

RECENT ANALYSES OF MARRIAGE RATES

by CLYDE V. KISER¹

SINCE marriage is the formal sanctioning of a relationship which normally results in reproduction, total and differential marriage rates have intimate bearing on the numbers and characteristics of our future population. "It is obvious," says Dorn,² "that a population with two children per married woman and with 80 per cent of the women married is more fertile than a similar population with three children per married woman, but in which only 50 per cent of the women are married. In 1930, 18.5 per cent of the women in Massachusetts aged 20 were married as contrasted with 55.3 per cent in Arkansas. Although this difference is affected by race and migration, it indicates one of the factors influencing the higher birth rate in Arkansas."

Few in number and limited in scope though they may be, recent studies of marriage rates have been concerned with questions of undoubted relevance to future population and the family. What changes are taking place with regard to percentages married and marriage rates in our population? What differentials have been observed in marriage rates, and what have been the trends with reference to such differences? What has been the trend since the advent of the depression?

Ogburn and others³ have explored the census data concerning percentages married for the past several decades. In his most recent article on the subject, Ogburn⁴ reports that marriages increased in the United States from 1920 to 1930 even when age, nativity, and

¹ From the Milbank Memorial Fund.

² Dorn, Harold F.: *Demographic Factors Affecting Fertility*. Unpublished paper, read before a joint meeting of the American Statistical Association and the Population Association of America, Chicago, Illinois, December 30, 1936.

³ Ogburn, W. F. and Groves, E. R.: *AMERICAN MARRIAGES AND FAMILY RELATIONSHIPS*. New York, Henry Holt and Company, 1928, 497 pp.

⁴ Ogburn, W. F.: Recent Changes in Marriage. *American Journal of Sociology*, November, 1935, xli, No. 3, pp. 285-298.

urban-rural composition are held constant. In 1920 there were 599 married persons per 1,000 population 15 years of age and over. In 1930 there were 605, an increase of 1.0 per cent. On the other hand, however, something of a reversal of previous trends toward earlier marriages was noted during the 1920-1930 decade.

Valuable as they are for periodic bench-marks in the analysis of trends, the decennial census data pertaining to percentages married at different ages do not provide the necessary information for computing true annual marriage rates,⁵ and yield nothing on the situation since the depression. In contrast to the decennial enumeration data on marital status of the population, the Vital Statistics Division of the Bureau of the Census until recently collected from state offices the number of marriages and divorces reported each year. Unfortunately, measures of economy forced the abandonment of this service in 1933, just at the time when marriage rates began to rebound from the unusually low level occasioned by the depression.

Stouffer and Spencer⁶ have performed an invaluable service in securing through correspondence available returns from states for the years 1933-1935 and in building up careful estimates of marriage and divorce rates during this period. Figure 1 shows the marriage and divorce rates for the total country since 1887, as originally presented by these authors. Upon their chart the writer has superimposed the marriage rates for up-state New York since 1898.⁷ The following are the chief points of interest:

1. The marriage rates for up-state New York are consistently somewhat lower than are those for the total country, due perhaps

⁵ The reader must keep in mind the distinction between percentages married afforded by enumeration data and rates based upon annually reported marriages per 1,000 population.

⁶ Stouffer, Samuel A. and Spencer, Lyle M.: *Marriage and Divorce in Recent Years. The Annals of the American Academy of Political and Social Science*, November, 1936, 188, pp. 56-69.

⁷ Data secured from *Forty-Sixth Annual Report* of the Department of Health, State of New York, Albany, 1936, Vol. II, page 6. The rates presented in this report relate to persons marrying per 1,000 population. These were adjusted to the basis of marriages per 1,000 population for plotting in Figure 1.

