

# A STUDY OF THE CHINESE POPULATION<sup>11</sup>

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## CHAPTER IV MARITAL CONDITION

### AGE AT MARRIAGE

THE marriages contracted during the enumeration year in the Chinese families under observation afford an interesting opportunity for studying the age and frequency of marriage in North and in South China. In the 10,832 farm families of the twenty localities for which these data were collected<sup>12</sup> there were 1,158 persons who were married for the first time. Table 13 shows the distribution of these cases by age at marriage for each sex, and Table 14 and Figure 6 give the same data in percentage form.

The outstanding fact exhibited by these data is that of early marriage. About 5 per cent of the persons of each sex married before they were 15 years of age. For ages after 15, however, the distribution of males and females differ sharply. Of the women, about two-thirds married at ages between 15 and 20, and about one-fourth between 20 and 25, while the number of those who married after 25 years of age was almost negligible. In some parts of China, there are few girls who remain unmarried after they are 20, and those who do find it

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<sup>12</sup>The two localities for which information concerning marital condition was not collected were Cheng Hsien, Honan Province, North China; and Tetsing Hsien, Chekiang Province, South China.



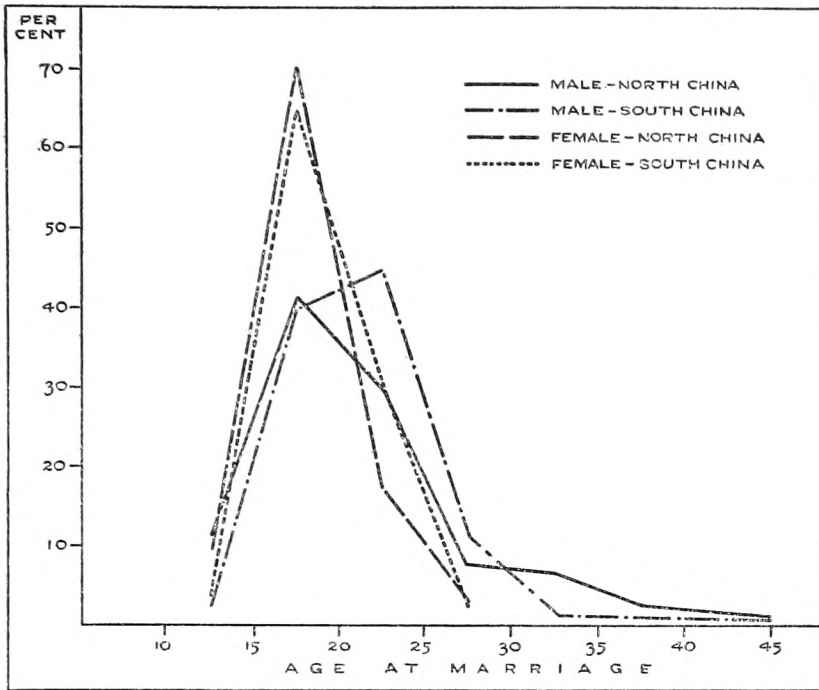


Figure 6. Percentage age-at-marriage distribution for persons of each sex who married during the year studied; 10,832 farm families, 20 localities, 11 provinces, China, 1929-1931.

Early marriage is much more common in North than in South China. In the North, nearly one-tenth of the women who married were less than 15 years old, and only about one-fifth were 20 or more, but in the South, less than 3 per cent were under 15, and one-third were 20 or older. The custom of early marriage also exists among men of the North. More than 10 per cent of them were less than 15 years old, as compared with less than 2 per cent in the South. Evidently, however, poverty in the North is a powerful deterrent to early marriage among the men, for in spite of the larger proportion of marriages at ages under 20, there was also a larger proportion at ages from 30 on. Since this large proportion of relatively late marriages in the North has a powerful influence on the mean age at marriage, the mean ages do not give an ade-

quate summary picture of the situation. (Table 15.) For this purpose the modal (or most frequent) ages for marriage are more satisfactory. They indicate that the most popular marriage age for each sex is two years earlier in the North than in the South, where the figures are 20 years for the males and 19 years for the females.

