it should be emphasized that birth rates observed among the lowest income groups and relief recipients were markedly high, Table 4 and Figure 3. Equally striking, however, is the unexpected showing made by the families in the highest income group. The birth rate in 1935 among these families was not only higher than that observed among families earning \$2,000-\$2,999,¹⁵ but also surpassed that of families in the \$1,500-\$1,999 group.

If the highest income group is disregarded, the picture for the five cities combined is that of a straight inverse association between income status and birth rates. The birth rate extended from 73 among nonrelief families earning \$2,000-\$2,999 to 154 among relief recipients. The reader is warned, however, against the conclusion that receipt of public relief is conducive to high birth rates. The rate for all families earning under \$1,000, relief and nonrelief, was 137. Students have frequently pointed out that indigent fami-

¹⁴ The income data coincide in time with the birth dates of infants enumerated, and in approximately one-fourth of the cases coincide with the dates of conception.

¹⁵ This situation was observed in three of the cities analyzed separately. The exceptions were Newark and Oakland, but in the latter city the birth rate among families earning \$2,000-\$2,999 surpassed that for families in the immediately lower category.

FAMILY INCOME PER YEAR	LIVE BIRTHS PER 1,000 WIVES, BY AGE					
	Total 15-44 Standardized	15-24	25-29	30-34	35-39	40-44
\$3,000 and Over	88	169	111	98	46	3
2,000-2,999	73	108	116	85	38	7
1,500-1,999	77	129	108	89	42	8
1,000-1,499	94	198	124	84	40	11
Under \$1,000 ¹	137	285	177	110	73	21
All on Relief	154	331	196	113	81	33
	NUMBER OF WIVES					
\$3,000 and Over	1,319	59	207	297	371	385
2,000-2,999	2,375	186	491	565	577	556
1,500-1,999	3,216	356	750	731	745	634
1,000-1,499	4,078	701	1,033	913	817	614
Under \$1,000 ¹	5,428	1,303	1,335	1,124	948	718
All on Relief ²	2,889	641	649	636	543	420

¹ Includes 2,661 families on relief and 2,767 nonrelief families. Specific income categories above \$1,000 include no relief families.

² Includes 2,661 families earning under \$1,000 and 228 relief families whose earnings were coded simply as "over \$1,000."

Table 4. Birth rates in 1935 among native-white marriages, grouped according to family income and relief status, and by age of wife. Samples from five cities combined.

lies with an expectant mother or a newly-born child are more

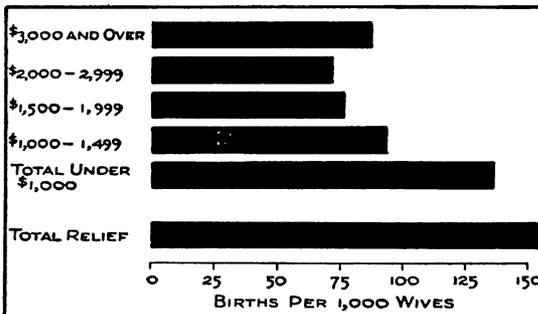


Fig. 3. Standardized birth rates in 1935, according to family income and relief status. See Table 4.

status at specific ages of wives, Table 4 and Figure 4, yield several points of interest. In the first place, the range of variation

likely to apply for and to receive public aid than are other economically marginal families. To some extent, therefore, families are on relief *because* of high birth rates.

The comparisons of birth rates by income

is greatest among wives under 25. Nevertheless, distinctly higher birth rates are observed among the low-income and relief groups of all ages from 15-40. Only a small number of wives under 25 years of age were in the "\$3,000 and over" income group, so the birth rate observed for them is not reliable. This group furnishes the reasonable suggestion, however, that there is less tendency toward postponement of births among young couples in the upper and middle classes if their income is commensurate with their usual standard of living.

BIRTH RATES ACCORDING TO EDUCATIONAL STATUS OF THE HEAD AND WIFE

In the nature of the case, educational status of parents is more permanent than family income or type of livelihood. Husbands and wives reporting college training before the depression remain in that classification despite changes in family income or usual occupational status.

As previously noted, the uppermost classes with respect to occupation and income surpassed immediately lower classes in birth rates during 1935. With respect to educational attainments, birth rates among college groups in that year were not higher than, but were as high as, those observed for individuals of high school