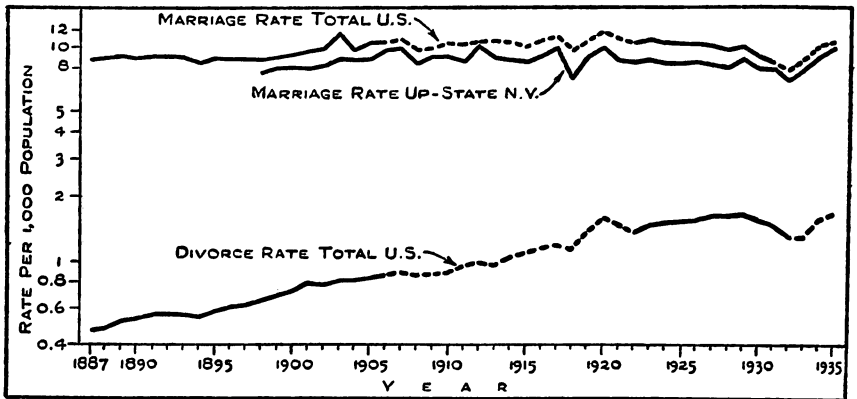


Fig. 1. Annual number of marriages and divorces per 1,000 population in the United States, 1887-1935, and corresponding trends for up-state New York, 1898-1935. United States rates for 1907-1921 are estimates by the Bureau of the Census, and those for 1933-1935 are estimates of Stouffer and Spencer (*op. cit.*, *Annals*, pp. 58-59).

to differences in racial and rural-urban composition of the population. Nevertheless, the trends have been strikingly parallel since 1898.

2. Disregarding minor fluctuations, a gradual rise in the marriage rate from 1898 until the early 1920's is apparent for both series.

3. The corresponding but sharper increase in the divorce rate is in itself one of the factors underlying increases in marriage rates. Divorces make possible repeated marriages.

4. A slight pre-depression decline in the two series of marriage rates is noted from the 1923-1928 trends.

5. During the short period 1932-1935, marriage rates in the total country and in up-state New York practically traversed the two extremes observed throughout the history of recorded rates. In 1932 the rate for the total country probably dropped to the lowest level since 1887, the estimate being 7.86 marriages per 1,000 population. In 1935 the estimated rate for the nation as a whole was about the same as the average observed during 1924-1925. In 1932 the marriage rate in up-state New York fell to the record low level of the war year 1918. In 1935 it reached the unusually high levels attained in 1912 and 1920.

It would be difficult to estimate the influence of a depression slump in marriages upon size of future population. Obviously, the

effect is largely to delay rather than to prevent marriages, and in view of the prevalence of voluntary family limitation one or two years of delay in the marriage may not be of consequence in reducing the size of the family. On the other hand, it is very likely that a loss of this kind can never be entirely liquidated. Stouffer and Spencer, using marriage rates of 1925-1929 as a norm, calculated a loss of about 3,000,000 "marriage years" during the period 1930-1935. They further state, "On the basis of such data as are now available, the writers are convinced that between January 1, 1930 and December 31, 1935, the loss in births due solely to loss in marriages was certainly in the hundreds of thousands and perhaps exceeded a million."⁸ The foregoing is qualified, however, by a statement that many of the couples deterred from marrying by the depression will marry eventually.

DIFFERENTIALS IN MARRIAGE RATES

From published census material, it is possible to secure percentages of single, married, widowed, and divorced in male and female populations 15 years of age and over according to age, nativity and color, urban or rural residence. The data are presented in varying detail for the total country, geographic areas, states, and cities. These and unpublished census data have been explored by various writers.

On the basis of his analysis of differentials afforded by census data for the past forty years, Ogburn⁹ comes to the conclusion that the country is becoming somewhat more homogeneous in respect to marital status. He points out that urban-rural and sex differences in proportions married were smaller in 1930 than in 1920. Nevertheless, he finds that in 1930 the large cities were still discouraging marriage to the extent of about 15 per cent if the farm population is taken as the norm. Also, rural-urban differences in proportions married among groups under 25 were somewhat greater in 1930

⁸ *Op. cit.*, Stouffer and Spencer, pp. 64-65.

⁹ *Op. cit.*, Ogburn, pp. 288-290.

than in 1920. This situation, however, may be the artificial and perhaps temporary result of the large cityward migration of young unmarried individuals during the decade.

Using data secured from special tabulations by the Census Bureau, Sanderson¹⁰ set for himself the task of ascertaining the residual relation between marital status and size of community after variations in age-distribution, sex-ratio, nativity, and color were virtually eliminated. The decrease in proportions married with increasing urbanization not only persisted but was somewhat intensified when the populations were standardized with respect to sex, age, nativity, and color.

