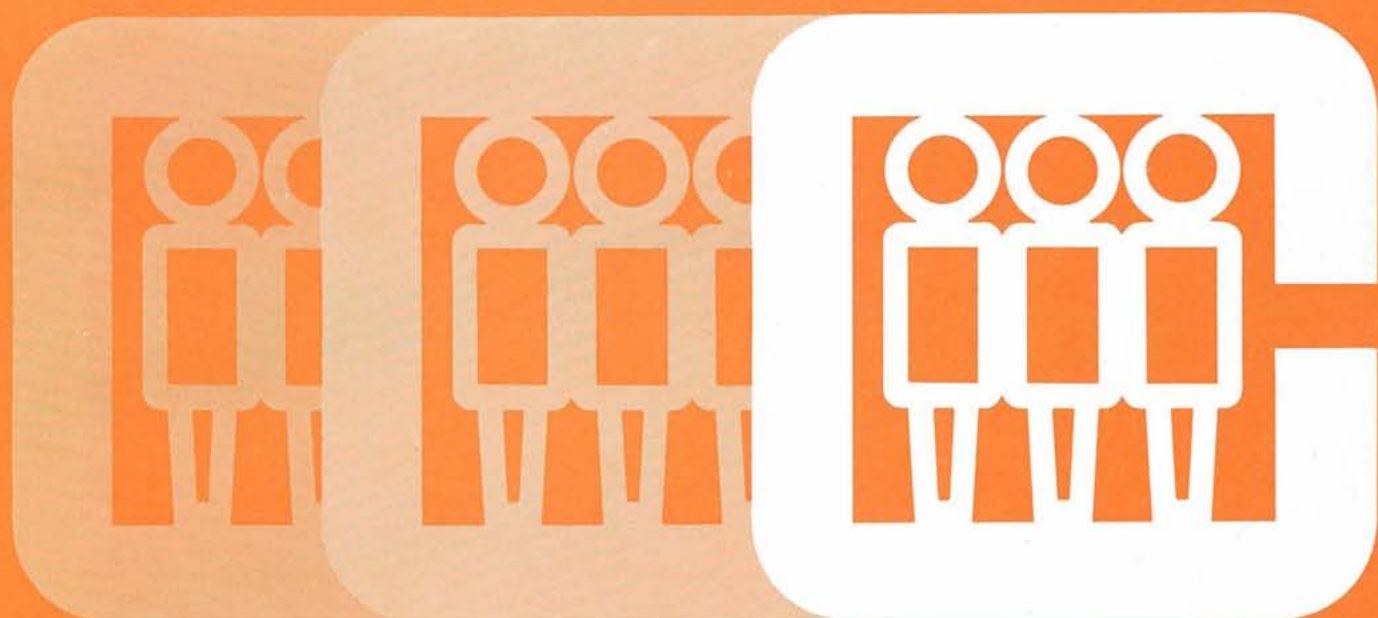


Hong Kong
By-Census 1976

Contribution to the WFS



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HONG KONG BY - CENSUS 1976

Contribution to the WFS

Census and Statistics Department, Hong Kong

Contents

	Page
A Summary of Findings	7
Chapter 1 The Background of The Study	11
1.1 Objectives of the study	13
1.2 Organization responsible for conducting the study	13
Chapter 2 Socio-Economic and Demographic Background of Hong Kong	15
2.1 Geographical location	17
2.2 Climate	17
2.3 Land area	17
2.4 Economic characteristics	17
2.5 Population composition	17
2.6 Population growth patterns	17
2.7 Population structure	18
2.8 Population distribution	18
2.9 Education	18
2.10 Family planning	18
Chapter 3 Methodology of The Study	19
3.1 The questionnaire	21
3.2 Sampling method	21
3.3 Sampling frame and unit	21
3.4 Sampling fraction	21
3.5 Estimation procedure	22
3.6 Enumeration method	22
3.7 Enumeration experience	22
3.8 Field organization	23
3.9 Recruitment and training	23
3.10 Selection and final briefing	23
3.11 The post-enumeration check	23
3.12 Data validation and amendment	23
3.13 Comparison of WFS and By-census variables	23
Annex: Assessment of quality of By-census data	25
Chapter 4 Background Characteristics of The Respondents	29
4.1 Introduction	31
4.2 Area of residence	31
4.3 Educational attainment	31
4.4 Occupation of husband	32
4.5 Association between variables	32
Chapter 5 Nuptiality and Exposure to Child-Bearing	35
5.1 Types of marriage	37
5.2 Marital status	37
5.3 Proportion never married	38
5.4 Age at first marriage	38
5.5 Social differential in marriage pattern	39
5.6 Widowhood and divorce	40
5.7 Exposure to child-bearing among ever-married women of different geographical and social background characteristics	41

	Page
Chapter 6 Fertility	43
6.1 Trends in birth rates	45
6.2 Factors leading to decline in birth rates	45
6.3 Trends in fertility by age	46
6.4 Breakdown of age-specific fertility rates by birth order	47
6.5 Analysis of cohort fertility	47
6.6 Birth cohort fertility	47
6.7 Marriage cohort fertility	48
6.8 Social and geographical differentials in marriage cohort fertility	48
6.9 Timing of the first birth	51
6.10 Fertility in the first five years of marriage	51
6.11 Fertility in the past five years	51
Chapter 7 Survivorship of Children	53
7.1 Trends in infant mortality	55
7.2 Mortality and family size	55
7.3 Survivorship of children	55
Annex A Family Planning in Hong Kong	57
Table 1 Percentage distribution of clients by age and contraceptive method used, 1976	60
Table 2 Percentage distribution of clients by contraceptive method and educational attainment, 1976	60
Table 3 Percentage distribution of clients by contraceptive method and occupation, 1976	61
Annex B Summary of A Survey Report on Family Planning Knowledge, Attitude and Practice in Hong Kong, 1977	63
Appendix A Statistical Tables	71
Table 1.1 Age at first marriage according to current age, for all ever-married women	73
Table 1.2 All ever-married women classified according to their year of birth and age at first marriage	73
Table 1.3 Mean age at first marriage of ever-married women married before age 25, according to current age and level of education	77
Table 1.4 Mean age at first marriage of ever-married women married before age 25, according to current age and occupation of husband	77
Table 1.5 Percentage of ever-married women in each marital status, according to years since first marriage within categories of current age	78
Table 1.6 Percentage of ever-married women who were currently married, according to level of education, years since first marriage and within categories of current age	80
Table 1.7 Percentage of ever-married women who were currently married, according to area of residence, years since first marriage and within categories of current age	82
Table 2.1 Percentage of women with specified intervals from first marriage to first birth, within categories of years since first marriage and age at first marriage, for all women married at least five years	83
Table 2.2 Mean number of children born within first five years of marriage, among all women married at least five years, according to level of education, age at first marriage and within categories of years since first marriage	84
Table 2.3 Number of children ever-born by current age	85
Table 2.4 Number of children ever-born by years since first marriage	85
Table 2.5 Mean number of children ever-born by age at first marriage and years since first marriage	86
Table 2.6 Number of children ever-born by level of education according to years since first marriage, for all ever-married women	87
Table 2.7 Number of children ever-born by area of residence, according to years since first marriage, for all ever-married women	87
Table 2.8 Number of children ever-born by occupation of husband, according to years since first marriage, for all ever-married women	89
Table 2.9 Mean number of children ever-born, according to the woman's area of residence and level of education, within categories of years since first marriage, for all ever-married women	91
Table 2.10 Mean number of children ever-born, according to the woman's level of education and the occupation of husband, within categories of years since first marriage, for all ever-married women	92
Table 2.11 Mean number of children ever-born, according to the woman's area of residence and the occupation of husband, within categories of years since first marriage, for all ever-married women	93
Table 2.12 Number of living children by current age	94

	Page
Table 2.13 Number of living children by years since first marriage	95
Table 2.14 Number of living children by number of children ever-born and current age, for all ever-married women	95
Table 2.15 Mean number of children ever-born, still alive and deceased by current age (in single year), for all ever-married women	97
Table 2.16 Mean number of live births in the past five years, among all currently married women married at least five years, by current age and number of living children	97
Table 2.17 Mean number of live births in the past five years by current age and age at first marriage, for all currently married women married at least five years	98
Table 2.18 Sex ratio of live births in the past five years by current age and age at first marriage, for all currently married women married at least five years	98
Table 2.19 Mean number of live births in the past five years by current age and level of education, for all currently married women married at least five years	98
Table 2.20 Mean number of live births in the past five years by current age and area of residence, for all currently married women married at least five years	98
Table 2.21 Mean number of live births in the past five years by current age and occupation of husband, for all currently married women married at least five years	99
Appendix B Questionnaire for 1976 By-Census	101
Appendix C Maps of Hong Kong	105
Appendix D Definitions of Terms	113

Notations used in all tables contained in this report:

- * an average is not calculated for any table cell with a base frequency of less than 200
- not applicable
- 0.00 zero
- ... less than 0.005
- .. less than 0.05

A Summary of Findings

A Summary of Findings

1. Nuptiality and exposure to child-bearing

Age at marriage (see Chapter 5 – sections 5.1 to 5.5)

In Hong Kong, marriage is nearly universal. Only a small proportion (about 3% in 1976) of women are still single by the age of 50.

Of the 1,044,240 women in the age group 15–49 enumerated in the 1976 By-census, 599,840 (57.4%) were married. Of these 599,840 women, 20% married at the age of 18–19 years, 46% at 20–24 years and 19% at 25 years and over. Only 15% married before the age of 18.

Analysis of age at marriage by current age of women is restricted to those women who were at least 25 years old and were married before the age of 25, as shown in Table 1.

Table 1 Percentage distribution of age at first marriage among ever-married women currently 25 years or more and married before age 25

<i>Current age</i>	<i>Age at first marriage</i>					<i>Total</i>	<i>Mean age at first marriage</i>	<i>Base frequency</i>
	<i><15</i>	<i>15–17</i>	<i>18–19</i>	<i>20–21</i>	<i>22–24</i>			
25–29	1.1	9.2	17.8	26.6	45.3	100	21.3	101,890
30–34	1.8	12.4	21.7	26.0	38.1	100	20.9	62,070
35–39	3.3	14.4	25.3	25.5	31.5	100	20.4	70,400
40–44	4.3	18.7	25.0	24.2	27.8	100	20.1	86,110
45–49	3.7	20.0	29.8	24.5	22.0	100	19.8	86,230

Only 10% of 25–29 years old reported that they had married before the age of 18, compared with 24% of women aged 45–49. Their mean age at first marriage is estimated to be 21.3 years and 19.8 years respectively. This indicates a trend towards later marriage.

Education has a positive relationship with mean age at marriage; this relationship persists even after discounting the age differences between educational groups. The standardized mean age at first marriage for women with lower than primary education is 19.9 years, compared with 22.3 years for women with university education.

There is also a positive relationship between mean age at first marriage and current occupation of husband; the higher the occupational status of the husband, the higher the mean age at first marriage.

Widowhood and divorce (see Chapter 5 – sections 5.6 to 5.7)

The proportion widowed has decreased in all ages over the past 15 years. Overall, 1.9% of ever-married women aged 15–49 were reported in the 1976 By-census as widowed.

The proportion of ever-married women aged 15–49 reported as divorced/separated was 0.6%; this compares with 0.7% for 1961 and 0.4% for 1971. The proportion divorced/separated is generally higher among women with higher educational attainment.

2 Fertility

Number of children ever-born (see Chapter 6 – sections 6.6 to 6.8)

The mean number of children ever-born to all ever-married women decreased in all ages between 15–49 during the period 1971 to 1976, particularly so for the age groups 25–29 and 30–39. The mean number of children ever-born for the 25–29 age group decreased from 2.1 to 1.8 and for the 30–39 age group from 3.5 to 3.1.

For women who had been married the same length of time, those marrying at older ages tended to have fewer children.

The overall figures indicate an inverse relationship between education and fertility. Women with lower than primary education reported an average of 4.3 births, compared with 1.6 births for women with university education.

A similar relationship is observed in respect of respondent's area of residence and socio-economic status measured in terms of husband's occupation. The differences in the mean number of children between areas of residence remain significant after discounting respondent's level of education and occupation of husband, whereas the differences between occupational groups largely disappear within educational group or within the same area of residence. The inverse relationship between education and fertility persists even when the area of residence or occupation of husband are taken into account.

Timing of the first birth (see Chapter 6 – section 6.9)

Delayed first births are generally associated with early marriage. 73% of women who had been married for 5–9 years were recorded in the 1976 By-census as having their first child born within the first two years of marriage; the corresponding figures for those married for 10–19 years and 20 years or more are 69% and 47% respectively.

Children born in the first five years of marriage (see Chapter 6 – section 6.10)

There is a tendency for women to have children more quickly within the first five years after marriage, particularly for those marrying young. Education has an inverse effect however: more educated women tend to have fewer children in the first five years of marriage. This pattern persists for all ages at marriage and among those who had been married for less than 20 years.

Children born in the past five years (see Chapter 6 – section 6.11)

Among women who had been married for at least five years, those marrying late had a higher mean number of children born in the past five years. Those with one or two children now living had fewer births in the past five years than those with three or more living children.

Both education and area of residence appear to be inversely related to recent fertility. Occupational differences are not significant.

Current fertility (see Chapter 6 – sections 6.1 to 6.4)

Adequate and comprehensive information for current fertility analysis is available from the civil registration system for vital events. The crude birth rate for 1976, based on the total number of live births occurring during the year, was 17.7 per thousand population; this compares with 35 per thousand in 1961. The decline in the crude birth rate over this period is attributable to changes in the age structure of the female population, delayed marriage and to an actual decline in fertility. Table 2 compares the age-specific fertility rates in 1970 and 1976.

Table 2 Age-specific fertility rates, 1970 and 1976

<i>Age group</i>	<i>Births per 1,000 female population</i>	
	<i>1970</i>	<i>1976</i>
15–19	18.1	17.4
20–24	155.3	109.7
25–29	233.4	192.1
30–34	168.8	119.6
35–39	87.1	48.9
40–44	31.0	14.6
45–49	4.4	1.5
Total fertility rate (TFR)	3,491	2,519
Net reproduction rate (NRR)	1.655	1.185

Source: Birth Statistics, Hong Kong 1970 and 1976.

The substantial decline in the birth rates for all fertile age groups between 1970 and 1976 is associated with a marked decrease in the number of high-order births in this period.

3 Survivorship of children (see Chapter 7)

In the 1976 By-census it was found that for women aged under 30, the mean number of living children almost coincided with the mean number of children ever-born; for women over 30, the two diverged.

The mean number of children reported dead increases with the age of mothers, from 0.02 for mothers aged 30 to 0.33 for those aged 49.

Chapter 1

The Background of The Study

Chapter 1

The Background of Study

1.1 Objectives of the study

The World Fertility Survey (WFS) is an international research programme, undertaken by the International Statistical Institute (ISI) in co-operation with the International Union for the Scientific Study of Population (IUSSP) and the United Nations, dealing with the study of human fertility behaviour. Its principal aims are:

- (1) 'To provide scientific information which will enable participating countries throughout the world to describe and interpret the population's fertility'.
- (2) 'To increase national capacity for fertility and other demographic research particularly in developing nations'.
- (3) 'To make analytical comparisons of fertility and the factors which affect it in different countries and regions of the world'.