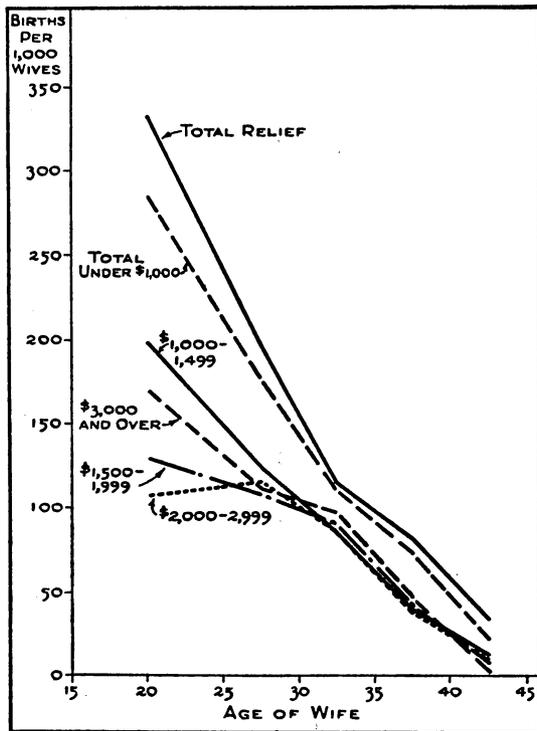


Fig. 4. Births per 1,000 wives in 1935, according to family income and relief status, and by age of wife. See Table 4.

	LIVE BIRTHS PER 1,000 WIVES, BY AGE					
	Total 15-44 Standardized	15-24	25-29	30-34	35-39	40-44
Education Head of Household						
College	99	176	155	102	41	11
High School	99	207	130	85	46	7
Grammar School	116	254	134	99	55	16
7th-8th Grades	112					
Under 7th Grade	133					
Education of Wife						
College	97	156	146	114	39	16
High School	98	216	126	82	44	7
Grammar School	119	248	149	102	57	14
7th-8th Grades	114					
Under 7th Grade	140					
NUMBER OF WIVES						
Education Head of Household						
College	2,620	295	716	597	539	473
High School	6,613	1,246	1,617	1,426	1,287	1,037
Grammar School	7,581	1,122	1,560	1,712	1,704	1,483
7th-8th Grades	6,511					
Under 7th Grade	1,070					
Education of Wife						
College	1,813	173	478	463	380	319
High School	8,013	1,564	2,073	1,714	1,515	1,147
Grammar School	7,002	927	1,345	1,562	1,638	1,530
7th-8th Grades	6,003					
Under 7th Grade	999					

Table 5. Birth rates in 1935 among native-white marriages grouped according to educational attainments of household heads and wives, and by age of wife.

status.¹⁶ This held true regardless of whether the data are grouped by educational status of the head or by education of the wife,¹⁷ Table 5 and Figure 5.

¹⁶ Heads or wives classified as being of "college" status, "high school" status, etc., did not necessarily complete the full training implied by the respective categories. Individuals were coded into the "college" group, for instance, if they reported any college attendance.

¹⁷ The averages for the five cities, however, conceal the variations observed in individual cities. In the classification on the basis of the head's educational status, the birth rates were

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The failure of the college groups to register during 1935 lower birth rates than high school attendants does not represent a substantial deviation from the situation in earlier years. Fairly recent data based upon total number of children born have indicated that the differences between high school and college groups are relatively insignificant compared with those between high school and common school groups.¹⁸ Other investigations confirm the foregoing indications that after high school the factor of continued education, in itself, has little influence upon marital fertility.¹⁹

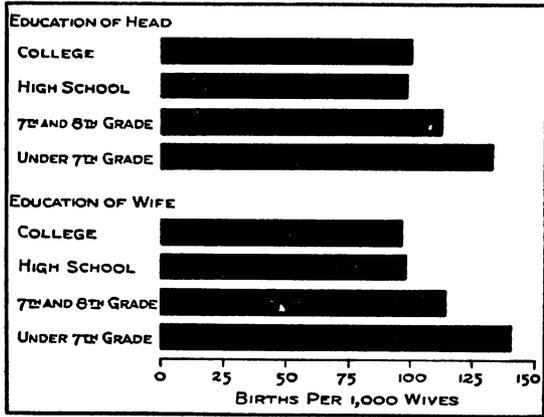


Fig. 5. Standardized birth rates in 1935, according to educational status of the household-head and of the wife. See Table 5.

Aside from the virtual similarity of rates among college and high school groups, the results from the present sample show fairly marked inverse association between birth rates and educational attainment. Wives of college men were characterized by a birth rate 11 per cent lower than that among women whose husbands attained seventh or eighth grade education and about 26 per cent

higher among the "college" groups than among the "high school" groups in two cities (Oakland and Fall River) and were lower than those among "high school" groups in Newark and Grand Rapids. In St. Paul the rates for "college" and "high school" groups were practically identical. In the grouping according to the wife's educational attainment, the birth rates of college-trained women surpassed those of "high school" women in only one city, St. Paul; were lower than "high school" rates in three cities (Newark, Fall River, and Grand Rapids) and similar to the "high school" rate in Oakland.

¹⁸ Notestein, F. W. and Kiser, C. V.: Factors Affecting Variations in Human Fertility. *Social Forces*, October, 1935, xiv, No. 1, pp. 34-35.