Using as a point of departure the fact that marriage rates declined precipitately during the worst years of the depression, several attempts have been made to analyze the depression trends among specific population groups. Hamilton has attempted such an analysis among relief and nonrelief families in rural North Carolina. A population census of 1,703 white and Negro families in the open country areas of five scattered counties of that State provided two items of information, year of birth and year of first marriage, for each living member of the family regardless of the place of his residence at the time of the enumeration. Descriptive data for each family included relief and tenure status as of the year 1934. From these data, series of annual marriage rates were computed for various population groups based upon (a) number of unmarried persons 15-29 years of age at the beginning of each year and (b) number of such persons marrying during that year. The results obtained for the relief and nonrelief groups are presented in the top section of Figure 2 and are commented upon by Hamilton as follows: "During the depression years of 1932 to 1934, inclusive, in the five counties surveyed, the marriage rate of the relief population was significantly and substantially below that of the nonrelief

¹⁰ Sanderson, Dwight: RELATION OF SIZE OF COMMUNITY TO MARITAL STATUS. Memoir 200, Cornell University Agricultural Experiment Station, Ithaca, New York, 1937, 74 pp.

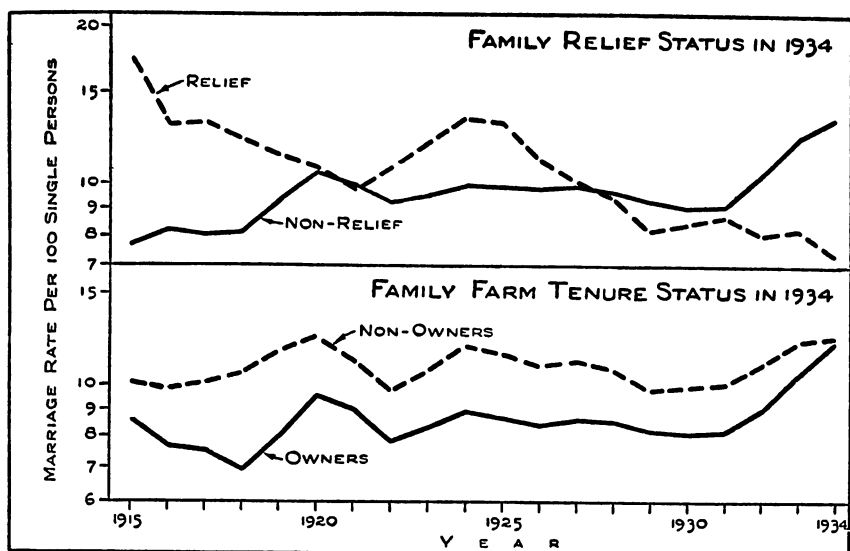


Fig. 2. Annual number of marriages per 100 single persons 15-29 years of age from rural families in North Carolina, 1915-1934, according to relief and farm-tenure status of families in 1934. Rates are three year moving averages with mid-years given a weight of 2 and the adjacent years 1 each. (Adapted from Hamilton's charts, *op. cit.*, *Rural Sociology*, pp. 455, 468.)

population. . . . During the period from 1915 to 1919 the marriage rate of the relief population (on relief in 1934) was 13.0 per 100, as compared with a nonrelief rate of only 8.1. . . . Again, beginning with 1922 there is a five-year period during which the marriage rate of the relief population was significantly higher than that of the nonrelief population.”¹¹

In view of the previously observed comparison, it is somewhat surprising that the marriage rates of individuals from farm owning families were strikingly parallel to those of nonowners (lower section of Figure 2). One might expect the tenant group to be more weighted with relief recipients. Original data furnished by the author substantiate this assumption, showing that those classified as “relief” constituted about 6 per cent of the owners, and about 20 per cent of the nonowners. The previously observed relief-nonrelief differences could be largely submerged in the analysis by

¹¹ Hamilton, C. Horace: *The Trend of the Marriage Rate in Rural North Carolina*. *Rural Sociology*, December, 1936, 1, No. 4, pp. 455-457.

tenure as a result of: (a) the relatively small number in the actual relief population and (b) the relatively small number of those classed as farm owners. A generally disturbing element, however, is the bi-racial composition of the samples used for both comparisons. This factor assumes importance in view of: (a) the racial dissimilarity of trends shown in a comparison given for total Negroes and total whites in the sample, (b) the unequal representation of Negroes in the various groups compared, as shown by original data. The author, however, claims no undue conclusiveness in the results secured, and he lists the outstanding limitations. Among these are small samples, and the fact that nonresident living offspring were necessarily included. The exclusion of migrants from the sample would naturally have introduced a bias in the direction of undue proportions of unmarried individuals.