The objectives of the World Fertility Survey are fully appreciated, as is also the importance of good fertility data to the planning of population programmes. However, Hong Kong has not conducted a special fertility survey for these purposes. There are three main reasons for this:

- (1) Basic fertility data are available through the various population censuses since 1961 and through the civil registration system of vital events (which was first set up in 1872 and extensively modified in 1969).
- (2) Following the practice of conducting a full-scale census every ten years and a sample census mid-way between full censuses, Hong Kong was planning a by-census (to be conducted in August 1976) in 1974 when invited to participate in the WFS. In the financial situation then prevailing, it was felt that a separate fertility survey taken around the same period as the By-census should not command priority over the latter in competing for resources.
- (3) Interviewing on 'knowledge, attitude and practice' needs to be carried out by trained health visitors or social/family service workers. Staff shortages did not permit deployment of a sufficient number of qualified interviewers from the various departments concerned.

Under the circumstances, it was decided that the best approach would be for Hong Kong to participate in the World Fertility Survey with an associate status. Information relevant to the WFS was collected through the 1976 By-census (which was taken during the period 30 July to 8 August 1976 and the field work was carried out without WFS supervision); this included questions on sex, month and year of birth and whereabouts – deceased or living (whether in the same household or elsewhere) – of each child ever-born. These questions were asked of all ever-married women aged 15–49. The analysis of nuptiality, exposure to child-bearing and fertility contained in this report is based on this data, supplemented by regular vital statistics information. As far as possible, the specifications of the WFS have been followed in data collection and compilation, so as to facilitate international comparability.

Two annexes covering family planning in Hong Kong have been included in the report. Annex A is aimed at giving a general description of family planning in Hong Kong, based on the family planning statistics collected by the Hong Kong Family Planning Association and the Medical and Health Department of the Hong Kong Government. Detailed analysis of the social characteristics of the participants in the programme is, however, restricted to those seeking the government family planning services only and the picture so presented is, therefore, incomplete. Annex B presents a summary of a survey on family planning knowledge, attitude and practice in Hong Kong carried out in 1977 by the Hong Kong Family Planning Association. It contains information relevant to the WFS, which had not been collected in the By-census or through the government family planning services.

1.2 Organization responsible for conducting the study

The relevant fertility information required by the WFS was obtained through the 1976 By-census. Both the conduct of population censuses such as the 1976 By-census and the maintenance of vital statistics information systems are the direct responsibility of the Census and Statistics Department of the Government of Hong Kong.

Chapter 2

Socio-Economic and Demographic Background of Hong Kong

Chapter 2

Socio-Economic and Demographic Background of Hong Kong

2.1 Geographical location

Hong Kong is on the south-east coast of China, adjoining the province of Kwangtung. It is just inside the tropics, being less than 100 miles south of the Tropic of Cancer. It lies between latitudes 22°9' and 22°37' N and longitudes 113°52' and 114°30' E.

2.2 Climate

Although Hong Kong lies within the tropics, it enjoys seasonal weather conditions. The climate of Hong Kong is governed by the monsoons. Winter is general dry and sunny, summer is almost continuously hot and humid. The mean daily temperature ranges from 15°C in February to about 28°C in July with an average rainfall of about 2,168 mm.

2.3 Land area

Hong Kong has a total land area of 1,050 sq.km. It is commonly divided into four main areas, namely: Hong Kong Island, Kowloon, New Kowloon and the New Territories.

Hong Kong Island has an area of 78 sq.km. The commercial centre is located on the northern coast of the Island, facing the Harbour.

Kowloon lies on the mainland on the other side of the harbour. It occupies slightly more than 9 sq.km.

New Kowloon lies further north, between Kowloon and a southern slope of hills. This area, spread over 41 sq.km., contains 30 out of 56 public housing estates (1976 figures) built by the Hong Kong Government.

North of New Kowloon, the New Territories stretch to the Chinese border. This area, together with over 200 scattered islands, occupies 922 sq.km. The New Territories were traditional rural area. However, due to the rapid process of urbanisation in the last two decades, market towns have been developed in this area. These townships scattered over a total of 63 sq.km. in the New Territories have been well-developed to match in almost all standards of the urban areas. They are therefore taken as urban in the analysis given in the later chapters.

2.4 Economic characteristics

Hong Kong has developed into a leading industrial and commercial centre in South and South-East Asia. In 1976, about 52% of the working population was engaged in the industrial sector (over 86% of them was in manufacturing), 45% in the service sector, and less than 3% in the primary sector. Per capita Gross Domestic Product in 1976 was US\$2,172.

2.5 Population composition

More than 98% of the population can be described as Chinese on the basis of language and place of origin. The greater part of the population originated from Kwangtung Province. The Cantonese group forms the biggest community; second and third are the Sze Yap and the Chiu Chow groups respectively.

2.6 Population growth patterns

The population of Hong Kong in 1931 was 840,000. It was not until 1937 that the total population first exceeded the one million mark. By 1941, the population had risen to more than 1.6 million. There was, however, a considerable outflow during the war period 1942 to 1945, the estimated population falling to only 600,000. With the return of people to Hong Kong from China, the population surpassed the pre-war level by the end of 1947 and was estimated to have reached 2 million in 1951. The first post-war census taken in 1961 recorded a total of 3.1 million. In 1976, the population was just over 4.4 million.

The pre-war and the early post-war population of Hong Kong was heavily influenced by migration movements. In the past 2½ decades, natural increase has played an increasingly important role in determining the growth of population. Between 1961 and 1976, the population increased by 1.3 million, of which 17% was due to net migration. Overall, the size of the population grew at an average rate of 2% a year.

2.7 Population structure

The population of Hong Kong is still very young. In 1976, 30% of the population was under 15 and just over 5% was aged 65 and over. The proportion of the population of working ages 15–64 was of the order of 64%. The dependency ratio was 553 persons per 1,000 population.

With the population being increasingly influenced by natural increase, the number of males and females gradually has become more balanced. In 1976, the sex ratio was 1,046 males per 1,000 females.

2.8 Population distribution

With a total land area of 1,050 sq.km. and a total population of 4.4 million, Hong Kong has overall a very high density of 4,138 persons per sq.km. In 1976, about 92% of the population was living in the urban areas (Hong Kong Island, Kowloon, New Kowloon and the new towns/market towns) which comprised only 18% of the total land area, thus producing a density of 21,178 persons per sq.km. The corresponding figure for the rural areas (the New Territories excluding the new towns/market towns) were 7.1% (population), 81.9% (land area and a density of only 363 persons per sq.km. In the most congested urban district, Mong Kok, the density was as high as 144,360 persons per sq.km.

There has been a major decline in the marine population over the past 15 years. In 1976, just over 1% of the population was living on boats.

2.9 Education

The 1976 By-census showed that 98% of children aged 6–11, 85% of those aged 12–14 and 63% of those aged 15–16 were attending school. Overall, about 81% of the population aged 5 and over had primary and above education.

2.10 Family planning

Organized family planning activities began in Hong Kong in the 1950's with the establishment of the Hong Kong Family Planning Association. Although the Government did not take a direct role in providing family planning services, it supported the activities of the Association by giving the latter considerable financial assistance. The activities of the Association expanded rapidly and by 1973, it ran 56 clinics.

In late 1973, the Government started to take over from the Association its clinics in the Government-run Family Health Centres. The Association then concentrated its resources on extending family planning services and consultation to other areas such as the rural New Territories and the public housing estates.

Chapter 3

Methodology of The Study

Chapter 3

Methodology of The Study

3.1 The questionnaire

The questionnaire for the 1976 By-census (Appendix B) was divided into three sections: the household particulars section, the personal particulars section and the maternity history section. The first two sections covered the general demographic, social and economic characteristics of the population, and the third section obtained information on the maternity history of ever-married women aged 15–49.

In the maternity history section, there was cross reference between husband and wife, so that their relevant social and economic characteristics could be cross-tabulated with data on nuptiality, exposure to child-bearing and fertility.

3.2 Sampling method

For the census of the land-based population, a one-stage stratified paired-selection sampling method was adopted. The selection of samples was made from an updated list of all permanent living quarters in the urban areas (Hong Kong Island, Kowloon, New Kowloon and the new towns/market towns in the New Territories) and segments of temporary structures in the rural and temporary structure areas. The main purpose of stratification (in terms of geographical area) in the design was to enable estimates of population parameters and their standard errors to be made separately for each census district, so that comparability of data on a geographical basis could be maintained between the 1971 Census and the By-census. The use of a paired-selection method in the design was to facilitate the computation of the sampling errors of the estimates. Throughout the selection process, an equal probability (10%) selection method was used.

The selection of sample vessels in harbour for enumeration in the 1966 By-census was by the co-listing method, i.e. listing all the vessels found and choosing at the same time the sample for detailed enumeration. This method was tested again *via* the Pilot Marine Census in 1970 and was not very satisfactory, great difficulty being found in listing all the vessels in harbour and choosing the sample. In most cases, anchorages were so congested that any systematic listing of the vessels mooring there was almost impossible. For the census of the marine population in 1976, a one-stage cluster sampling design was used. Again, the sampling fraction was 10%.

3.3 Sampling frame and unit

A frame is a prerequisite for a sample census. A good frame must cover every eligible unit of enquiry, and each unit must only appear once. For the Land By-census, a list of addresses of all permanent living quarters was made available after the 1971 Population and Housing Census. To maintain this list up-to-date, arrangements were made with the Public Works Department and the Housing Department to supply monthly returns of occupation and demolition permits to the Census & Statistics Department for follow-up field visits and updating. Field checks were also made on, for example, redevelopment of temporary structure areas or on any sudden changes e.g. structures wiped out by fire.

For permanent structures, the listing unit was a living quarter and was the same as the sampling unit. For temporary structures, the listing unit was a structure, but the sampling unit was a group of some adjacent 15 to 20 temporary structures, termed a segment. An individual structure could not be chosen as the sampling unit for temporary structures because there was generally an absence of a unique and identifiable address among these structures, and also because of the difficulty of keeping the list of such structures up-to-date. Using a segment as the sampling unit facilitated identification by the use of segment boundaries which were in the main demarcated by such relatively permanent landmarks as a road, a ditch or a field lane; further, the selected segments were compact which meant that every structure found inside a selected segment during the field operation was enumerated so that field updating was built-in.

For the Marine By-census, the sampling unit was a section. Physical identification of the boundaries of a section in harbour was made by the use of fire lanes. All vessels found inside a sampled section at the time of the census were enumerated.

3.4 Sampling fraction

Systematic sample tabulations of 5% and 10% of the 1971 Census data were produced and analysed in order to provide some guidelines for the optimum sample size in terms of costs and precision. Since the By-census was a

multi-purpose survey, it was not possible to use a sample which was large enough to give the desired precision for all of the characteristics measured. Some order of priority was required, so that at least the major ones were measured with satisfactory precision. From the analysis of the sample tabulations, it was established that a 10% sample gave a maximum relative error (at a 95% level of confidence) of not greater than $\pm 10\%$ for the major characteristics of the population.

This degree of precision was considered acceptable and a 10% sample for the 1976 By-census was accordingly adopted. This was estimated to give a total of some 100,000 households, 440,000 persons and 105,000 women aged 15 to 49 in the sample.

3.5 Estimation procedure

Estimation of parameters fell broadly into two distinct groups: population totals and mean values. Estimation of the population total of a certain characteristic was done by 'blowing-up' the sample take (i.e. the total in the By-census sample with the characteristic in question) using the sampling fraction of 10%. (Throughout this report, all tables derived from the By-census are collated using the blown-up population; this is contrary to WFS presentation of tables.) On the other hand, estimation of the population mean value of a certain characteristic was done by taking the ratio of the blown-up sample takes of the numerator and denominator.

Calculation of variances was facilitated by the use of paired sample selection, and further enhanced by thickening the sample into 10 thick zones, so that only 10 contrasts were required in the estimation.

Let x, y be the sample takes of two population characteristics (e.g. economically active population, total population), then the estimated population total and mean value of these characteristics are given as follows:—

$$\hat{X} = \frac{x}{f} = 10x \quad \hat{Y} = \frac{y}{f} = 10y \quad \hat{r} = \frac{\hat{X}}{\hat{Y}} = \frac{10x}{10y} = \frac{x}{y}$$

The estimated variances, (var) of $\hat{X}$, $\hat{Y}$ and $\hat{r}$ are:—

$$\text{var}(\hat{X}) = 0.9 \sum_i \sum_{j=1}^{10} (\hat{X}_{ij1} - \hat{X}_{ij2})^2$$

$$\text{var}(\hat{Y}) = 0.9 \sum_i \sum_{j=1}^{10} (\hat{Y}_{ij1} - \hat{Y}_{ij2})^2$$

$$\text{and var}(\hat{r}) = \frac{0.9 \sum_i \sum_{j=1}^{10} (\hat{X}_{ij1} - \hat{r}\hat{Y}_{ij1} - \hat{X}_{ij2} + \hat{r}\hat{Y}_{ij2})^2}{\hat{Y}^2}$$

where $i = i^{\text{th}}$ district $j = j^{\text{th}}$ thick zone
1, 2 = first or second sample in the paired selection

3.6 Enumeration method

The By-census was a *de facto* census and the enumerator method of data collection was used. The census moment was allowed to shift along the enumeration period, so that the number of persons enumerated in a household always referred to 'yesterday'.

During the enumeration, for households which could not be contacted after four or more visits during two consecutive days, enumerators were instructed to leave a self-administered questionnaire for the household(s) to fill in. This contained four questions, namely: number of households in the living quarter, number of persons in each household and their age and sex, and was accompanied by a stamped addressed envelope. A total of 2,561 questionnaires were sent and 1,451 (about 57%) were returned completed. These completed questionnaires were used to adjust the geographical age and sex distribution of the population.

3.7 Enumeration experience

Of the 99,293 addresses selected in the sample, 86.2% (85,627) turned out to be living quarters, i.e. quarters being occupied for domestic purposes; of the remainder, 8.7% (8,635) of the total was vacant, 4.5% (4,449) was non-domestic and 0.6% (582) was demolished. 'Vacant quarters' as defined in the By-census included, not only unoccupied quarters, but also quarters whose occupants were temporarily absent during the night prior to the day of enumeration. The proportion of non-domestic quarters relates to those quarters which could not be identified as non-domestic during the sampling stage.

Of the total of 85,627 sampled living quarters, at least four visits by enumerators and follow-up visits by chief enumerators failed to contact any occupant in 1.0% (889) of the cases. It was estimated from the 1,451 self-administered questionnaires that a total of 2,529 households were non-contacted during the enumeration period. Thus, together with 103,238 households actually enumerated during the enumeration period, a total of 104,689 (99.0%) households were contacted at the end.

3.8 Field organization

In the 1976 By-census, the field staff consisted of one Area-Superintendent, four Assistant Area Superintendents, 10 Census and Statistics Supervisors and 30 Survey Interviewing Officers. Their main duties included updating of geographical records, training and selection of enumerators, planning and operational control of field enumeration, and deployment and supervision of more than 2,600 temporary field staff specially recruited to carry out the enumeration work during the Land and Marine By-census.

3.9 Recruitment and training

In order to obtain the required number of enumerators for the By-census, a General Schools Circular was issued in October 1973 through the Education Department. Some 540 teachers were recruited for training as chief enumerators and field editors, and 2,750 students in Form 6 or above for training as enumerators.

The departmental field supervisory staff were first trained on all aspects of the By-census field operation, including basic principles as well as techniques and methods of conducting interviews. They were then required to train the chief enumerators, who in turn were required to train the enumerators. Field editors were also trained by the departmental supervisory staff. To achieve uniformity in training, a teaching brief was prepared for the departmental supervisory staff and the chief enumerators. During the training sessions, special emphasis was given to obtaining of maternity history information.