Table 15. Mean and modal ages at marriage of persons who married for the first time during the year studied; 10,832 farm families, 20 localities, 11 provinces, China, 1929-1931.

Region	Mean Age		Modal Age	
	Male	Female	Male	Female
China	20.19	18.82	20	17
North China	21.00	18.14	18	17
South China	21.28	19.25	20	19

A comparison of the ages at marriage of women in China with

those in other countries will help us to understand the differences in their birth rates. Early marriage is much more common in China than in any other country for which the data are presented in Table 16. Almost three-quarters of the Chinese women marry before they are 20. Of the six Occidental countries shown, Italy had the largest proportion of marriages under 20 and there this amounted to about one-

Table 16. Percentage age-at-marriage distribution of women in various countries.

COUNTRY	YEAR	UNDER	20	25	30	40	ALL AGES UNDER 50
		20	TO 24	TO 29	TO 39	TO 49	
China	1929-						
	1931	72.2	25.4	2.3	0.1	—	100.0
England and Wales <sup>1</sup>	1920	8.3	45.4	27.3	14.9	4.1	100.0
France <sup>1</sup>	1920	12.2	41.5	25.2	16.7	4.4	100.0
Germany <sup>1</sup>	1925	7.3	46.2	28.4	14.6	3.5	100.0
Italy <sup>1</sup>	1920	21.3	39.3	26.6	10.7	2.1	100.0
Sweden <sup>1</sup>	1920	7.3	40.6	29.3	18.7	4.1	100.0
Australia <sup>1</sup>	1920	12.4	42.2	26.8	15.1	3.6	100.0

<sup>1</sup>Thompson, W. S.: *Op. cit.* p. 93.

fifth of the total, while in Sweden and Germany, they were only 7 per cent of the total. On the other hand, from two-fifths to one-half of the women in Western countries married after they were 25, while in China less than 3 per cent were that old. The averages tell the same story. (Table 17.) That for China, 18.82, is most nearly approached by 21.4 for a selected sample of rural women in the United States who married during the first decade of the century. At the other extreme is that for Swedish women in 1921, which is 26.59.

MARRIAGE RATE

The marriage rate used in this study is the number of first marriages contracted per 1,000 population living at the end of the year. It is impossible, however, to

Table 17. Mean age at marriage of women in various countries.

Country	Year	Mean Age at Marriage
China	1929-1931	18.82
United States <sup>1</sup>	1900-1905	21.4
France <sup>2</sup>	1911-1920	23.67
Italy <sup>2</sup>	1921	24.33
Australia <sup>3</sup>	1930	25.49
England and Wales <sup>2</sup>	1921	25.52
Sweden <sup>2</sup>	1921	26.59

<sup>1</sup>Notestein, Frank W.: Differential Age at Marriage According to Social Class. *The American Journal of Sociology*, July 1931, xxxvii, No. 1, pp. 22-48. The average quoted is for a sample of native-white rural women who married under 40 years of age.

<sup>2</sup>Thompson, W. S. *Op. cit.*, p. 93.

<sup>3</sup>Official Year-Book of the Commonwealth of Australia, No. 24, 1931. H. J. Green, Government Printer, Canberra, p. 700.

more than approximate it because of the manner in which the data were collected. The enumerator in each village was told to record all marriages which took place during the year among all the people who were members of the family at any time during the year. Therefore, in each case where a marriage

involved the moving of one spouse from one residence to another in the same village, that spouse's marriage was recorded twice, once in the family left and once in the family joined.

Similarly, if the spouse left or came into a survey village to marry, the event was recorded; so that for all persons whose marriage involved a change of residence there was what amounts to a double entry. This situation applies to all the girls except those who were living in their husbands' families as fiancées prior to their marriage and a very small number whose husbands joined them in their own homes. The number of women whose marriages were recorded does not, therefore, indicate the number of marriages.

The number of marriages recorded for males is a fair approximation to the number of marriages since the men seldom changed their residence when marrying. The rates shown in Table 18 for China were obtained by dividing the number of first marriages of males recorded during the year by the total population. Since the rates shown for other countries include second and succeeding marriages as well as first ones, the Chinese rates are doubtless somewhat too low. They are 7.86 for all China, 6.59 for the North, and 8.71 for the South. That for China is about the same as the rates for Japan, England and Wales, and Sweden, and is lower than those for Soviet Russia and the United States.