The ecological approach to differentials in marriage rates in a large city is afforded by Bossard's recent analyses in Philadelphia.¹² His primary interests were to describe and interpret two situations: (1) variations in marriage rates in different areas of the City, (2) variations in trends of marriage rates during the depression in different areas of the City. Briefly, his method was to secure from the Philadelphia Marriage License Bureau and from bureaus of surrounding towns the street addresses of 20,000 male Philadelphians who married during specific intervals of time before or during the depression.¹³ The marriages were allocated to proper census tracts. Marriage rates per 1,000 marriageable males were computed for each tract, using official census tract data for 1930 as population bases. Areal variations in marriage rates and their trends

¹² Acknowledgment is hereby given to Dr. J. H. S. Bossard for his generosity in loaning the writer two unpublished manuscripts: "Ecological Areas and Marriage Rates" and "Depression and Pre-Depression Marriage Rates: A Philadelphia Study." These papers were read at meetings of the American Sociological Society, in Chicago, December 28-30, 1936. The latter paper is to be published in the *American Sociological Review*.

¹³ The first 10,000 cases, a "pre-depression" series, represented consecutive marriages from January 1, 1928 to November 1, 1929. The second 10,000 cases, a "depression" series, covered the periods November 1, 1931 to July 1, 1932; October 1, 1932 to March 1, 1933; and January 2, 1935 to May 15, 1935.

during the depression were analyzed with reference to characteristics of the local areas, particularly in regard to spatial characteristics and nativity-color composition.

Bossard's chief conclusions may be stated briefly as follows:

1. The total marriage rates, based upon the pre-depression and depression series combined, generally appeared to be relatively high in areas characterized by high proportions of Negroes and foreign whites (especially Russian Jews) and relatively low in areas characterized by high proportions of native whites of native parents. The spatial pattern of marriage rates in Philadelphia was generally consistent with that found in urban studies of other social phenomena. If one disregards the low marriage rates in the central business district of the City and in other nonresidential areas, the rates tended to decrease as one proceeded outward from the center of the City. With certain exceptions, there was a similar decrease in proportion of foreign whites and Negroes as one proceeded toward the periphery of the City.

2. The trends in marriage rates during the depression were not uniform throughout the City. "So far as Philadelphia is concerned, the conclusion seems inescapable that the presence in large proportions of Negroes, Russian Jews, and, to a lesser extent, of Italians, among the marriageable males of areas in the City, coincides with a rise in the marriage rates of those areas during the depression; while a preponderance of older native-white stock, and of northern and western European stock, coincides with a lowering of the rates."¹⁴

For the primary purpose of the study, that of depicting areal differences in marriage rates in a large city together with demographic data concerning those areas, the study has much local and sociological value. In considering the significance of the association of marriage rates and their trends with nativity and color, however, it is necessary to bear in mind certain limitations of the data. Chiefly, these were as follows:

¹⁴ Bossard's unpublished manuscript, "Depression and Pre-Depression Marriage Rates: A Philadelphia Study," page 21.

(a) Marriage rates were not computed by nativity groups.¹⁵ The procedure was simply that of computing total marriage rates by census tracts and relating these to the nativity-color composition of the marriageable males in the respective tracts.

(b) No adjustment could be made for age differences due to the inadequacy of census tract data.¹⁶

(c) The depression sample included some marriages in 1935, a year in which marriage rates were generally very high throughout the country due to accumulation of delayed marriages and probably to improved economic conditions.¹⁷

For further testing the relation of nativity and color to levels and trends in marriage rates during the depression, the Annual Reports of the New York State Department of Health provide unusual data. The writer has tabulated from these reports from 1925 through 1935 the annual numbers of marriages in New York State, exclusive of New York City, among males 15-44 years of age, according to nativity, color, and age. The annual numbers of marriages per 1,000 estimated single, widowed, and divorced males 15-44 years of age were computed for native-white, foreign-white, and Negro groups.¹⁸

¹⁵ According to information received through correspondence with the author, the above and the following limitation were necessitated by inadequacies of basic data.