3.10 Selection and final briefing

A written test was held at the end of the training courses to select suitable trainees for appointment. The number of trainees finally selected was 2,150 (73% males and 27% females) for enumerators and 440 for chief enumerators and field editors.

Selected enumeration field staff attended final briefing sessions on operational details about one week before the commencement of the census enumeration. Immediately after briefing, the enumeration field staff took an oath of secrecy and were shown a training film to remind them of what had been taught in the training courses.

3.11 The post-enumeration check

The post-enumeration check was based on a sub-sample (2.5%) of the master sample, and was conducted by chief enumerators concurrently with the main census enumeration. The re-enumeration of households in the selected living quarters involved questions on number of households in the living quarter, type of household, and number of persons in the household. Chief enumerators were not allowed to refer to the original questionnaires during the re-enumeration and were required to record the answers in a separate schedule. In subsequent analysis, the two sets of data were compared on a one-to-one basis, i.e. living quarter by living quarter, and results indicated that there was an overall underenumeration of 0.42%.

3.12 Data validation and amendment

Data were firstly coded and manually edited before input to the computer. For the validation phase of the data processing, there were two main types of check, one being an out-of-range check and the other a consistency check. The former was performed for all records to ensure that the codes were within the coding frame. As regards the latter, only the more important ones such as household size, type of household, household composition, person count, relationship to head, year of marriage, educational attainment, technical/vocational training, activity status and occupation were cross-checked. Furthermore, for the information recorded in the maternity history section, there were consistency checks between the mothers and children, between the fathers and children, and also between the children themselves.

All offending records were flagged by the computer for manual amendment. If the consistency was due to coding error, then the erroneous code would be amended for re-run, otherwise, the inconsistency was left there to be taken care of by the imputation phase of the data processing.

3.13 Comparison of WFS and By-census variables

The list below compares the variables which appeared in the WFS core tabulations with those in the By-census tabulations.

World Fertility Survey and By-census

List of variables appearing in WFS core tabulations

By-census tabulations

Section 1: Respondent's background

a. Region of residence	Census area
b. Type of place of residence	Area of residence
c. Childhood type of place of residence	No
d. Birth date	Yes
e. Age	Yes
f. Level of education	Yes
g. Literacy	No
h. Religion, ethnic groups, etc.	No

Section 2: Fertility

a. Number of children ever-born	Yes
b. Number of children still alive	Yes
c. Number of children deceased	Yes
d. Number of sons still alive	Yes
e. Year of age at first birth	Yes
f. Interval from first marriage to first birth	Yes
g. Number of live births in past five years	Yes
h. Number of sons/daughters in past five years	Yes
i. Whether currently pregnant	No
j. Length of closed/open birth interval	No

Section 3: Contraceptive knowledge and use

No

Section 4: Marriage history

a. Current marital status	Yes
b. Number of times married	No
c. Date of first marriage	Year of first marriage
d. Age at first marriage	Yes
e. Date of current marriage	No
f. Interval since first marriage	No
g. Years since first marriage	Yes
h. Interval since current marriage	No
i. Total marital duration	No
j. Date of end of latest marital exposure	No
k. Type of dissolution of first marriage	No
l. Interval from first marriage to its dissolution	No

Section 5: Fertility planning

No

Section 6: Woman's work history

a. Duration of work before first marriage	No
b. Occupation before first marriage	No
c. Work status before first marriage	No
d. Duration of work since first marriage	No
e. Whether worked in first birth interval	No
f. Years since most recent work	No
g. Most recent occupation	Yes
h. Most recent place of work	Yes
i. Most recent work status	Yes

Section 7: Current husband's background

a. Level of education	Yes
b. Literacy	No
c. Childhood type of place of residence	No
d. Most recent occupation	Yes
e. Work status	Yes

Assessment of Quality of Census Data

1 Sources of errors and bias

Sampling error. This term refers to the range of variability within which the theory of mathematical probability indicates that successive estimates of the same statistics from comparable samples are likely to fall. The range is basically dependent on (a) the size and type of sample and (b) the intrinsic variability of the response being considered. ‘Sampling error’ occurs because observations are made only on the basis of a sample, not the entire population, and it is therefore part of the sampling design. It is not ‘error’ in the usual sense of ‘a mistake’; rather, it is a recognized and controlled variable element in the method.

Non-sampling errors. These are essentially human errors. They relate, among other things, to non-completion of forms, interviewer and respondent errors, mistakes made by the office staff in handling data and so on. They are more serious in the sense that, unlike sampling errors which are random, they may cause one-sided bias. Moreover, this bias does not diminish as sample size increases, and the magnitude of the bias cannot be precisely determined.

2 Estimation and interpretation of sampling errors

The particular sample used for the By-census is one of a large number of all possible samples of the same size that could be selected using the same sampling design. Estimates derived from the different samples differ from each other; the difference between a sample estimate and the average value of all possible samples is called the sampling deviation. The standard error (i.e. sampling error) of a sample estimate is a measure of the variation among the estimates derived from all possible samples and, thus, is a measure of the precision within which an estimate from a particular sample approximates to the average value of all samples.

The sample estimate and an estimate of its standard error will enable interval estimates to be constructed, which based on probability theory will include the average value of all possible samples with prescribed confidence. To illustrate this, if all possible samples were selected and each of these was surveyed under essentially the same conditions, then:

- (i) Approximately 19/20 of the intervals of two standard errors above and below the sample estimate will include the average value of all possible samples. The interval of two standard errors above and below a sample estimate is called a 95% confidence interval.
- (ii) Almost all intervals of three standard errors above and below the sample estimate will include the average value of all possible samples.

The average value of all possible samples may or may not be contained in *any* particular interval estimates. However, for a particular sample, it is possible to say, with the indicated confidence, that the average value of all possible samples is included in the constructed interval estimates.

The following table gives the sample estimate, estimated standard error and 95% confidence interval estimates of selected characteristics.

Table 2.1 Sampling errors of selected variables

Variable description	Estimate	Standard error	95% confidence interval	
			Lower limit	Upper limit
Adjusted population by age:				
0– 4	379,380	2,000	375,460	383,300
5– 9	408,440	2,010	404,500	412,380
10–14	537,440	2,270	532,990	541,890
15–19	532,230	2,200	527,920	536,540
20–24	435,850	2,000	431,930	439,770
25–29	367,420	1,870	363,750	371,090
30–34	208,650	1,340	206,020	211,280
35–39	226,220	1,500	223,280	229,160
40–44	248,660	1,540	245,640	251,680
45–49	244,130	1,540	241,110	247,150
50–54	233,410	1,480	230,510	236,310
55–59	182,980	1,340	180,350	185,610

Table 2.1 Sampling errors of selected variables *continued*

<i>Variable description</i>	<i>Estimate</i>	<i>Standard error</i>	<i>95% confidence interval</i>	
			<i>Lower limit</i>	<i>Upper limit</i>
60–64	155,380	1,190	153,050	157,710
65 and over	242,800	1,600	239,660	245,940
Female population by age:				
15–19	255,550	1,540	252,530	258,570
20–24	207,410	1,410	204,650	210,170
25–29	166,360	1,220	163,970	168,750
30–34	89,230	880	87,510	90,950
35–39	98,200	950	96,340	100,060
40–44	115,120	1,030	113,100	117,140
45–49	112,370	980	110,450	114,290
Female labour force aged 15–49 by educational attainment:				
Lower than primary	76,240	1,000	74,280	78,200
Primary	245,180	1,610	242,020	248,340
Secondary	220,730	1,460	217,870	223,590
University	13,820	370	13,090	14,550
Male working population (including unemployed persons with previous job) by occupation:				
Professional, technical and related workers	60,780	620	59,560	62,000
Administrative and managerial workers	36,450	570	35,330	37,570
Clerical and related workers	105,470	1,000	103,510	107,430
Sales workers	166,770	1,630	163,580	169,960
Service workers	188,780	1,660	185,530	192,030
Agricultural workers and fishermen	34,340	4,140	26,230	42,450
Production and related workers, transport equipment operators and labourers	636,830	3,720	629,540	644,120
Armed forces and unclassifiable	26,340	570	25,220	27,460
Mean number of children ever-born to ever-married women by age:				
15–19	0.67	0.08	0.51	0.83
20–24	1.03	0.04	0.95	1.11
25–29	1.78	0.04	1.70	1.86
30–34	2.74	0.06	2.62	2.86
35–39	3.49	0.07	3.35	3.63
40–44	4.13	0.07	3.99	4.27
45–49	4.35	0.08	4.19	4.51
Mean number of living children by age of ever-married women:				
15–19	0.66	0.08	0.50	0.82
20–24	1.02	0.04	0.94	1.10
25–29	1.77	0.04	1.69	1.85
30–34	2.71	0.06	2.59	2.83
35–39	3.44	0.07	3.30	3.58
40–44	4.05	0.07	3.91	4.19
45–49	4.17	0.08	4.01	4.33
Mean number of children ever-born to ever-married women aged 15–49 by area of residence:				
Urban	2.92	0.02	2.88	2.96
Rural	3.73	0.05	3.63	3.83
Marine	5.07	0.12	4.83	5.31
Average age at first marriage of all females by educational attainment:				
Lower than primary	20.95	0.09	20.77	21.13
Primary	21.61	0.09	21.43	21.79
Secondary	22.89	0.12	22.65	23.13
University	25.26	0.34	24.59	25.93

3 Errors of non-completion

In all surveys of people or households, there is always an element of non-completion. Instances of non-completion arise from non-contact cases, i.e. people not found at home even after repeated calls. Errors of non-completion are important primarily because they may distort the selection probability of the sample and limit the application of the statistical probability formulae. The seriousness of such errors depends on two factors: (a) the proportion of cases that are not completed, and (b) the extent to which the persons not covered differ from those covered.

All efforts were made in the By-census enumeration to reduce the errors of non-completion to a minimum. Enumerators were required to pay at least four household visits before they could report any household as non-contacted. The non-contact cases were first followed up by personal visits by chief enumerators and then by survey interviewing officers. For households which could not be contacted even during this final visit, a self-administered questionnaire was deposited for the household(s) to fill in. This contained four questions: number of households in the living quarter, number of persons in each household, and their age and sex, and was accompanied by a stamped addressed envelope. A total of 2,529 questionnaires were sent and 1,451 (about 57%) were returned completed. The net result of this activity was that the proportion of households enumerated was about 99%.

4 Interview errors

There are many kinds of possible errors stemming from the interview process itself, e.g. differences in interpretation of questions, inability or unwillingness to provide correct information etc. Because they involve the interaction of people, these errors are probably the most difficult to control, but precautionary measures were taken during field operations by which the chief enumerators had to:

- (i) spot-check randomly some of the enumerated households to confirm that the enumerators had visited the correct address and made all the interviews claimed;
 - (ii) revisit all the living quarters that were reported as 'demolished', 'vacant' or 'non-domestic', and all non-contact households;
 - (iii) discuss with the enumerators any problems they might have, or concepts or procedures which they did not understand;
 - (iv) report regularly to the Census and Survey Supervisors about the field work performance of the enumerators.
- In addition, the completed questionnaires were edited in the field centres by the field editors and re-edited for obvious inconsistencies by statistical staff before the data were input to the computer.

As an illustration of interview errors, the accuracy of age reporting in the By-census is examined below, using the 'age score test' (Myer's index).

It is common that the age distribution of the population (particularly in single years of age) derived from censuses is often distorted by inaccurate age reporting. Misstatement of age generally arises as a result of digital preference. There are various methods for measuring the extent of digital preference. In particular, the age score test (Myer's index) is one which indicates the preference of the ten digits from 0 to 9, and provides also an overall measure of distortion in the age distribution. The age score test for the By-census is shown in the following table.

Table 4.1 Age score test for 1976 By-census

Age ending in	% of persons reporting	
	Male	Female
0	10.2	10.2
1	9.3	9.2
2	9.7	9.5
3	9.6	9.5
4	10.0	9.8
5	10.6	12.5
6	10.1	10.0
7	10.1	9.6
8	10.1	9.9
9	10.3	9.8
Total	100.0	100.0

In general, the male population had a preference for reporting ages ending in digits 0, 5 and 9. The preference for digits 6, 7 and 8 was marginal. On the other hand, the female population had a preference for digits 0 and 5, the preference for digit 5 being the most marked. The overall age reporting error was 2.8% for males and 5.4% for females. In the 1971 Population Census, the corresponding error rates were 6.1% and 5.3% respectively.

5 Processing errors

Errors in processing can arise during editing, coding or punching. These errors, and any interview or respondent errors undetected by the quality control mechanism, were corrected by the computer in the validation and imputation phases of the data processing.

Validation of the By-census data consisted of two main types of check: out-of-range and inconsistency between data fields. All offending records were flagged by the computer for manual amendment. Table 5.1 gives the validation rates by type of check and record.

Table 5.1 Validation rates by type of check and record

Type of record	Out-of-range (per data field) %	Inconsistency (per data field) %	Overall (per data field) %
Household	0.05	0.56	0.61
Person	0.08	0.69	0.77
Birth	0.86	0.58	1.44
All records (weighted average)	0.12	0.67	0.79

In the imputation phase, all validated data were subject to an extensive consistency check and any inconsistent data were imputed by the computer in accordance with a set of predetermined rules. Table 5.2 summarizes the imputation rates by type of record and variable.

Table 5.2 Imputation rates by selected type of variable

Type of variable	Imputation rate (per data field)
Relationship to head	0.1%
Sex	0.0
Children ever-born	1.5
Date of birth	0.0
Marital status	0.5
Place of birth	0.0
Year of first marriage	0.2
Educational attainment	0.1
Activity status	3.9
Industry	5.8
Occupation	2.8

Chapter 4

Background Characteristics of The Respondents

Chapter 4

Background Characteristics of The Respondents

4.1 Introduction

In the subsequent three chapters, analyses will be made of the By-census information relevant to the WFS in relation to nuptiality and fertility behaviour of ever-married women in the age group 15–49 and to the survivorship pattern of their children. Wherever appropriate, a cross-classification of fertility data by the selected geographical and social variables will be attempted to show the fertility differentials between groups of women.

To help readers in appraising the main findings presented in the later chapters, it is considered necessary to give first a brief description of the background variables used in the analysis. These are referred to as area of residence, educational attainment and occupation of husband. Other useful variables such as religion, pattern of work, type of place of residence and ethnic group were not collected in the By-census.

4.2 Area of residence

Overall, some 93% of ever-married women aged 15–49 lived in the urban areas (as defined to include Hong Kong Island, Kowloon, New Kowloon and the new towns/market towns), 6% in the rural areas (the New Territories excluding the new towns/market towns), and 1% on boats. These major areas do not show any significant variations across birth cohorts.

Table 4.2.1 Percentage distribution of ever-married women aged 15–49 by current age by area of residence, 1976

<i>Area of residence*</i>	<i>Age group</i>			<i>Overall (15–49)</i>
	<i>15–29</i>	<i>30–39</i>	<i>40–49</i>	
Urban	92.6	93.4	92.0	92.6
Rural	6.2	5.4	6.8	6.2
Marine	1.2	1.2	1.2	1.2
All areas	100.0	100.0	100.0	100.0
Base frequency	199,310	178,540	221,990	599,840

* See Appendix D for the definitions of urban and rural areas and marine.

4.3 Educational attainment

Approximately one-quarter of the women had received no formal education. 46% had primary education, and 26% had secondary education. The proportion with university education was just over 2%.

The younger cohorts show a decreasing proportion of women with no education, from about 47% for the oldest cohort to 8% for the youngest. On the other hand, the proportion with secondary or higher education increased from less than 14% of the oldest cohort to some 41% of the youngest.