## CHAPTER V

### THE BIRTH RATE

#### CRUDE BIRTH RATE

**T**HE crude birth rate is not an adequate instrument with which to predict the future growth of a population because the number of births is influenced by a variety of factors such as the age, sex, and marital composition of the population and the specific fertility of married women. Since these factors are to a limited extent indepen-

dent of each other, prediction is likely to be more accurate if each one is given special study. For any particular time, however, the crude birth rate is the only measure of the actual

Table 18. Marriage rates for North and South China and for various other countries.

Country	Year	No. of Marriages per 1,000 Population
China	1929-1931	7.86
North China	1929-1931	6.59
South China	1929-1931	8.71
Soviet Republic <sup>1</sup>	1929	10.6
United States <sup>1</sup>	1929	10.1
Germany <sup>1</sup>	1930	8.7
France <sup>1</sup>	1930	8.3
England and Wales <sup>1</sup>	1930	7.9
Japan <sup>1</sup>	1929	7.9
Sweden <sup>1</sup>	1929	7.9
Great Britain and Ireland <sup>1</sup>	1929	7.5

<sup>1</sup>Official Year-Book of the Commonwealth of Australia, No. 24, 1931. H. J. Green, Government Printer, Canberra, p. 699. Includes marriages of persons married before.

increase of the population through birth.

A comparison of the crude rate of various countries indicates the differences in the rates at which their populations are replenished.

Before considering the birth rates, it will be well to examine the ratios of the sexes at birth, which are shown together with the crude birth rates in Table 19. They are

110.4 for China, 115.2 for North China, and 106.6 for South China. The figure for the South lies within the limits of the experience with Western countries, but that for the North is considerably higher than the ratios observed in countries where birth registration is fairly reliable.

Table 19. Crude birth rates and the ratios of male to female births; 12,456 farm families, 22 localities, 11 provinces, China, 1929-1931.

REGION	BOTH SEXES	BIRTHS		LIVING POPULATION AT END OF YEAR	BIRTHS PER 1,000 LIVING POPULATION	MALE BIRTHS PER 100 FEMALE BIRTHS
		Male	Female			
China	2,479	1,301	1,178	67,643	36.6	110.4
North China	1,134	607	527	29,909	37.9	115.2
South China	1,345	694	651	37,734	35.6	106.6

Does the large proportion of male births found in North China represent an actual situation, or is it the result of failure to enumerate baby girls as completely as possible? No positive answer can be given to this question, but some indications may be gathered from Table 20, which presents the results of a variety of studies of Chinese populations for which data have been gathered by the registration or by the survey method. Under registration, there were two methods used. The first method involved the registration of births in the hospitals or clinics, and the second method the reporting of the births in a registration area when they occurred. The former method is considered more accurate than the latter method. By the former method the highest ratio of male births to 100 female births was 116.8 reported from West Gate Hospital in Shanghai. The lowest ratio is  $103.9 \pm 6.1$ , reported from the clinic of Peking Union Medical College Hospital. The weighted average for the three studies by this method is 111.6. By the latter method of recording births as they occur, the highest ratio was  $115. \pm 0.9$ , which is obtained from the municipal government in Singapore by Dr. F. Oppenheim. The lowest ratio is 107 at Kiangyin, Kiangsu province, by the University of Nanking. The weighted average for the three studies using this method is 114.7.

Two studies in which the survey method was used have been made by the individuals in hospitals. In one, the information was obtained by interviewing the parents of Chinese patients who visited a hospital or clinic. In the other, the data were obtained by interviewing the families of Chinese preachers. The ratio of male births to 100 female births was found by Dr. Lennox at Peking, in the first study, to be  $119.1 \pm 2.6$ . The lowest ratio,  $106.3 \pm 4.8$ , was found by Mr. Lai for the families of Chinese ministers.