¹⁶ General steps were taken to test the importance of age differences, and on the basis of these the author reported, ". . . It would appear that the age factor may be disregarded in most tracts, and needs to be considered only in the case of tracts with marked deviations." Unpublished manuscript, "Ecological Areas and Marriage Rates," page 4. However, the tests were confined to age differences in tracts and included no comparison of ages among marriageable males according to nativity.

¹⁷ The inclusion of 1935 marriages in the "depression" series may be partially responsible for the fact that records for only seventeen and one-half months were required to furnish the desired 10,000 cases for a "depression" series as compared with twenty-two months for a "pre-depression" series.

¹⁸ The numbers of single, widowed, and divorced males of specified age, nativity, and color in up-state New York were estimated for the years 1925-1930 by application of the arithmetic method to the 1920-1930 changes as computed from the last two Federal Census reports. The above changes, however, were not projected for estimates during the post-censal years 1931-1935. Net immigration into this country has been *nil* during the past several years. It also appeared probable that the increase of native whites and Negroes through migration was negligible during the period of the depression. The following procedure was therefore used for post-censal estimates:

From the 1930 Census the number of males 10-44 years of age in up-state New York was secured for five-year age groups according to nativity and color. On the assumption that the mortality among males 10-40 years of age was slight and that there was little loss

(Continued on page 271)

YEAR	NUMBER OF SINGLE, WIDOWED, AND DIVORCED MALES 15-44 YEARS OF AGE ESTIMATED AS OF JANUARY 1			GROOMS PER 1,000 MARRIAGEABLE MALES					
				Rate Not Standardized			Rate Standardized		
	White		Negro	White		Negro	White		Negro
	Native	Foreign		Native	Foreign		Native	Foreign	
1925	492,020	79,684	8,680	67	90	96	68	72	86
1926	501,936	79,391	9,177	68	89	105	70	72	93
1927	511,852	79,098	9,674	68	85	97	70	69	86
1928	521,768	78,805	10,171	65	82	93	68	66	84
1929	531,684	78,512	10,668	70	87	89	73	69	80
1930	541,600	78,219	11,165	66	78	87	69	61	78
1931	552,994	74,245	11,190	64	75	84	67	59	75
1932	565,021	69,000	11,060	59	71	81	62	56	73
1933	577,049	63,756	10,927	66	77	82	68	61	79
1934	589,077	58,511	10,794	78	91	88	81	72	85
1935	601,105	53,266	10,661	83	102	91	87	80	91

Table 1. Estimated numbers of single, widowed, and divorced males 15-44 years of age in up-state New York and marriage rates from 1925 to 1935, according to nativity and color.

The results are presented in Table 1 and Figure 3. In the top section of the chart, the rates are based upon marriages per 1,000 males 15-44 years old according to nativity and color, without any further correction for age differences. The rates shown in the lower section are based upon identical data, but the rates for each of the three groups were adjusted to a common age standard.¹⁹ The chief and identical points of interest in the two series are: (a) the strikingly parallel trends in the marriage rates of foreign and native-

or gain from migration during the 1930-1935 period, it was possible to estimate that the number of males 10-14 years of age in 1930 would constitute the number 15-19 in 1935; those reported as 15-19 in 1930 would be 20-24 in 1935; and those 35-39 in 1930 would be 40-44 in 1935. Assumed age distributions as of 1935 were thus built up for each nativity-color group. Computations were then made for average annual changes between the actual number within a specified age group in 1930 and the assumed number in 1935, and on the basis of this the estimates were secured for each successive year 1931-1935, adjusted to January 1. The numbers secured were then restricted to single, widowed, and divorced males by application of proportions not married in specific age, nativity, and color groups as computed from the 1930 Census reports pertaining to this area.

¹⁹The standard used was the age distribution of the combined native white, foreign white, and Negro males in up-state New York reported as single, widowed, or divorced, and 15-44 years of age by the 1930 Federal Census.