Table 4.3.1 Percentage distribution of ever-married women aged 15–49 by current age by educational attainment, 1976

<i>Educational attainment</i>	<i>Age group</i>			<i>Overall (15–49)</i>
	<i>15–29</i>	<i>30–39</i>	<i>40–49</i>	
Lower than primary	7.8	21.0	46.7	26.1
Primary	51.5	46.7	39.8	45.8
Secondary	38.8	28.7	12.1	25.9
University	1.9	3.6	1.4	2.2
Total	100.0	100.0	100.0	100.0
Base frequency	199,310	178,540	221,990	599,840

4.4 Occupation of husband

The distribution by occupation of husband given in Table 4.4.2 is limited by the availability of information. The tabulation available only refers to those women who have been married for at least 5 years. This precludes analysis of the trends of this variable for all ever-married women aged 15–49. The table has an overall under-coverage of 26.2% of the women, mainly in the younger cohorts. Caution is therefore required in interpreting Table 4.4.2.

Table 4.4.1 Degree of under-coverage by birth cohort, 1976

<i>Age group</i>	<i>No. of currently married women married for at least 5 years (1)</i>	<i>No. of ever-married women (2)</i>	<i>Degree of under-coverage $\left[1 - \frac{(1)}{(2)}\right] \times 100\%$</i>
15–19	260	10,020	97.4%
20–24	11,440	65,520	82.5%
25–29	68,450	123,770	44.7%
30–34	73,080	83,050	12.0%
35–39	89,570	95,490	6.2%
40–44	104,540	112,610	7.2%
45–49	95,310	109,380	12.9%
15–49	442,650	599,840	26.2%

Table 4.4.2 Percentage distribution of currently married women aged 15–49 married at least 5 years by current age by occupation of husband, 1976

	<i>Age group</i>			<i>Overall (15–49)</i>
<i>Occupation of husband</i>	<i>15–29</i>	<i>30–39</i>	<i>40–49</i>	
Professional and technical workers	4.6	5.8	3.3	4.5
Administrative and managerial workers	4.0	4.8	3.3	4.0
Clerical workers	8.1	7.4	5.4	6.6
Sales workers	11.8	12.9	14.8	13.5
Service workers	11.4	11.3	12.3	11.8
Agricultural workers and fishermen	1.3	1.8	2.9	2.2
Production workers, transport equipment operators and labourers	49.0	43.9	36.3	41.4
Armed forces and unclassified	2.7	2.3	6.7	4.4
Unknown	7.1	9.8	15.0	11.6
Total	100.0	100.0	100.0	100.0
Base frequency	80,150	162,650	199,850	442,650

A very large proportion (41.4%) of husbands was production workers, less than 9% was professional, technical, administrative and managerial workers. Leaving out the most recent cohort (i.e. 15–29), which is seriously distorted by the incomplete coverage, the trends have been for more women of the younger cohorts to marry professional, technical, administrative and managerial workers.

4.5 Association between variables

An attempt is made in this section to examine pairs of the background variables in order to show the extent to which they are statistically associated. It must be emphasized, however, that since these variables and many others not included in the analysis might be interrelated with one another, a causal relationship as such cannot be established. Also, the observed associations apply to ever-married women aged 15–49 and not necessarily to the total population.

Table 4.5.1 shows the relationship of educational attainment to area of residence.

Table 4.5.1 Percentage distribution of ever-married women aged 15–49 by area of residence by educational attainment, 1976

	<i>Area of residence</i>			
<i>Educational attainment</i>	<i>Urban</i>	<i>Rural</i>	<i>Marine</i>	<i>All areas</i>
Lower than primary	24.0	45.0	92.5	26.1
Primary	46.5	41.5	7.2	45.8
Secondary	27.2	12.5	0.3	25.9
University	2.3	1.0	0.0	2.2
Total	100.0	100.0	100.0	100.0
Base frequency	555,640	37,130	7,070	599,840

There are significant variations in the level of education among ever-married women in the urban, rural and marine areas. Less than one-quarter of the urban women had no formal education, as compared with 45% and 93% for the rural and the marine women respectively. While nearly 30% of urban women had secondary or higher education, the corresponding proportion for rural women was just over 13% and for the marine women less than half a percent.

Table 4.5.2 shows the relationship between a woman’s area of residence and her husband’s occupation.

Table 4.5.2 Percentage distribution of ever-married women aged 15–49 by area of residence by occupation of husband, 1976

<i>Occupation of husband</i>	<i>Area of residence</i>			
	<i>Urban</i>	<i>Rural</i>	<i>Marine</i>	<i>All areas</i>
Professional and technical workers	5.0	2.7	0.1	4.8
Administrative and managerial workers	4.0	0.8	0.0	3.7
Clerical workers	7.7	1.8	0.0	7.3
Sales workers	12.8	9.3	2.8	12.4
Service workers	11.5	10.3	0.9	11.3
Agricultural workers and fishermen	0.5	17.2	56.0	2.2
Production workers, transport equipment operators and labourers	41.6	29.7	31.7	40.8
Armed forces and unclassified	3.5	9.0	0.7	3.8
Unknown	13.4	19.2	7.8	13.7
Total	100.0	100.0	100.0	100.0
Base frequency	555,640	37,130	7,070	599,840

There are marked differences in the occupational structure of husbands as between areas of residence. Marine naturally shows a majority of the women with husbands who are in fishing occupations. The rural areas, however, have a larger proportion in production occupations than in agriculture. The urban areas have comparatively larger proportions in professional, technical, administrative and clerical occupations.

Table 4.5.3 shows the relationship between a woman’s educational attainment and her husband’s occupation.

Table 4.5.3 Percentage distribution of ever-married women aged 15–49 by educational attainment by occupation of husband, 1976

<i>Occupation of husband</i>	<i>Educational attainment</i>				<i>All levels</i>
	<i>Lower than primary</i>	<i>Primary</i>	<i>Secondary</i>	<i>University</i>	
Professional and technical workers	0.7	2.0	11.7	30.8	4.8
Administrative and managerial workers	0.8	1.9	8.7	16.6	3.7
Clerical workers	2.2	5.4	15.4	9.2	7.3
Sales workers	12.9	12.1	12.6	11.2	12.4
Service workers	12.2	12.7	8.7	2.1	11.3
Agricultural workers and fishermen	5.8	1.2	0.4	0.3	2.2
Production workers, transport equipment operators and labourers	41.9	49.2	27.6	9.7	40.8
Armed forces and unclassified	5.4	3.0	3.7	4.9	3.8
Unknown	18.1	12.5	11.2	15.2	13.7
Total	100.0	100.0	100.0	100.0	100.0
Base frequency	156,760	274,370	155,490	13,220	599,840

There appears to be a fairly close association between a woman’s educational attainment and her husband’s occupation. Over 47% of women with university education has husbands who are in professional, technical, administrative and managerial occupations, whereas nearly half of the women with primary education has husbands in production occupations. This reflects the usual tendency for men and women of similar backgrounds to marry.

Chapter 5

Nuptiality and Exposure to Child-Bearing

Chapter 5

Nuptiality and Exposure to Child-Bearing

5.1 Types of marriage

There are several types of marriage in Hong Kong.* Chinese customary marriage has a long tradition, but there is no single or authoritative definition. Chinese modern marriage is contracted in accordance with the Chinese Civil Code, 1930. One of the essential requirements is celebration in a public ceremony in the presence of at least two witnesses. Registry marriage is contracted in accordance with the provisions of the Marriage Ordinance of 1875. Reputed marriage is similar to common-law marriage. A couple who begin to live together, perhaps having children, may regard themselves as married and be so regarded by others. This union is common among the poorer people. Foreign marriage is contracted abroad under foreign laws.

The traditional pattern of marriage was the most prevalent during the early decades; but registry marriage has become increasingly widespread over the past 15 years. Table 5.1.1 shows the 'registry' marriage rates by broad age groups for both males and females for the period 1967 to 1977 (in three 3-year periods to average out yearly fluctuations). The 'rates' for males and females in all age groups increased markedly over the 10-year period. If the 'non-registry' marriage rates had remained unchanged in these years, the age-specific marriage rates, as indicated in the table, would have increased by 9%–77% for males and by 16%–86% for females over this period. Against a back-ground of the prevailing socio-demographic conditions in Hong Kong, it seemed that such a continuing increase in marriage rates would not be plausible. Thus, this could only reflect the shift from traditional to registry marriages over these years.

* White Paper on Chinese Marriages in Hong Kong (Hong Kong, Government Printer 1967).

Table 5.1.1 'Registry' marriage rates by sex by broad age group, 1967–1977

Age group	Registry marriages per 1,000 population		
	1967–69	1970–72	1975–77
Male			
16–24	13.1	17.3	23.2
25–34	48.0	54.7	63.4
35–44	7.9	9.0	10.9
45 and over	1.1	1.0	1.2
Female			
16–24	46.3	48.2	53.9
25–34	21.3	26.3	39.7
35–44	1.9	1.9	2.5
45 and over	0.3	0.3	0.4

Source: Marriage Statistics, Hong Kong 1967–1977 Half-yearly Population Estimates, Hong Kong 1968, 1971, 1976.

5.2 Marital status

For the By-census purposes, 'marriage' was recorded if so reported by respondents, regardless of whether any kind of ceremony had taken place or whether or not the 'marriage' had been registered. Similarly, there was no distinction made between legal and customary divorces, or contractual and voluntary separation.

The censuses showed that there had been an increase in the proportion never married and a decrease in the proportion married, both male and female, over the past 15 years. This indicates a general tendency to postpone marriage.

After discounting the differences in the age structure of the population between 1961 and 1976, the change in the marital status distribution varied as between males and females. Overall, there was an increase in the proportion never married for males (with slight fluctuation) and females. The increase for females was attributable to the decrease in the proportion widowed/divorced, the effect of which was sufficient to offset the effect of the postponement of marriage.

Table 5.2.1 Marital status of population aged 15 and over by sex, 1961, 1971 and 1976

	<i>Male</i>				<i>Female</i>			
	<i>Never married</i>	<i>Married</i>	<i>Widowed/ divorced</i>	<i>Total</i>	<i>Never married</i>	<i>Married</i>	<i>Widowed/ divorced</i>	<i>Total</i>
Crude percentage:								
1961 Census	35.3	62.3	2.4	100.0	18.7	67.6	13.7	100.0
1971 Census	42.6	55.5	1.9	100.0	29.5	61.8	8.7	100.0
1976 By-census	43.5	54.4	2.1	100.0	31.8	59.4	8.8	100.0
Standardized percentage:								
1961 Census	41.4	55.6	3.0	100.0	28.2	56.2	15.6	100.0
1971 Census	45.0	53.0	2.0	100.0	31.4	59.6	9.0	100.0
1976 By-census	43.5	54.4	2.1	100.0	31.8	59.4	8.8	100.0

5.3 Proportion never married

There is only a very small proportion of the female population unmarried by the end of their reproductive life. This is illustrated in the following table which compares the proportion of the female population never married in 1961, 1971 and 1976.

Table 5.3.1 Proportion of female population never married by age, 1961, 1971 and 1976

<i>Age group</i>	<i>1961 Census</i>	<i>1971 Census</i>	<i>1976 By-census</i>
15-19	93.6	97.1	96.1
20-24	48.6	67.6	68.4
25-29	15.5	20.1	25.6
30-34	6.0	5.6	6.9
35-39	5.0	3.0	2.8
40-44	5.9	2.9	2.2
45-49	7.4	3.8	2.7
Overall	22.7	38.6	42.6

The population of Hong Kong tend to marry relatively late. Even in the late 1950's, well over 90% of the female population aged 15-19 was unmarried. For those below age 30, the proportion unmarried has increased steadily over the past 15 years indicating that there has been a general trend towards the postponement of marriages. For those in the older age groups, the proportion has decreased.

5.4 Age at first marriage

Of the 1,044,240 women in the fertile ages 15-49 enumerated in the 1976 By-census, 599,840 (or 57.4%) were married. Appendix Table 1.1 classifies these ever-married women by their current age and age at first marriage.

Analysis of age at marriage can be made with reference either to the events occurring in the same period of time (i.e. marriage-cohort approach) or to a group of women all born in the same period of time (i.e. birth-cohort approach). For the current study, the latter approach has been used.

For an unbiased comparison of the mean age at first marriage between birth cohorts, it is necessary to confine the analysis to a sub-sample which is homogeneous with respect to exposure to the 'risk' of marriage. To this end, the calculation of means has been limited to those ever-married women aged 25-49 who were married before the age of 25 years. Table 5.4.1 shows the mean age at first marriage of these ever-married women by their current age.

Table 5.4.1 Mean age at first marriage for ever-married women aged 25-49 and married before age 25 by current age

<i>Current age</i>	<i>Mean age at first marriage</i>
25-29	21.3
30-34	20.9
35-39	20.4
40-44	20.1
45-49	19.8

The mean age at first marriage for each birth cohort between ages 25 and 49 was higher than that for the one that followed it. This indicates a trend towards delayed marriage.

To examine this trend in greater detail, Appendix Table 1.2 has been compiled, which cross-tabulates the year of birth of those ever-married women aged 25-49 who were married before age 25 by their respective age at first marriage. The following table presents the mean and median age at first marriage by year of birth (1926 to 1951).

Table 5.4.2 Mean and median age at first marriage for ever-married women born between 1926 and 1951 and married before age 25

<i>Year of birth</i>	<i>Average age at first marriage</i>	
	<i>Mean</i>	<i>Median</i>
1926	19.6	19.5
1927	19.8	19.9
1928	19.9	19.9
1929	19.7	19.7
1930	19.8	19.7
1931	19.7	19.7
1932	20.0	19.9
1933	19.9	20.0
1934	20.1	20.3
1935	20.3	20.4
1936	20.4	20.5
1937	20.3	20.4
1938	20.4	20.4
1939	20.4	20.7
1940	20.5	20.7
1941	20.7	20.8
1942	20.8	20.9
1943	20.8	21.1
1944	20.9	21.2
1945	20.9	21.1
1946	21.0	21.3
1947	21.2	21.5
1948	21.2	21.6
1949	21.4	21.8
1950	21.5	21.8
1951	21.4	21.7

Apart from some minor variations as between birth cohorts, the general trend in the postponement of marriages holds.

5.5 Social status differentials in marriage pattern

Appendix Tables 1.3 and 1.4 show the differences in marriage pattern among those ever-married women aged 25–49 who were married before the age of 25 years with reference to their social status background. Educational attainment of the women and the occupation of their husbands have been used as the general indicators of their social status.

There was a positive relationship between educational attainment and mean age at marriage; the higher the level of education of the women, the higher their mean age at first marriage. This holds for all birth cohorts between ages 25 and 49. Moreover, there was a higher tendency among the women with higher educational attainment to postpone marriage. As a result, the difference in the mean age at first marriage between different educational groups was significantly larger for those in the younger cohorts.

It should be pointed out that the overall mean age at first marriage for the different educational groups, as shown in Appendix Table 1.3, was influenced by the age structure of the women in each of these groups. To remove the differences in age structure between the groups, standardization has been used. Table 5.5.1 shows the mean age at first marriage standardized on the age structure of all ever-married women aged 25–49 (excluding those marrying after the age of 25 years).

Table 5.5.1 Standardized mean age at first marriage for ever-married women aged 25–49 married before age 25 by educational attainment

<i>Educational attainment</i>	<i>Mean age at first marriage (standardized)</i>
Lower than primary	19.9
Primary	20.4
Secondary	21.5
University	22.3
Overall	20.5

On occupational differentials, it was assumed in the analysis that the current occupation of the husbands of the ever-married women would broadly reflect their social status at the time of marriage.