METHODS OF AND SOURCES OF DATA	NUMBER OF BIRTHS		RATIO OF MALE TO 100 FEMALE BIRTHS
	Male	Female	
<i>Hospital registration</i>			
West Gate Hospital 1927-1929 <sup>1</sup>	1,561	1,336	116.8
P.U.M.C. Hospital 1925-1929 <sup>2</sup>	583	561	103.9 ± 6.1
First National mid-wife school Peiping 1929-1931 <sup>2</sup>	595	557	107
TOTAL	2,739	2,454	111.6
<i>Registration area</i>			
Oppenheim and Liang, Singapore, 1913-1922 <sup>3</sup>	33,238	28,881	115.1 ± 0.9
First health station, Peiping 1920-1931 <sup>3</sup>	3,675	3,337	110.0
Kiangyin, Kiangsu 1931-1932 <sup>4</sup>	423	344	107
TOTAL	37,336	32,562	114.7
<i>Survey method</i>			
Hsu and Chu, Peiping 1930 <sup>3</sup>	2,470	2,253	109.6 ± 3.2
Lennox, Peking, 1919 <sup>3</sup>	4,603	3,865	119.1 ± 2.6
Gray, Peking, 1919 <sup>2</sup>	2,554	2,169	117.7 ± 3.4
Lai, Chinese preachers 1929 <sup>3</sup>	1,035	973	106.3 ± 4.8
TOTAL	10,662	9,260	115.2
<i>Present study</i>	1,301	1,178	110.4

<sup>1</sup>Wu, T. L.: A Study of Ratio of Births. Proceedings of the First Annual Conference of Chinese Sociological Society, 1932. (In Chinese.) pp. 248 ff.

<sup>2</sup>From personal notes gathered by Edgar Sydenstricker, Milbank Memorial Fund.

<sup>3</sup>Hsu, Kang-Liang and Chu, Fu-Tang: Statistics concerning Births and Deaths in the Children of 2,168 Chinese Families. *The National Medical Journal of China*, xvi, No. 6. December 1930, pp. 744-755.

<sup>4</sup>Birth Registration Record of Kiangyin Registration Area in 1931. Department of Agricultural Economics, University of Nanking.

Table 20. Comparison of the sex ratios at birth computed from registration data with those based on data gathered by surveys.

It is apparent that the more reliable the method of collecting the data, the more nearly the results approach Western

experience. The hospital registrations yielded an average of 111.6, and the rates from registration areas and hospital surveys are nearly the same, while the other surveys yielded higher ratios.

Table 21. Crude birth rates for various countries.

The results secured in the present study are about the same as those found by hospital registration, and indicate that a fair degree of accuracy can be obtained by the survey method. However, the fact that several scholars have found still lower ratios and that in this study the ratio is low for the South, where the

Country	Year	Births per 1,000 Population
Sweden <sup>1</sup>	1929	15.2
England and Wales <sup>1</sup>	1930	16.3
Great Britain and Ireland <sup>1</sup>	1930	16.9
Germany <sup>1</sup>	1930	17.5
France <sup>1</sup>	1930	18.1
United States <sup>1</sup>	1929	18.9
Japan <sup>1</sup>	1930	33.0
China	1929-1931	36.6
Soviet Republic <sup>1</sup>	1927	44.4
India <sup>2</sup>	1901	44.4

<sup>1</sup>Official Year-Book of the Commonwealth of Australia: No. 24, 1931. H. J. Green, Government Printer, Canberra, p. 684.

<sup>2</sup>Imperial Gazetteer of India, The India Empire: Vol. I, Oxford University Press, 1907, p. 478.

population is less bound by tradition, would seem to indicate that there was some unwillingness to report the birth of girl babies in the North. The fact that female births were omitted suggests the possibility that some boys were also omitted in the count. It appears probable that at least the birth rate for North China (Table 19) is somewhat too low.

In spite of this underenumeration the birth rate obtained for the North (37.9) was somewhat higher than that for the South (35.6). It seems likely, therefore, that the figures underestimate the difference in the actual rates for the two regions.

The rate for all China (36.6) is somewhat higher than that for Japan (33.0) and among the countries listed in Table 21 is exceeded only by the rates for the Soviet Union and India. Those for all of the other countries listed are substantially

lower, ranging from 15.2 for Sweden to 18.9 for the United States.