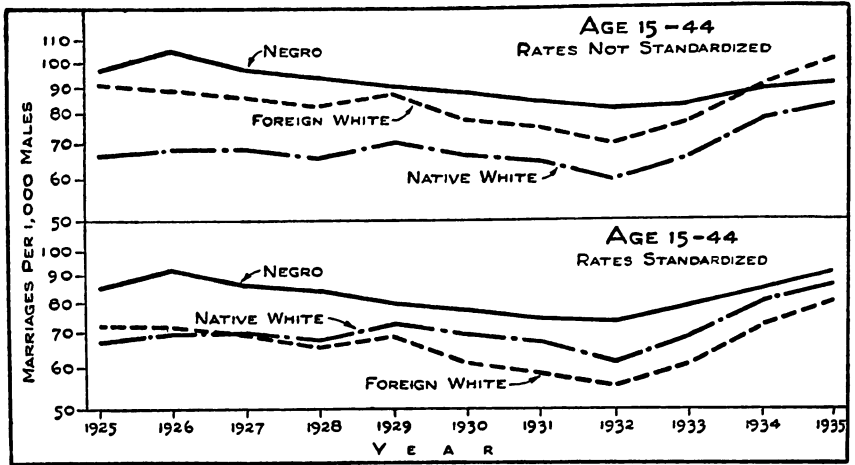


Fig. 3. Annual number of marriages per 1,000 single, widowed, and divorced males 15-44 years of age in up-state New York, 1925-1935, according to nativity and color.

white groups during the depression, and (b) the smaller apparent effect of the depression upon the marriage rates of Negroes than upon either group of whites. A further point of interest is the reversal of the relative levels of the marriage rates of native and foreign whites by the process of standardization. The lower unstandardized rate among native whites is partially due to the larger proportions in the 15-19 age group, a period when relatively few males marry. Although standardization brings the rates for the foreign whites below the levels of the natives, it should also be remembered that a larger proportion of foreign whites than native whites live in urban areas. The difference, however, is smaller than might be expected.²⁰ Constancy of the rural-urban factor would doubtless introduce some alteration in the relative levels of the standardized marriage rates and possibly might show differences by nativity in trends of the marriage rates during the depression. The latter contingency, however, would appear unlikely. Unfortunately, the data utilized were not sufficiently refined for such analysis.

²⁰ According to the 1930 Census, the proportions of the native-white, foreign-white, and Negro population in up-state New York enumerated in urban areas were 61.5 per cent, 73.1 per cent, and 73.8 per cent, respectively.

Age-specific rates, by nativity and color, portrayed essentially the same situation as that shown by the standardized rates. This similarity was especially striking among males 20-24 and 25-34. In each nativity and color group the above ages were represented by sufficiently substantial numbers to yield dependable comparisons.

In considering the findings for up-state New York, it must be remembered that marriage rates are subject to any errors involved in population estimates, and such estimates are particularly hazardous for post-censal years.²¹ It should also be emphasized that the results observed in up-state New York are not closely comparable with those secured by Bossard from the analysis of marriages in a single large city. The New York data afford no analysis of differential marriage rates by specific racial strains of whites. They are further limited in value as a result of the aforementioned variations in rural-urban composition among the three groups studied. On the other hand, they permit the computation of rates standardized for age by nativity and color over a period of years. The showing made by Negroes in regard to levels and trends in rates partially agrees with the Philadelphia findings. It would appear, however, that the depression trends in marriage rates of foreign whites and native whites have been remarkably parallel in up-state New York. Furthermore, the data emphasize the fact that age differences cannot safely be ignored in a comparison of levels of marriage rates, by nativity.

The above summaries of recent data indicate primarily that much remains to be known about variations in marriage rates. One virtually untouched aspect of the problem is that of differential

²¹ A partial test of the accuracy of results obtained by the method described in Footnote 18 is afforded by the fact that its application toward an estimate of the total number of males 15-44 years of age on July 1, 1935 in up-state New York yielded a figure only 2 per cent below that derived by the Vital Statistics Division of the New York State Department of Health through the use of an entirely different method. The estimate based upon the method used in this paper was 1,372,507, while that derived by the State office was 1,401,077. It should be emphasized, however, that the method used in this paper is applicable only to age groups characterized by low mortality rates and only during periods when migration is negligible.

marriage rates according to social class. Some data on this question will soon be available from an analysis nearing completion in the Fund's office. From family rosters secured in several surveys, it has been possible to investigate proportions married among offspring by sex, age, and nativity, and according to certain social attributes of parents. It is hoped that such data, despite their manifest limitations, will partially fill an important gap in our knowledge. Most of the studies of class variations in fertility have been made with reference to married couples. Our ignorance of class differences in marriage rates has precluded adequate interpretation of existing knowledge in terms of differential population replacement.