Indications from Appendix Table 1.4 are that the mean age at first marriage of women was generally higher for those whose husbands were professional, administrative or clerical workers, and lower for agricultural and production workers. However, the differences between occupational groups were less marked than between educational groups. The following table shows the mean age at first marriage after standardization. The age structure of all ever-married women aged 25–49 who were married before the age of 25 years was used as the standard.

Table 5.5.2 Standardized means age at first marriage for ever-married women aged 25–49 married before age 25 by occupation of husband

<i>Occupation of husband</i>	<i>Mean age at first marriage (standardized)</i>
Professional and technical workers	21.3
Administrative and managerial workers	21.1
Clerical workers	21.0
Sales workers	20.5
Service workers	20.5
Agricultural workers and fishermen	19.6
Production workers, transport equipment operators and labourers	20.5
Armed forces and unclassifiable	20.2
Overall	20.5

It must be emphasized that there is no assessment of the causal relationship between these two factors and marriage pattern. The above is aimed at illustrating that women with lower social status tend to marry at a relatively younger age.

5.6 Widowhood and divorce

Not all of the 599,840 ever-married women in the fertile ages 15–49 were classified as being exposed to the risk of child-bearing. A certain proportion of them was permanently or temporarily protected through widowhood, divorce and separation. Table 5.6.1 shows the proportion of the widowed in each quinquennial age group between 15–49 as recorded in the censuses.

Table 5.6.1 Proportion widowed of ever-married women in each quinquennial age group, 1961, 1971 and 1976

<i>Age group</i>	<i>1961 Census</i>	<i>1971 Census</i>	<i>1976 By-census</i>
15–24	0.38	0.21	0.07
25–29	0.78	0.30	0.19
30–34	2.12	0.76	0.58
35–39	4.50	1.61	1.48
40–44	9.39	3.83	2.89
45–49	17.53	6.83	5.72

The proportion widowed has decreased in all ages over the past 15 years. The decrease was more substantial between 1961 and 1971, which could be partly attributable to the more significant decline in male mortality in this period. In all these years, the proportion widowed increased rapidly with age. This was attributable to the marked differences in mortality between males and females in the older ages (on average, women live about seven years longer than men), coupled with the fact that men normally marry at a later age than women.

Table 5.6.2 shows the proportion of the divorced/separated in each quinquennial age group between 15–49.

Table 5.6.2 Proportion divorced/separated of ever-married women in each quinquennial age group, 1961, 1971 and 1976

<i>Age group</i>	<i>1961 Census</i>	<i>1971 Census</i>	<i>1976 By-census</i>
15–24	0.29	0.16	0.36
25–29	0.51	0.22	0.38
30–34	0.63	0.29	0.37
35–39	0.75	0.40	0.65
40–44	0.78	0.48	0.71
45–49	0.87	0.56	0.96

The proportion divorced/separated decreased markedly in all ages between 1961 and 1971. Since 1971, the trend has been reversed. In both periods, the proportion divorced/separated increased steadily with age.

Further analysis of the widowed and the divorced/separated by duration of marriage is given in Appendix Table 1.5. The duration referred to the period from the date of first marriage to the time of the By-census. There was no adjustment made to discount the period of widowhood, divorce and separation. Panel 5 of the table shows that, overall, the proportion of the widowed increased steadily with duration since first marriage. A similar but less significant pattern holds for those divorced/separated. The same relationship is shown in Panels 1 to 4, which confine the analysis to particular age groups.

5.7 Exposure to child-bearing among ever-married women of different geographical and social background characteristics

In order to measure exposure to the risk of child-bearing, it is necessary to deduct the time of non-exposure from the duration of marriage. However, there was no information on the timing and incidence of dissolutions and remarriages collected in the By-census that would allow for the construction of this measure. Instead the 'currently married' women were taken as being exposed to child-bearing.

Appendix Table 1.6 is aimed at illustrating the differences in exposure to child-bearing among ever-married women with different educational attainment.

The proportion currently married was in general higher for the higher educational groups. However, this relationship did not exist for those below age 45. Further breakdown of the ever-married women by marital status shows that the rate of divorce/separation was higher for those with higher educational attainment. On the other hand, the proportion 'widowed' was much lower among these women. For the younger age groups, the two counterbalanced each other; as a result, the proportion currently married was just about the same for ever-married women with different educational attainment. For the older age groups, the proportion widowed was so much higher for those with lower education that the resultant proportion currently married was lower.

Table 5.7.1 Proportion widowed or divorced/separated of ever-married women by age by educational attainment

<i>Age group</i> (A) % widowed	<i>Educational attainment</i>			
	<i>Lower than primary</i>	<i>Primary</i>	<i>Secondary</i>	<i>University</i>
15-24	0.00	0.07	0.07	0.00
25-34	0.68	0.33	0.27	0.17
35-44	2.82	2.18	1.37	1.68
45-49	5.86	5.93	4.79	1.72
Overall	3.50	1.73	0.85	0.91
(B) % divorced/separated				
15-24	0.00	0.43	0.29	1.30
25-34	0.21	0.24	0.59	0.51
35-44	0.49	0.64	1.05	1.50
45-49	0.80	1.05	1.26	2.59
Overall	0.54	0.52	0.70	1.13

Appendix Table 1.7 presents the differences in exposure to child-bearing among ever-married women by geographical characteristics.

Analysis shows that the proportion widowed or divorced/separated varied as between urban and rural areas. The proportion divorced/separated was higher for those in urban areas, and generally increased with age. The proportion for those in rural areas decreased with age. On the other hand, the proportion widowed was slightly higher in the rural areas. It increased sharply for those in the older age groups, both in urban and rural areas. The differences in the proportion widowed or divorced/separated as between areas and ages largely counterbalanced each other. Consequently, the proportion currently married was about the same among the ever-married women in the urban and rural areas.

Table 5.7.2 Proportion widowed or divorced/separated of ever-married women by age by area (urban, rural and marine)

<i>Age group</i> (A) % widowed	<i>Urban</i>	<i>Rural</i>	<i>Marine</i>
15-24	0.07	0.00	0.00
25-34	0.34	0.46	0.00

Table 5.7.2. Proportion widowed or divorced/separated of ever-married women by age by area (urban, rural and marine) *continued*

<i>Age group</i>	<i>Urban</i>	<i>Rural</i>	<i>Marine</i>
35-44	2.24	2.48	1.20
45-49	5.69	6.21	5.51
Overall	1.93	2.24	1.41
 (B) % divorced/separated			
15-24	0.35	0.50	0.00
25-34	0.39	0.28	0.00
35-44	0.73	0.15	0.00
45-49	1.02	0.13	*
Overall	0.62	0.24	0.14

* base frequency of less than 200.

Chapter 6

Fertility

Chapter 6

Fertility

6.1 Trends in birth rates*

Hong Kong had a high birth rate in the pre-war and early post-war periods. Even in the late 1950's, the crude birth rate remained between 35 and 40 per thousand population. The decline in the birth rate only became apparent in the early 1960's. The crude birth rate dropped steadily from 35 per thousand in 1961 to 20 per thousand in 1970. The rate remained stable at the level of about 19.5 per thousand between 1971 and 1974 but in 1975, resumed its declining trend. The figure for 1976 was 17.7.

6.2 Factors leading to decline in birth rates

The crude birth rates are influenced by changes in both the rate at which married couples have children and the age structure of the female population. The general trend towards delayed marriage in recent years also had some effects. Table 6.2.1 shows the standardized birth rates for the years 1961, 1966, 1971 and 1976, which is aimed at illustrating the position in relation to the change in age structure on the one hand and the change in the proportion of currently married women and their fertility on the other.

* The analysis is based on regular vital statistics information. Before 1961, the birth rate was computed from vital registration. It was estimated that the number of births never registered was very small. (Pages 129–132 of the UN Country Monograph Series No. 1). Since 1961, the birth data have been compiled from returns supplied by institutions, doctors and midwives within 7 days after the occurrence of births (irrespective of whether the births are subsequently registered) and registration of self-delivered births with slight adjustment for late-registration of self-delivered births. The number of self-delivered births is estimated to be of the order of less than 0.4% of the total live births in recent years. As over 99% of births have taken place in hospitals, maternity homes and other institutions, the completeness of the vital statistics based on the 'known births' data should be close to 100%.

Table 6.2.1(a) Crude birth rates and standardized birth rates 1961, 1966, 1971 and 1976

Year	Crude birth rate	Standardized birth rate (A)	Standardized birth rate (B)
1961	35.0	—	—
1966	25.3	30.3	31.2
1971	19.7	19.3	21.2
1976	17.7	14.6	14.9

Table 6.2.1(b) Decline in crude birth rates by component, 1961, 1966, 1971 and 1976

Period	% decline in crude birth rate	% attributable to changes in age structure	% attributable to changes in proportion of females married	% attributable to decline in fertility
1961–1966	–28%	–15%	–2%	–11%
1966–1971	–22%	+ 2%	–8%	–16%
1971–1976	–10%	+16%	–2%	–24%

- (A) Standardized birth rates obtained by applying the age-specific fertility rates for 1961, 1971 and 1976 to the population for the base year (i.e. the age and sex distribution of the population for 1961, 1966 and 1971).
- (B) Standardized birth rates obtained by applying the age-marital-specific fertility rates for 1966, 1971 and 1976 to the currently married population for the base year (i.e. the age and sex distribution of the currently married population for 1961, 1966 and 1971).

Source: Birth Statistics, Hong Kong 1961–1976.

During the period 1961–1966, the cohorts born in the war years gradually entered their twenties. This had resulted in a shortage in the supply of women in the most fertile ages and, consequently, a decline in the total number of births over this 5-year period. It is estimated (see Table 6.2.1 (b)) that between 1961 and 1966, the decline in fertility was only 11%. Changes in the age structure of the female population and in the postponement of marriages over the period

added another 15% and 2% respectively to the decline. These had artificially pushed the decline in the crude birth rate to a high level of 28%.

As the cohorts born in the war years became older and were replaced by a larger number of women born in the early post-war years, the effect of the change in age structure on the birth rate was reversed. A 2% increase in the crude birth rate due to this factor was recorded between 1966 and 1971. The effect of the postponement of marriages persisted and brought about 8% decline in the crude birth rate in this period. The actual decline in fertility became more significant, and contributed to 16% decline in the crude birth rate.

The birth cohorts during the 1950's began to enter the most fertile ages in the early 1970's. The change in the age structure of the female population over the period 1971–1976 has been to increase the crude birth rate by 16%. On the other hand, a 2% decline was caused by the continuous trend towards late marriage. The decline in fertility in this period was 24%. Putting all these factors together, the actual decline in the crude birth rate during the period was only 10%.

The retarding trends in the crude birth rates over the periods 1966–1971 and 1971–1976 were the result of changes in both the age structure of the female population and the proportion currently married among women in the reproductive ages. The decline in fertility, in fact, accelerated from period to period.

6.3 Trends in fertility by age

Age-specific fertility rates are a better measure of fertility because they are not affected by the age structure of the female population. Table 6.3.1 shows the age-specific fertility rates for Hong Kong for the years 1970–1976 (the starting year of this and subsequent tables is dictated by limitations in the availability of information). The net reproduction rates (NRR) and total fertility rates (TFR) are also given in the table.

Table 6.3.1 Age-specific fertility rates, 1970–1976

Age group	Births per 1,000 female population						
	1970	1971	1972	1973	1974	1975	1976
15–19	18.1	17.0	17.4	17.9	18.8	17.8	17.4
20–24	155.3	145.0	139.3	132.5	133.3	121.5	109.7
25–29	233.4	243.0	248.0	243.3	219.2	198.6	192.1
30–34	168.8	162.2	145.8	141.8	137.4	126.0	119.6
35–39	87.1	83.3	77.4	72.4	65.7	54.5	48.9
40–44	31.0	28.4	25.8	23.5	21.1	18.3	14.6
45–49	4.4	3.6	3.2	3.2	2.5	2.4	1.5
TFR	3,491	3,413	3,285	3,173	2,990	2,696	2,519
NRR	1.655	1.625	1.552	1.497	1.415	1.255	1.185

Source: Birth Statistics, Hong Kong 1970–1976.

From the above it can be seen that the birth rates for almost all the fertile age groups declined steadily over the period 1970 to 1976. For the age groups 30 and above, the higher the age group, the faster the rate of decrease. In the age group 25–29, there was a slight increase in the rate over the period 1970–1972 but from 1973 onward, the birth rate for this age group also declined. Although the rate of decrease for this age group was relatively insignificant compared with that for the older age groups, the decline contributed appreciably to the overall fertility decline. The net reproduction rate (NRR) also decreased steadily over this period and was fairly close to a level of one in 1976. To a large extent, this pattern of fertility decline was associated with a marked decrease in the number of high-order births in this period.

Table 6.3.2 Percentage distribution of live births by birth order, 1970–1976

Year	Birth order				
	1st	2nd	3rd	4th	5th and above
1970	26.5	22.3	16.1	11.9	23.2
1971	26.5	23.5	16.8	11.8	21.4
1972	31.7	22.7	16.5	10.6	18.5
1973	32.9	24.9	16.2	10.2	15.8
1974	37.6	25.8	15.2	8.8	12.6
1975	39.8	26.8	15.0	8.0	10.4
1976	38.9	30.6	15.1	7.3	8.1

Source: Birth Statistics, Hong Kong 1970–1976.

Table 6.3.2 shows that in each year during the period 1970–1971, a substantial proportion (more than 20%) of the total live births was of a fifth child and above. This proportion dropped notably in recent years and was only 8% in 1976. At the same time, a significant increase in the proportion of first-order births was recorded.

6.4 Breakdown of age-specific fertility rates by birth order

The percentage distribution of the total live births by birth order given in Table 6.3.2 does not identify differential fertility decline between different age groups as affected by the decline in high order births. In the absence of the relevant data on high and low parity women, it is not possible to compute age parity-specific fertility rates for this purpose. Only a simple breakdown of the age-specific fertility rates by birth order for the years 1970 and 1976 is attempted.

Table 6.4.1 Age-specific birth rates by birth order, 1970 and 1976

Age group	Births per 1,000 female population									
	1st order		2nd order		3rd order		4th order		5th order and above	
	1970	1976	1970	1976	1970	1976	1970	1976	1970	1976
15-19	13.6	13.9	4.0	3.2	0.5	0.3	0.0	0.0	0.0	0.0
20-24	76.7	63.5	50.0	35.2	21.3	9.0	6.0	1.7	1.3	0.3
25-29	54.8	66.8	64.5	69.5	54.6	35.4	35.7	14.5	23.8	5.9
30-34	14.4	16.6	27.2	31.8	31.7	29.9	33.8	20.2	61.7	21.1
35-39	3.3	3.9	6.6	8.0	9.7	8.5	12.8	8.1	54.7	20.4
40-44	0.6	0.6	1.2	1.2	2.2	1.5	2.7	1.7	24.3	9.6
45-49	0.1	0.1	0.2	0.1	0.3	0.1	0.5	0.1	3.3	1.1

Source: Birth Statistics, Hong Kong 1970-1976.

Table 6.4.1 shows that first- and second-order birth rates remained more or less stable during the period 1970 to 1976. The decline in the age-specific fertility rates between 1970 and 1976 was mainly attributable to the decline in the third- and higher-order birth rates. The decline was concentrated in the age group 25-39. The rate of decrease for the fifth- and higher-order birth rates was very substantial.

Broadly, the change in high-order birth rates reflected a general preference among women of younger ages for a small family; such a tendency would have a significant impact on future fertility level.