¹⁹ Goodsell, W.: The Size of Families of College and Non-College Women. *American Journal of Sociology*, March, 1936, xli, No. 5, pp. 585-597; Smith, Mary Roberts: Statistics of College and Non-College Women. *Quarterly Publications of the American Statistical Association*, 1900, vii, pp. 1-26.

lower than that found for families in which the head's formal education did not extend beyond the sixth grade. The range in variation of birth rates was a little greater when the grouping was

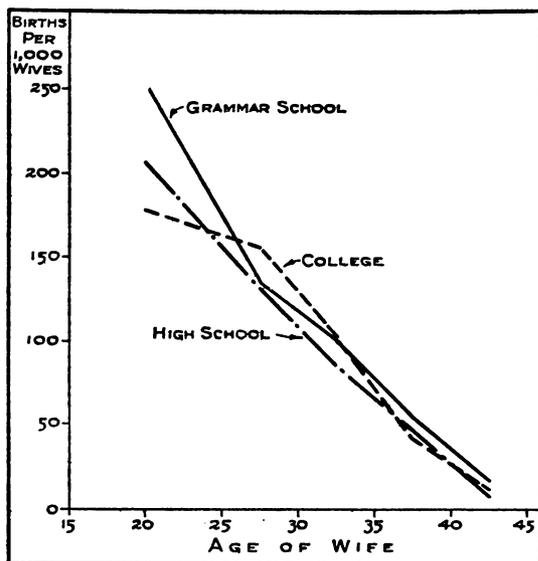


Fig. 6. Births per 1,000 wives in 1935, according to educational status of the household-head, and by age of wife. See Table 5.

made on the basis of the wife's education, but this increase in range may well be accidental. In the present sample, however, the 1935 birth rate of college-trained wives was about 15 per cent lower than that of women of seventh-eighth grade education, and 31 per cent lower than that of women whose formal learning was confined to the sixth grade or less.

In essential respects the age-specific pattern of variation in birth rates by educational status is similar to that previously observed when the data were grouped by occupational class. At ages younger than 25, the college-trained groups ranked lowest in birth rates regardless of whether the education of the head or that of the wife was used as the basis of classification, Figures 6 and 7. A like situation was observed among young wives of professional men, Figure 2. In part, the relatively high ranking of the birth rates of wives in upper classes at ages 25-34 accrue from first births among late marriages. In addition, the situation may reflect the eventuation of postponed births among young couples of college or professional status.

Before closing this report it should be emphasized that the findings presented here are preliminary, not final. More adequate analyses of the bearing of the various socio-economic factors upon

the birth rate must await larger and better controlled masses of data. When these are available, it should be possible, for instance, to determine the relation of income to birth rates among groups homogeneous with respect to educational and occupational levels. Such cross-tabulation demands larger numbers than were available at this time.

SUMMARY

This preliminary analysis of fertility data from the Health Survey is confined to five cities and is restricted mainly to 16,831 native-white unions in which the

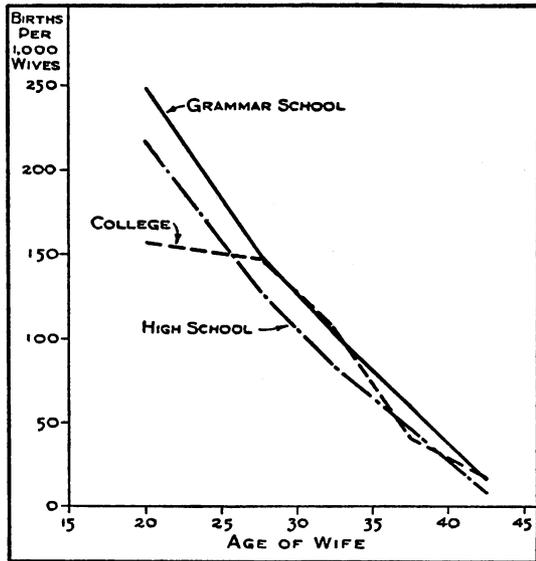


Fig. 7. Births per 1,000 wives in 1935, according to educational status and age of the wife. See Table 5.

wives were 15-44 years of age. The birth rates refer to natalities during one year (centering on 1935) among women of childbearing age and were computed according to several separately considered socio-economic attributes. The major preliminary points may be summarized as follows:

1. In Newark, Negro marriages of the laboring class were less fertile than native-white unions comparable with respect to occupational class and age of wife. This disparity arose mainly from the low birth rates of Negro wives over 25 years of age.
2. In Newark and in Fall River the birth rates of foreign-white unions were practically the same as those of native-white unions.
3. With one type of exception, the combined data for native-white unions indicated the existence in 1935 of marked inverse association between birth rates and socio-economic status. This held true re-

ardless of whether the data were grouped according to occupational class of head, family income, education of the head, or education of the wife. The exception consisted in the failure of the top classes to manifest the lowest birth rates. The standardized birth rate for the professional group was a little higher than that for the business class. Grouped according to income, minimum birth rates were observed not among families earning \$3,000 and over, but among those in the \$2,000–\$2,999 category. Practically equal birth rates were observed in college and high school groups, when the classification was made either on the basis of the head's educational status or on the basis of the wife's education. Additional data are required before valid conclusions can be drawn concerning recent enlargement or diminution of class differences in fertility in their more general aspects.