FERTILITY OF MARRIED WOMEN

As pointed out above the crude birth rate is affected by the age and sex composition and the marital condition of the population as well as by the specific fertility of married women. If we are to gain insight into the significance of the difference in the birth rate for various populations, some of these factors must be taken into account.

The crude birth rates for North and South China were 37.9 and 35.6 respectively (Table 19), that is, an excess of 6.5 per cent for North China. The difference is not attributable to a difference in the proportion of the sexes in the two regions (Chapter III). When, however, we compute the birth rates in terms of number of women of childbearing age (15-44 years of age), they are 178 for the North and 163 for the South or an increase in the percentage differences from 6.5

Table 22. Percentage age distribution of females; 12,456 farm families, 22 localities, 11 provinces, China, 1929-1931.

Age (Years)	China	North China	South China
0-9	25.0	23.3	26.4
10-19	17.9	17.7	18.0
20-29	17.3	17.1	17.5
30-39	13.5	12.8	14.0
40-49	11.4	12.4	10.6
50 and over	14.9	16.7	13.5
Total	100.0	100.0	100.0

per cent to 9.2 per cent. This means that North China had a higher crude birth rate than South China in spite of the less favorable age composition of its population (Table 22). If, finally, for those localities for which marital condi-

tion is known,<sup>13</sup> the fertility rates are obtained by dividing the number of births by the number of married women of childbearing age (Table 23) the percentage excess of the North

<sup>13</sup>See footnote to Table 23.

drops again from 8.5<sup>14</sup> to 6.1. This drop is due to the fact that a larger proportion of the women of childbearing age are mar-

Table 23. Fertility rate of married women, 15-44 years of age, and per cent of females 15-44 married; 10,832 farm families, 20 localities, 11 provinces, China, 1929-1931.<sup>1</sup>

Region	Per Cent of Females 15-44 Married	Births per 1,000 Married Women 15-44
China	84.5	202
North China	85.7	209
South China	83.7	197

<sup>1</sup>Two areas for which data on marital condition were not reported are omitted. See footnote 12.

ried in the North than in the South. The loss in the number of births in the North, due to the less favorable age distribution of its population, is about counterbalanced by the larger proportion of women of childbearing age who are married. This larger proportion of married persons is in turn accounted for by the earlier marriage age which we have seen to be characteristic of the North.

The fertility rate for Chinese married women (201.6) was higher than that for any Western country shown in Table 24, but lower than that for Japan, 245.5. This is the reverse of

Table 24. Fertility rate of married women 15-44 years of age, and per cent of females 15-44, married, for various countries.

COUNTRY	BIRTHS PER 1,000 MARRIED WOMEN 15-44	CRUDE BIRTH RATE	PER CENT OF FEMALES 15-44 MARRIED
China <sup>1</sup>	201.6	37.0	84.5
Japan <sup>2</sup>	245.5	33.9	66.7
England and Wales <sup>2</sup>	179.1	20.9	48.5
Germany <sup>2</sup>	162.2	21.7	48.4
Sweden <sup>2</sup>	196.8	21.0	41.2
France <sup>2</sup>	149.3	17.3	52.3

<sup>1</sup>Two areas for which data on marital condition were not reported are omitted. See footnote 12.

<sup>2</sup>Thompson, W. S.: *Op. cit.* p. 91. Birth rates are for 1918 and 1922 and per cents of females married for 1921.

<sup>14</sup>For twenty localities for which fertility rate can be calculated. The percentage excess for all twenty-two localities was 9.2. See footnote 12.

the relationship of the crude rates for China and Japan. China had a rate of 37.0<sup>15</sup> while that for Japan was 33.9. A clue to the reason for China's lower fertility rate and higher birth rate may be found in the fact that 84.5 per cent of the Chinese women of childbearing age were married as compared with only 66.7 per cent in Japan. Similarly, the fertility rate for Sweden was not much lower than that for China but the crude rate was much lower, due in large part to the fact that only about one-half of the Swedish women were married. The explanation of China's higher birth rate, therefore, lies in the fact that an exceptionally large proportion of the eligible women are married and when married they exhibited a relatively high fertility rate.

<sup>15</sup>This is for the twenty localities for which fertility rates are available. See footnote 12.