6.5 Analysis of cohort fertility

Analysis of the age-specific fertility rates is aimed at finding out the fertility conditions in a particular year and their changes over time. In order to examine changes in the fertility level between generations and fertility differentials between socio-economic groups, it is more appropriate to focus on cumulative fertility rates.

Analysis of fertility can be made with reference either to birth cohorts of women or to marriage cohorts of women. For the current study, both approaches have been attempted.

6.6 Birth cohort fertility

Births outside marriage (as defined for By-census purposes) make up an insignificant proportion of the total births in Hong Kong. The analysis of fertility of birth cohorts can, therefore, be confined to ever-married women. Appendix Table 2.3 shows the number of children ever-born by current age of ever-married women. Similar information was collected in the 1971 Census. Table 6.6.1 below compares the birth cohort fertility in 1971 and 1976.

Table 6.6.1 Mean number of children born to ever-married women, 1971 and 1976

Age group	1971 Census	1976 By-census
15-19	0.7	0.7
20-24	1.2	1.0
25-29	2.1	1.8
30-34	3.1	2.7
35-39	3.9	3.5
40-44	4.3	4.1
45-49	4.1	4.4

The decline in cumulative fertility during the period 1971 to 1976 was appreciable for the age groups 25-29 and 30-39. The mean number of children ever-born for these age groups dropped by 0.3 and 0.4 respectively. This coincided with the decline in the fertility rates for these two age groups in the same period.

During the War and the period immediately after it, women in the most fertile ages did not have the number of children that they would normally have had. As fecundity declines with age, the likelihood of these women producing in their reproductive life-span the number of children they would otherwise have wished would have been reduced. This probably accounts for the low mean number of children ever-born for the age group 45-49 in 1971. As these women gradually passed their reproductive ages and were replaced by those who were in their most fertile ages

in the baby boom period of the 1950's, cumulative fertility for the same age group must increase. This explains the slight increase in the mean for the age group 45–49 in 1976.

6.7 Marriage cohort fertility

Analysis of fertility of birth cohorts is useful in assessing the impact of fertility on population growth. On the other hand, marriage cohort fertility is essential to the study of fertility differentials between groups of women and the factors leading to or affecting these differences over time.

Appendix Table 2.4 shows the number of children ever-born by years since first marriage of all ever-married women. Appendix Table 2.5 shows the mean number of children born by years since first marriage and age at first marriage.

It should be noted that, due to the coverage for the maternity history of only ever-married women aged 15–49, a certain proportion of ever-married women (now aged 50 and over) who were married late but had the same duration of marriage as those covered in the study was excluded from the calculation of the mean number of children ever-born. Conversely, those included in the calculation had a longer exposure to the risk of child-bearing and their cumulative fertility would be comparatively higher than those excluded. The marriage cohort fertility shown in Appendix Table 2.4 therefore was biased upward; the longer the duration of marriage, the more significant the bias.

It appeared that those marrying at the ages of 18–19 had the highest mean number of children ever-born. This applied to almost all marriage cohorts. For those marrying at ages 20 and over, the later they got married, the lower the mean. This indicates that for the same marriage cohort, cumulative fertility declined with age at marriage.

6.8 Social and geographical differentials in marriage cohort fertility

Married women with different social and geographical background characteristics tend to behave differently in the course of family-building. In this section, attempts are made to bring out these differences between the different groups of women; variables such as educational attainment and area of residence of the women and occupation of their husbands have been used as broad indicators.

Appendix Table 2.6 shows the number of children ever-born by level of education of ever-married women. The data were stratified by marriage cohort for comparisons within the more homogeneous groups. Panel 4 of the table shows the number of children ever-born by educational attainment (all ever-married women).

From the table it may be noted that the lower the level of education of ever-married women, the larger the number of children they had given birth to. This applied to all three broad marriage cohorts. For ever-married women who had nearly completed their family-building (i.e. having a marriage duration of 20 years or more), those with lower than primary education had, on average, about two children more than those with university education. Analysis in Chapter 4 indicates that women with higher educational attainment tended to marry late. A certain proportion of these ever-married women now aged 50 and over were excluded from this analysis of fertility. For the same marriage cohort, the chances of excluding those with university education must be higher than for those with lower education. The mean number of children ever-born for the different educational groups therefore is biased. The differences between these means should not be taken as absolute.

While on this point, it should also be mentioned that the estimated mean number of children ever-born for the different educational groups (all ever-married women) is crude, since it does not take into consideration the differences in their marriage duration patterns, as shown in the table below.

Table 6.8.1 Marriage duration patterns of ever-married women aged 15–49 by educational attainment, 1976

<i>Educational attainment</i>	<i>Years since first marriage</i>				<i>Mean number of children ever-born (standardized)</i>
	<i>less than 10 years</i>	<i>10–19 years</i>	<i>20 years or more</i>	<i>All duration</i>	
Lower than primary	12%	30%	58%	100%	3.4
Primary	42%	31%	27%	100%	3.0
Secondary	62%	26%	12%	100%	2.4
University	57%	33%	10%	100%	2.0
Overall	40%	29%	31%	100%	3.0

To remove the differences in marriage duration between the groups, a standardization technique has been used. The combined marriage duration pattern for all ever-married women (excluding those with unknown years since first marriage) was used as standard. The standardized mean number of children ever-born had a much narrower range than the original one, indicating that part of the differences in the means between different educational groups was attributable to the differentials in marriage duration between these groups.

Appendix Table 2.7 shows the number of children ever-born by area of residence of ever-married women by duration of marriage.

The mean number of children ever-born for each of the three marriage cohorts indicated that the ever-married women in urban areas were less fertile than those in rural areas who, in turn, were less fertile than those living on boats. Towards the end of their reproductive life-span, the rural women had, on average, just under 1 child more than the urban women; whereas the marine women had about 1½ and 2 children more than the rural and the urban women respectively. Again, the differences between these groups of women should not be taken as absolute. Previous analysis indicates that urban women tended to marry at a higher age than rural and marine women. For the same marriage cohort, the chances of excluding the urban women (now aged 50 and over) must be higher than for the others. This will cause bias in the estimate of the mean number of children ever-born.

The mean number of children ever-born for all marriage cohorts as a whole shown in Panel 4 of Appendix Table 2.7 was affected by differences in marriage duration among ever-married women in the urban, rural, and marine areas. Table 6.8.2 presents the percentage distribution of the ever-married women in each area by marriage duration.

Table 6.8.2 Marriage duration patterns of ever-married women aged 15–49 by area of residence, 1976

<i>Area of residence</i>	<i>Years since first marriage</i>				<i>Mean number of children ever-born (standardized)</i>
	<i>less than 10 years</i>	<i>10–19 years</i>	<i>20 years or more</i>	<i>All duration</i>	
Urban	40%	30%	30%	100%	3.0
Rural	35%	28%	37%	100%	3.5
Marine	29%	29%	42%	100%	4.5
Overall	40%	29%	31%	100%	3.0

The standardized mean number of children ever-born for the three areas shows that after discounting the differences in marriage duration, the marine women had, on average, about 1 and 1½ children more than the rural and the urban women respectively.

Occupation of husband has been used as another broad indicator of the social status of women. Marriage cohort fertility differentials between different occupational groups are given in Appendix Table 2.8. Table 6.8.3 shows the percentage distribution of the ever-married women in each occupational group of their husbands by marriage duration.

Table 6.8.3 Marriage duration patterns of ever-married women aged 15–49 by occupation of husband, 1976

<i>Occupation of husband</i>	<i>Years since first marriage</i>				<i>Mean number of children ever-born (standardized)</i>
	<i>less than 10 years</i>	<i>10–19 years</i>	<i>20 years or more</i>	<i>All duration</i>	
Professional and technical workers	56%	29%	15%	100%	2.5
Administrative and managerial workers	45%	32%	23%	100%	2.7
Clerical workers	53%	28%	19%	100%	2.7
Sales workers	34%	32%	34%	100%	3.1
Service workers	39%	30%	31%	100%	3.0
Agricultural workers and fishermen	24%	29%	47%	100%	4.0
Production workers, transport equipment operators and labourers	44%	31%	25%	100%	3.2
Armed forces and unclassifiable	24%	22%	54%	100%	2.9
Overall	40%	29%	31%	100%	3.0

Differences in marriage duration between the various occupational groups were not so marked as those between different educational groups or between areas of residence. However, it can still be seen that professional, technical, administrative, managerial and clerical workers had relatively shorter marriage duration than the other occupational groups. Wives of farmers and fishermen had the longest duration. These different patterns contributed significantly to the differences between the mean number of children ever-born for the different occupational groups as shown in Panel 4 of the table.

Even after standardization, wives of professional, technical, administrative, managerial and clerical workers had, on average, fewer children than those of the other occupational groups. Wives of farmers and fishermen still had the largest mean number of children ever-born.

To carry the analysis further, two-way tables have been compiled to show the association between marriage cohort fertility and the paired variables of educational attainment and area of residence of the ever-married women and occupation of their husbands.

Table 6.8.4 Standardized mean number of children born to ever-married women aged 15–49 by educational attainment by area of residence, 1976

<i>Educational attainment</i>	<i>Area of residence</i>		
	<i>Urban</i>	<i>Rural</i>	<i>Marine</i>
Lower than primary	3.4	3.7	4.6
Primary	3.0	3.4	3.7
Secondary	2.4	2.7	*
University	1.9	2.3	0.0

* base frequency of less than 200.

Table 6.8.5 Standardized mean number of children born to ever-married women aged 15–49 by educational attainment by occupation of husband, 1976

<i>Occupation of husband</i>	<i>Educational attainment</i>			
	<i>Lower than primary</i>	<i>Primary</i>	<i>Secondary</i>	<i>University</i>
Professional and technical workers	3.2	2.9	2.4	2.1
Administrative and managerial workers	3.7	3.2	2.4	2.1
Clerical workers	2.9	2.9	2.3	2.0
Sales workers	3.5	3.2	2.7	1.8
Service workers	3.3	3.0	2.5	1.9
Agricultural workers and fishermen	4.3	3.4	3.1	2.2
Production workers, transport equipment operators and labourers	3.6	3.1	2.7	2.2
Armed forces and unclassifiable	3.6	3.1	2.3	1.9

Table 6.8.6 Standardized mean number of children born to ever-married women aged 15–49 by area of residence by occupation of husband, 1976

<i>Occupation of husband</i>	<i>Area of residence</i>		
	<i>Urban</i>	<i>Rural</i>	<i>Marine</i>
Professional and technical workers	2.5	2.8	*
Administrative and managerial workers	2.7	3.7	0.0
Clerical workers	2.6	3.3	0.0
Sales workers	3.1	3.7	4.1
Service workers	3.0	3.6	4.7
Agricultural workers and fishermen	3.8	3.8	4.6
Production workers, transport equipment operators and labourers	3.2	3.7	4.5
Armed forces and unclassifiable	2.9	3.0	*

* base frequency of less than 200.

Standardized means were calculated to eliminate, to a large extent, the differences in marriage duration between social status groups for purposes of comparison.

These tables show that occupation of husband was a relatively less important factor affecting fertility. The association between the fertility behaviour of ever-married women and the occupation of their husbands largely disappeared within the same educational group or within the same area of residence. The association between marriage cohort fertility and area of residence remained significant after discounting the educational attainment of the women or the occupation of their husbands. Educational attainment seemed to be the most important factor among the three. Strong association between the educational attainment of the women and their fertility behaviour existed within each occupational group, and within each area of residence.

From this analysis it may be inferred that the higher the social status of ever-married women as indicated by their educational attainment, area of residence or occupation of their husbands, the fewer children they would produce. In saying this, it should be emphasized that cumulative fertility increased with duration of marriage. For this analysis, the ever-married women were stratified by three broad marriage cohorts only. Standardization based on these

broad groups of marriage duration could only eliminate, to a certain extent, the marriage duration differentials between them. Part of the effects due to these differentials would still exist after standardization. The actual range between the standardized means should be even narrower than those presented in the tables. The exact magnitude of this, however, could not be ascertained. The mean number of children ever-born so calculated is aimed at illustrating the social and geographical differentials in marriage cohort fertility and the association between fertility behaviour and the selected geographical and social variables. Since these variables and many others not identified in the analysis might be interrelated with one another, a causal relationship cannot be established.

6.9 Timing of the first birth

The different timing of the first birth for the three broad marriage cohorts (marriage duration of 5–9 years, 10–19 years and 20 years or more) is shown in Appendix Table 2.1. Those married for less than five years were excluded.

It appeared that the interval from first marriage to the first birth was comparatively shorter for the more recent marriage cohorts. 73% of the women who had been married for 5–9 years had their first child born within the first two years of marriage. The corresponding figures for those married 10–19 years and 20 years or more were 69% and 47% respectively. The proportion with no child born within the first five years of marriage also decreased notably over the three marriage cohorts. Less than 8% of the women in the most recent marriage cohort (marriage duration of 5–9 years) remained childless after five years of marriage, as compared with 24% of those married at least 20 years.

Age at first marriage had a significant bearing on the timing of the first birth. Based on the mean length of time from marriage to the first birth calculated for the different ages at first marriage within each marriage cohort, it is noted that delayed first births were generally associated with early marriages. The younger the women when married the longer they delayed the birth of the first child. Since there was an increasing trend towards delayed marriage over the past decades, the mean length of time from marriage to the first birth was significantly shortened for the more recent marriage cohorts.

6.10 Fertility in the first five years of marriage

Appendix Table 2.2 is compiled to show the differences in early marital fertility among women who had been married for at least five years between marriage cohorts. The table is further cross-classified by age at first marriage and educational attainment. Table 6.10.1 shows the mean number of children ever-born by age at first marriage and marriage cohort.

Table 6.10.1 Mean number of children ever-born within the first five years of marriage among all women married at least five years by years since first marriage by age at first marriage

Age at first marriage	Years since first marriage		
	5-9 years	10-19 years	20 years or more
Less than 15	1.5	1.2	0.5
15-17	1.8	1.8	1.2
18-19	1.9	1.9	1.4
20-21	1.9	1.9	1.6
22-24	1.8	1.9	1.7
25-29	1.7	1.9	1.7
30 or higher	1.3	1.6	—

There appeared to be a tendency for women to have children more quickly within the first five years after marriage. This is especially so among those married young.

Educational attainment also appeared to have an effect on the mean number of children ever-born in the first five years of marriage. Other than those with no formal education, the higher the educational attainment of ever-married women the fewer children they had given birth to in the first five years of marriage. This pattern is consistently seen for all ages at marriage. Comparisons between marriage cohorts indicate the same effect for those married less than 20 years; for those married 20 years or more, the differentials were unclear.

6.11 Fertility in the past five years

Information on the number of births during the past five years provides the basis for current fertility assessment. However, it is not intended to produce estimates of current fertility rates from the By-census retrospective data for the following reasons:

- (1) Adequate comprehensive information for the purpose of current fertility analysis has been available from vital statistics information system for the past eight years.
- (2) The data obtained retrospectively in the By-census are subject to both sampling error and non-sampling error such as age reporting error and memory lapse error.

- (3) Births to women who died during the past five years omitted.
- (4) Births to women currently aged 50 and older were excluded.
- (5) The age of mothers recorded in the By-census, which was the end of the 5-year period, did not relate to the actual age at which the births occurred.

For the current study, the pattern of current fertility and differentials between different social status groups are presented in Appendix Tables 2.16 to 2.21. As births in the past five years are studied, the tabulations are restricted to those currently married women who have been married for at least five years.

Appendix Table 2.16 shows the mean number of live births in the past five years by current age of the women and number of living children.

The mean number of live births decreased with increasing age; this holds for women with different numbers of living children. Among women in the same age group, the mean number of live births varied. Those having one or two children now living had fewer births in the past five years than those with three or more living children.

Appendix Table 2.17 shows the relationship between age at marriage and the number of children born in the past five years over different birth cohort of currently married women. The mean number of births during the past five years increased with age at marriage in all age groups.

Appendix Tables 2.19 to 2.21 are aimed at illustrating the differences in fertility among women with different social and geographical background characteristics.

Education and area of residence appeared to be the more important factors affecting recent fertility. Occupational differences were not very sharp. This pattern of differentials in current fertility was similar to that which was observed in the analysis of marriage cohort fertility.

Chapter 7

Survivorship of Children

Chapter 7

Survivorship of Children

7.1 Trends in infant mortality

The level of infant mortality in Hong Kong was very high (about 100 per thousand live births) up to the outbreak of the Second World War. After the War, the infant mortality rate showed a spectacular decline, falling from 91.8 per thousand in 1951 to 13.8 per thousand in 1976. The rate of decrease was most substantial during the 1950's and the early 1960's. Thereafter, the decline was more gradual; for some years, the rate has shown little significant change.

Table 7.1.1 Infant mortality rates, 1951–1976

<i>Year</i>	<i>Infant mortality rate (per 1,000 live births)</i>
1951	91.8
1952	77.1
1953	73.6
1954	72.4
1955	66.4
1956	60.9
1957	55.5
1958	54.2
1959	48.3
1960	41.5
1961	37.0
1962	36.8
1963	33.3
1964	26.8
1965	24.1
1966	25.1
1967	25.7
1968	23.2
1969	21.1
1970	19.3
1971	17.7
1972	17.4
1973	16.4
1974	16.8
1975	14.9
1976	13.8

Source: Vital Statistics, Hong Kong 1951–1976.

7.2 Mortality and family size

The effects of infant and child mortality on family size are summarised in Appendix Table 2.15.

For ever-married women currently aged under 30, the mean number of living children almost coincided with the mean number of children ever-born. For women above age 30, the two diverged. The mean number of deceased children increased rapidly with the age of mothers. This reflects the decline in infant and child mortality over the past 2½ decades on the one hand and the fact that the children of older women were born longer ago and had therefore been exposed to greater risk of death on the other.

7.3 Survivorship of children

Appendix Table 2.14 shows the cross-classification of number of children ever-born and number of children living by broad age group of ever-married women.

The figures seem to indicate that the number of living children and the number of children ever-born were inversely related to one another; the larger the number of children ever-born, the greater the proportion deceased.

However, no such pattern was found among women in the same age group. Thus, the overall relationship indicated in respect of all ever-married women is misleading. It conceals differences in the proportion of women in different age groups having different numbers of children ever-born and the fact that the older the women the more their children were exposed to the risk of death and the higher the mortality rate to which these children were subjected. Table 7.3.1 below compares the survivorship ratio of children among women in three broad age groups.

Table 7.3.1 Survivorship ratio of children by number of children ever-born by age of ever-married women, 1976

<i>No. of children ever-born</i>	<i>Current age of ever-married women</i>		
	<i>25-34</i>	<i>35-44</i>	<i>45 and over</i>
1	0.992	0.989	0.960
2	0.993	0.991	0.964
3	0.994	0.991	0.960
4	0.990	0.990	0.968
5	0.989	0.985	0.964
6	0.988	0.982	0.963
7	0.990	0.974	0.962
8	*	0.958	0.946

* base frequency of less than 200.

The survivorship ratio largely remained unchanged with the number of children ever-born for women in the same age group. Comparisons between birth cohorts of women indicate that survivorship of children increased over time; the younger the women, the higher the survivorship ratio. This again reflects the fact of historical decline in infant and child mortality.

Annex A

Family Planning in Hong Kong

Annex A

Family Planning in Hong Kong

A1 Introduction

The family planning programme in Hong Kong is the joint responsibility of the Medical and Health Department of the Hong Kong Government and the Government-subsented Family Planning Association (FPA). Prior to October 1973, the FPA was the only organization directly providing family planning services. With effect from October 1973, the Medical and Health Department commenced a three-phase operation to take over family planning clinics hitherto run by the FPA in 30 government clinics and 2 hospitals. The take-over exercise was successfully completed in 1974. By the end of 1976, a total of 40 clinics were operated by the Medical and Health Department and another 26 clinics were run by the FPA.

A2 Use of contraceptive

In 1976, 86,854 clients attended the clinics run by the Medical and Health Department and another 78,460 clients attended the FPA clinics. It is possible that a client might have been counted twice because she has attended both the Government clinic and the FPA clinic, but the extent of this duplication is considered to be minimal. Among the 165,314 clients, 60,333 (or 36%) were new clients. All these clients represented about 16% of the female population in the fertile age group 15–49. However, it must be pointed out that they did not represent the total proportion of women in the fertile ages practising family planning, there being an unknown number of women doing so through other private-sector supplies and services.

For clients attending family planning clinics, the usual contraceptive methods prescribed include the pill, IUD, injection, condom, diaphragm, sampooon tablet, jelly and foam, and sterilization. The following table shows the percentage distribution of the clients in 1976 by contraceptive method.

Table I Distribution of clients by contraceptive method, 1976

<i>Contraceptive method</i>	<i>Medical and Health Department clients</i>		<i>FPA clients</i>		<i>All clients</i>	
Pill	44,782	51.6%	46,593	59.4%	91,375	55.3%
IUD	3,612	4.2	6,790	8.7	10,402	6.3
Injection	2,791	3.2	2,539	3.2	5,330	3.2
Sterilization	387	0.4	177	0.2	564	0.3
Condom and other	35,282	40.6	22,361	28.5	57,643	34.9
Total	86,854	100.0	78,460	100.0	165,314	100.0

Source: Hong Kong Family Planning Association, Annual Report 1976 Family Planning Statistics, Medical and Health Department, Hong Kong 1976.

For the various methods, the pill has been most widely used, followed by condom (which accounted for the majority of the group 'condom and other methods').

A3 Social characteristics

The analyses given below are based on the information obtained from the clients attending the Medical and Health Department clinics in 1976.

(i) Age distribution

Table 1 shows the percentage distribution of the clients by age and contraceptive method used.

The proportion of the 'pill' clients was highest for the age group under 20 (72%); and it decreased with increasing age. However, the trend was reversed for the 'IUD' clients, with the highest proportion for the age group 45 and over.

(ii) Educational attainment

The relationship between educational attainment of the clients and contraceptive method used is presented in Table 2.

15% of the clients had no formal education; the corresponding proportion was much higher for the population at large (ever-married women aged 15–49). This seems to indicate that less educated people tend to be less inclined to adopt family planning.

Educational attainment appeared to have no significant bearing on the choice of contraceptive method. Nevertheless, apart from the group of 'no information', the proportion of 'IUD' and 'injection' users was highest among those with no formal education. On the other hand, the proportion of 'pill' users was highest among those with secondary education.

(iii) Occupation

Table 3 shows the percentage distribution of the clients by contraceptive method and occupation.

Since over three-quarters of the clients was housewives; the comparison of their choice of contraceptive method between occupations was not very relevant. Nevertheless, the table indicates that those with lower occupational status tended to use IUD more frequently than the others.

(iv) Aim of control

Table II below shows the percentage distribution of the clients by aim of control.

Table II Distribution of clients by aim of control, 1976

<i>Aim of control</i>	<i>Clients</i>	<i>Percentage</i>
Limiting	27,522	31.7
Spacing	59,276	68.2
Others	56	0.1
Total	86,854	100.0

Source: Family Planning Statistics, Medical and Health Department, Hong Kong 1976.

The majority of the clients sought family planning services for spacing of children; less than one-third for limiting family size.

Table 1 Percentage distribution of clients by age and contraceptive method used, 1976

<i>Current age</i>	<i>Contraceptive method</i>					<i>Total</i>	<i>Base frequency</i>
	<i>Pills</i>	<i>IUD</i>	<i>Injection</i>	<i>Condom and others</i>	<i>Steri-lization</i>		
15–19	71.7	0.2	0.1	28.0	0.0	100.0%	2,428
20–24	65.8	0.4	0.1	33.6	0.1	100.0%	18,305
25–29	60.0	1.4	0.3	38.0	0.3	100.0%	30,251
30–34	54.1	4.2	1.3	39.4	1.0	100.0%	14,031
35–39	42.5	8.6	5.6	42.7	0.6	100.0%	9,063
40–44	14.4	13.2	17.5	54.6	0.3	100.0%	8,245
45 & Over	5.4	14.8	11.8	67.9	0.1	100.0%	4,531
All	51.6	4.2	3.2	40.6	0.4	100.0%	86,854

Table 2 Percentage distribution of clients by contraceptive method and educational attainment, 1976

<i>Level of education</i>	<i>Contraceptive method</i>					<i>Total</i>	<i>Base frequency</i>
	<i>Pills</i>	<i>IUD</i>	<i>Injection</i>	<i>Condom and others</i>	<i>Steri-lization</i>		
No information	35.4	6.5	9.6	48.0	0.5	100.0%	444
No formal education	38.1	7.7	9.0	44.8	0.4	100.0%	13,112
Primary	53.7	3.8	2.7	39.3	0.5	100.0%	51,402
Secondary	55.4	2.7	0.9	40.9	0.1	100.0%	21,100
Post-secondary	46.5	4.3	0.6	48.6	0.0	100.0%	796
All	51.6	4.2	3.2	40.6	0.4	100.0%	86,854

Table 3 Percentage distribution of clients by contraceptive method and occupation, 1976

<i>Occupation</i>	<i>Contraceptive method</i>					<i>Total</i>	<i>Base frequency</i>
	<i>Pills</i>	<i>IUD</i>	<i>Injection</i>	<i>Condom and others</i>	<i>Steri- lization</i>		
No information	43.9	6.7	7.1	42.3	0.0	100.0%	581
Unemployed/housewife, no part-time work	52.3	3.8	2.9	40.6	0.4	100.0%	67,233
Part-time worker	38.1	8.2	6.8	46.0	0.9	100.0%	1,184
Professional and technological worker	50.9	3.5	0.9	44.6	0.1	100.0%	1,490
Clerical and sales	50.5	4.1	2.8	42.6	0.0	100.0%	2,637
Farmer and fisherfolk	44.8	4.8	11.9	38.5	0.0	100.0%	1,192
Transport and communication	57.4	5.3	3.2	34.1	0.0	100.0%	108
Craftsman and production worker	51.0	5.3	3.3	40.1	0.3	100.0%	8,723
Service, sports and recreation worker	48.8	7.2	4.5	39.3	0.2	100.0%	2,718
Miner, quarryman, armed forces and unclassified	48.2	6.4	4.6	40.8	0.0	100.0%	988
All	51.6	4.2	3.2	40.6	0.4	100.0%	86,854

Annex B

Summary of A Survey Report on Family Planning Knowledge, Attitude and Practice in Hong Kong, 1977

Annex B

Summary of A Survey Report on Family Planning Knowledge, Attitude and Practice in Hong Kong, 1977

B1 Introduction

In the year 1977, a survey on family planning knowledge, attitude and practice in Hong Kong was conducted by the Hong Kong Family Planning Association. The objectives of this survey were:

- (1) evaluation of the progress of the family planning movement in Hong Kong;
- (2) evaluation of the impact of the family planning programme on fertility level;
- (3) evaluation of the adequacy of current provision of family planning clinic services.

It was through the fulfilment of these objectives that information on topics such as 'preferences for number and sex of children' and 'knowledge and use of contraception' not covered in the 1976 By-census was collected. Although the KAP survey and the By-census differed in sample size, survey methodology, coverage and time reference period etc. and therefore can hardly be linked together, it is still hoped that the survey results will provide readers with a first insight into those fields not covered in the main body of this report. This section is a summary of some of the results. The survey in fact covered a wider field than; and produced additional valuable information to that actually included in this summary. Topics irrelevant to the WFS have been excluded. Needless to say, the survey report was written for its own purposes and was not tailor-made to suit the WFS requirements. Consequently some re-organization of the survey findings had to be made in preparing this summary to keep it roughly in line with the general guidelines.

B2 Survey methodology

The survey aimed at obtaining 1,200 successful interviews from currently married women aged 15–49 throughout Hong Kong in 1977. Those living on boats or in the remote areas of the New Territories were excluded in order to reduce the workload. Since a sampling frame of currently married women was not available, living quarters were selected instead, based on a distribution of all living quarters on land by Tertiary Planning Unit (TPU). It was estimated that 3,000 living quarters would have to be selected in order to secure 1,200 successful interviews. A stratified two-stage area sampling method was used. The TPUs were first grouped into 18 strata of roughly equal size (in terms of the number of living quarters). Following the principle of 'paired selection' without replacement, two TPUs were selected from each of the 18 strata with probability proportional to their sizes. From each selected TPU, living quarters were selected by systematic sampling.

The interviewer-questionnaire method was employed to obtain the necessary data. The number of living quarters sampled in the survey was 2,850 and the number of successful interviews was 1,550. These two figures represent a sampling fraction of 0.27% and a response rate of 93.4% respectively. The latter proportion is remarkably high for a social survey of this nature taking into consideration the public's prevailing attitudes towards home-interviews to which people have no obligation to respond.

B3 Representativeness of the sample

Compared with the estimate for the whole of Hong Kong in 1977, the sample gave a slight under-representation of the currently married women aged under 25 and an over-representation of those aged 45–49. This was possibly associated with the greater likelihood of the latter being found at home than the former.

The sample also slightly under-represented those with no formal education and also those with post-secondary education. These deviations, however, were considered to be too small to invalidate the sample results to any appreciable extent.

B4 Preference for number and sex of children

B4.1 Introduction

Having examined the objectives, methodology and representativeness of the survey, this and the subsequent sections are aimed at summarizing the main survey findings.

The success of a family planning programme requires, as a pre-requisite, the couples' general wish to limit family growth. The desire is generally reflected by indices such as ideal family size, proportions wanting no more children and, to some extent, preferences for male children. Changes in these measures are of crucial importance for estimating the community's potential demand for contraceptive services.

B4.2 Ideal family size

Respondents in the survey were asked how many children they would like to have in their lifetime if they could start all over again. The results are given in the following table.

Table I Percentage distribution of currently married women by age by ideal family size, 1977

<i>Age group</i>	<i>Ideal family size</i>					<i>Mean</i>
	<i>0-1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5 and over</i>	
15-24	11	64	21	3	1	2.1
25-29	10	58	23	6	3	2.3
30-34	10	50	22	16	3	2.7
35-39	3	50	27	15	4	2.7
40-44	3	40	29	20	8	2.9
45-49	5	36	25	25	9	2.9
Overall	7	49	25	15	5	2.6

Older women generally prefer more children than younger women. However, caution is required in interpreting the data on ideal family size obtained in a cross-sectional sample of women from different birth cohorts. Although the question clearly refers to a hypothetical situation in which they could start all over again, for women close to the end of their reproductive life-span, their answers to this question must, to some extent, be influenced by what has actually happened. For women more recently married, the data represent a long-term desire which might not be fulfilled.

Ideal family size also differed according to respondents' educational attainment; the higher the level of education the smaller the ideal family size.

Table II Mean ideal family size of currently married women by educational attainment, 1977

<i>Educational attainment</i>	<i>Mean ideal family size</i>
No formal education	3.2
Some primary school education	2.7
Complete primary school education	2.5
Some secondary school education	2.2
Complete secondary school education	2.1
Post-secondary school education	2.0
Overall	2.6

The relationship of educational attainment to respondents' ideal family size must, to a certain extent, reflect the close association between age and educational attainment. Isolation of their respective partial effects has not been attempted.

Despite these limitations, indications are that the desire for a two-child family has been generally established only among those in their early twenties and/or among those with post-secondary education.

B4.3 The desire to limit family size

Data on ideal family size reflect the general attitude towards having children in a hypothetical situation. It is more important to have data showing whether a woman desires more children or not in the present circumstances. Study of the proportion of women who do not want to have more children pinpoints the potential demand for contraceptive services. It is believed that *inter alia* a woman's age and the number of children she has had are the most important variables determining her desire to have or not to have more children.

Table III Percentage of currently married 'fecund' women wanting no more children by age, 1977

<i>Age group</i>	<i>Percentage wanting no more children</i>
15-24	29.3%
25-29	42.6
30-34	69.3
35-39	86.5
40-44	95.7
45-49	98.3
Overall	68.8

Table IV Percentage of currently married 'fecund' women wanting no more children by parity, 1977

<i>Parity</i>	<i>Percentage wanting no more children</i>
0	12.9%
1	29.1
2	70.9
3	90.9
4	94.9
5 or more	97.9
Overall	68.8

The proportion of currently married 'fecund' women who did not want more children increased sharply with age and parity. Conversely, 29% of the women with two children still wanted to have more. The corresponding proportions for those with three, four and five or more children were 9%, 5% and 2% respectively. This indicates that there is still a significant proportion of fertile couples who need motivation for a 'two-child-family' goal.

B4.4 Family sex composition and the desire to limit family size

Besides the genuine desire for a large family, it is suspected that a strong preference for a particular sex composition of their family may lead couples to desire more children when they have already had two. Such a preference may be judged by respondents' desired sex of their children yet to be born. The question 'what sex would you like your coming child to be' was directed to all currently married 'fecund' women who said that they wanted to have more children. Table V below illustrates the differentials by parity and sex-composition of living children.

Table V Percentage distribution of currently married 'fecund' women wanting more children by parity by sex-composition of living children, 1977

<i>Number of living children</i>	<i>Sex composition of living children</i>	<i>Desired sex of coming child</i>		<i>Doesn't matter</i>	<i>Base frequency</i>
		<i>Boy</i>	<i>Girl</i>		
0	Overall	23.5	21.2	55.3	85
1	Overall	36.1	44.9	19.0	147
	One boy	3.6	77.1	19.3	82
	One girl	75.8	4.5	19.7	65
2 or more	Overall	49.1	23.5	27.4	93
	No boy	85.2	0.0	14.8	27
	No girl	4.5	77.3	18.2	21
	One boy/one or more girls	48.9	11.1	40.0	45
	One girl/one or more boys	39.4	15.2	45.5	33
	Two or more boys	4.8	81.0	14.3	21
	Two or more girls	82.1	0.0	17.9	39
All currently married 'fecund' women wanting more children		36.5	32.5	31.0	325

Generally, there is a slight preference for boys. Such a preference, however, is not at all obvious among women of 0-1 parity. Over half of the zero-parity respondents did not bother about the sex of their first child. The desire for a 'one boy one girl' pattern was only obvious after women had their first child. Male preference became more pronounced for respondents of parity two or more. Although a desire for a 'mixed' pattern still prevailed, many more preferred boys to girls for practically all possible sex compositions of living children that they had. This suggests that the desire for more children was at least in part induced by the wish to attain a certain preferred family sex composition.

To carry the study further, all currently married 'fecund' women wanting more children were asked whether they would continue to try to have either a boy or a girl if the sex of their next child was not what they had wanted. 39.5% of those hoping the next child to be male reported that they would do so; the corresponding proportion for those hoping the next child to be female was 33.0%. These fairly high proportions are consistent with the findings indicated in section B4.3. In saying this, it should also be noted that 27.3% of these respondents was in fact of 0-1 parity. This might have induced them to continue family growth regardless of the sex of their next child.

B5 Knowledge and use of contraceptive methods

B5.1 Knowledge of contraceptive methods

The term contraception was readily understood by respondents with hardly any explanation. In order to assess their knowledge of contraceptive methods, each of them was asked:

- (a) to mention the names of as many as possible of the contraceptive methods that she could recall;

- (b) whether she had heard of the contraceptive methods which were read out from a pre-set list (methods mentioned by the respondent were not read out since they had clearly been heard of) and
- (c) whether she knew how to use them.

Information gathered from these questions is shown in the following two tables.

Table VI Knowledge of specific contraceptive methods, 1977

<i>Method</i>	<i>Self-mentioned</i>	<i>Heard of</i>	<i>Knew how to use</i>
Pill	86.5%	96.9%	78.1%
IUD	52.6%	91.1%	not asked
Vasectomy	16.8%	86.8%	
Female sterilization	32.8%	92.5%	
Injection	34.8%	81.4%	
Diaphragm/jelly	29.2%	75.2%	26.5%
Condom	48.3%	84.1%	55.3%
Rhythm	22.1%	74.0%	39.0%
Post-coitus douche	1.7%	25.2%	8.8%
Coitus interruptus	2.3%	31.7%	16.4%
Foaming tablets (spermicide)	16.5%	45.0%	26.3%

Table VII Percentage distribution of currently married women by (a) number of methods mentioned, (b) number of methods heard of and (c) number of methods the operation of which was known to them, 1977

<i>No. of contraceptive methods</i>	<i>Self-mentioned</i>	<i>Heard of</i>	<i>Knew how to use</i>
0	5.9	1.2	9.0
1	11.2	1.4	21.5
2	16.3	1.4	20.5
3	19.4	1.4	14.0
4	18.6	3.9	13.5
5 or more	28.3	90.4	20.3
NA*	0.3	0.3	0.3
Total	100.0	100.0	100.0
Base frequency	1,550	1,550	1,550

* referring to those born infecund.

Knowledge of contraceptive methods is almost universal in Hong Kong. Almost all currently married women had heard of the pill, IUD, female sterilization, vasectomy and condom. Over 78% and 55% of them knew how to use the pill and condom, respectively. Traditional methods such as post-coitus douche and coitus interruptus were comparatively less well known.

Widespread knowledge of contraception was reflected in the very large proportions of respondents who were able to mention, who had heard of five or more contraceptive methods. The proportion of those who claimed to be able to 'use' the methods is equally impressive: almost 70% claimed that they knew how to use two or more methods.

B5.2 Ever-users of contraception

Contraceptive practice is also very common in Hong Kong. 87.5% of all currently married women reported that they had used at least one method of contraception at sometime in their lives. There are some significant variations in the level of contraceptive practice between age groups. The level of practice was highest in the middle age group 30–39, then gradually decreasing towards both ends of the reproductive age-span.

Table VIII Age-specific rates of contraceptive practice of ever-users, 1977

<i>Age group</i>	<i>Percentage</i>
15–24	78.0
25–29	90.7
30–34	95.8
35–39	95.5
40–44	89.9
45–49	73.9
Overall	87.5

Table IX illustrates the relationship between contraceptive practice and number of pregnancies by age of women.

Table IX Percentage distribution of ever-users of contraception by pregnancy level at which they first started practising, 1977

<i>Age group</i>	<i>Before the 1st pregnancy</i>	<i>After the 1st pregnancy</i>	<i>After the 2nd pregnancy</i>	<i>After the 3rd pregnancy</i>
15–24	27	59	13	1
25–29	21	50	24	5
30–34	10	34	31	25
35–39	4	20	32	44
40–44	2	16	19	63
45–49	1	9	14	76
Overall	10	30	23	37

The tendency has been for ever-users of contraception to start practising at low pregnancy levels. The younger the women the higher the tendency, which could be related to the close association between age and parity order.

Among the remaining 12.5% who were never-users of contraception, about half still wanted more children and about one-third considered that they had no need of contraception. Slightly more than one-quarter of them had no knowledge of contraception or was afraid of side effects. Very few of them actually disapproved of the use of contraception.

B5.3 Current-users of contraception

71% of all currently married women was practising family planning at the time of the survey. This included 18.3% who had been sterilized for contraceptive reasons. Again, current rates of contraceptive practice varied with the age of the users. Much lower rates were found in the youngest and oldest age groups, and the highest rate occurred in the age group 35 – 39. The relatively low current practice rates among those in the younger age groups is to be expected since a significant proportion of them had not yet attained their desired family size. It was found that 35.8% and 22.4% of those in the age groups 15 – 24 and 25 – 29 wanted to have more children regardless of the number they already had.

Table X Age-specific rates of contraceptive practice of current-users by practising status, 1977

<i>Age group</i>	<i>Practising status</i>		
	<i>For spacing</i>	<i>For limiting*</i>	<i>Total (including unknown)</i>
15–24	25.1	24.5	56.6
25–29	24.3	43.6	72.9
30–34	8.7	70.5	83.7
35–39	4.9	81.3	87.9
40–44	0.0	79.1	80.2
45–49	0.0	49.2	49.2
Overall	9.8	59.1	71.9

* Including those who had been sterilized (either the woman or her husband) for contraceptive reasons.

The level of current contraceptive practice is influenced by a number of social and economic variables many of which are interrelated. The following table illustrates the differentials by selected socio-economic variables.

Table XI Differentials in current practice rates by selected socio-economic variables, 1977

(A) By parity:

<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5 or more</i>	<i>Overall</i>
24.3	62.8	80.2	83.8	77.4	71.8	71.9

(B) By level of education:

<i>No formal education</i>	<i>Some primary</i>	<i>Complete primary</i>	<i>Secondary</i>	<i>Post secondary</i>	<i>Overall</i>
57.8	76.2	76.0	73.9	82.1	71.9

(C) By working status:

<i>Housewife</i>	<i>Full-time</i>	<i>Working wife Part-time at home</i>	<i>Part-time outdoor</i>	<i>Overall</i>
71.2	73.2	72.3	70.9	71.9

Table XI Differentials in current practice rates by selected socio-economic variables, 1977
continued

(D) By area of residence:

<i>Hong Kong Island</i>	<i>Kowloon</i>	<i>New Kowloon</i>	<i>New Territories</i>	<i>Overall</i>
75.1	70.6	71.3	71.1	71.9

To varying degrees, these practice rate differentials can be explained by age differentials existing in the various sub-groups of the users.

B5.4 Methods used by current-users

The following table shows the contraceptive methods used by current-users.

Table XII Percentage distribution of current-users by method used, 1977

<i>Age group</i>	<i>Pill</i>	<i>IUD</i>	<i>In- jection</i>	<i>Sterili- zation</i>	<i>Condom</i>	<i>Spermi- cide/ dia- phragm</i>	<i>Rhythm</i>	<i>Other tradi- tional methods</i>
15-24	71	0	3	1	21	0	3	0
25-29	46	2	3	13	21	5	9	1
30-34	35	1	3	29	15	4	11	1
35-39	26	5	1	34	17	7	10	1
40-44	20	6	4	28	17	9	14	2
45-49	9	6	5	42	15	10	12	1
Overall	32	4	3	26	18	6	11	1

Of the methods currently in use, the most popular ones are the pill followed by sterilization. These two methods accounted for 32% and 26% of all current-users. The pill was mainly used by the younger women, ranging from 71% among those aged 15-24 to only 9% among those aged 45-49. The reverse applies to sterilization which was more commonly used by women in the older age groups.

B5.5 Source of contraceptive supply

Not all current-users of contraception are programme users (i.e. those obtaining services from clinics of the Hong Kong Family Planning Association or the Government MCH Centres). 54.5% of non-sterilized current-users was using traditional methods or practising through other private-sector supplies and services. The proportion of these 'non-programme' users was found to differ significantly between age groups. Details are shown in Table XIII below.

Table XIII Percentage distribution of non-sterilized current-users by source of contraceptive supplies, 1977

<i>Age group</i>	<i>Programme users</i>	<i>Private doctor</i>	<i>Non-programme users obtaining supplies from</i>			<i>Sum</i>	<i>All users</i>
			<i>Drug store</i>	<i>Other institution</i>	<i>need no appliance</i>		
15-24	61.4	6.8	26.1	2.3	3.4	38.6	100.0
25-29	55.9	8.9	23.8	0.0	11.4	44.1	100.0
30-34	41.7	12.8	29.5	0.0	16.0	58.3	100.0
35-39	36.9	5.4	39.2	3.1	15.4	63.1	100.0
40-44	36.7	5.1	36.7	0.0	21.5	63.3	100.0
45-49	40.7	8.1	26.7	1.2	23.3	59.3	100.0
Overall	45.5	8.0	30.4	0.9	15.2	54.5	100.0

It appears that the organized family planning programme generally attracts the younger women. The non-programme users practised contraception mainly through obtaining supplies or appliances from drug-stores or relying on traditional methods. Only a small proportion of them, mainly in the age group 25-34, consulted private doctors.

Appendix A

Statistical Tables

Table 1.1 Age at first marriage according to current age, for all ever-married women

Current age	Age at first marriage								All
	<15	15-17	18-19	20-21	22-24	25-29	30+	Unknown	
15-19	670	5,960	3,190	—	—	—	—	200	10,020
20-24	640	8,410	19,060	22,630	14,410	—	—	370	65,520
25-29	1,140	9,370	18,180	27,110	46,090	21,530	—	350	123,770
30-34	1,150	7,710	13,450	16,120	23,640	18,550	2,200	230	83,050
35-39	2,330	10,140	17,800	17,960	22,170	19,230	5,580	280	95,490
40-44	3,780	16,080	21,520	20,820	23,910	19,130	7,100	270	112,610
45-49	3,250	17,210	25,690	21,110	18,970	15,570	7,210	370	109,380
15-49	12,960	74,880	118,890	125,750	149,190	94,010	22,090	2,070	599,840

Table 1.2 All ever-married women classified according to their year of birth and age at first marriage

Age at first marriage	Year of birth									
	1926	1927	1928	1929	1930	1931	1932	1933	1934	
<10	10	90	80	90	60	130	60	70	70	
11	20	60	80	160	20	160	50	120	60	
12	70	40	100	130	60	50	70	170	120	
13	80	170	180	120	150	180	160	180	160	
14	240	230	260	230	240	380	260	290	360	
15	400	580	420	510	730	650	610	470	520	
16	620	920	860	1,120	1,130	1,130	1,190	1,220	980	
17	1,160	1,520	2,120	1,710	2,020	2,020	1,930	1,760	1,300	
18	1,000	1,780	2,530	2,330	2,650	2,600	2,350	2,030	1,940	
19	1,790	2,340	3,120	2,550	2,840	2,950	2,130	2,300	2,340	
20	720	1,890	2,860	2,330	2,610	2,510	2,000	2,010	2,200	
21	960	1,650	2,180	1,590	1,850	1,820	1,970	1,830	2,270	
22	630	1,450	1,500	1,420	1,590	1,590	1,620	1,820	2,090	
23	560	1,180	1,340	1,100	1,180	1,270	1,460	1,660	1,400	
24	610	870	1,320	970	1,230	1,390	1,440	1,240	1,300	
25	490	590	850	920	1,190	1,120	980	1,090	1,000	
26	300	570	640	660	920	860	980	820	1,040	
27	280	330	550	680	670	710	780	760	800	
28	190	390	520	460	600	700	630	500	670	
29	260	340	430	320	390	400	400	420	500	
30	80	250	280	300	370	370	360	390	420	
31	110	200	230	280	160	210	280	220	270	
32	130	180	170	150	220	280	230	130	270	
33	50	140	170	160	160	100	140	200	120	
34	60	80	140	110	140	150	180	160	90	
35	70	30	110	50	80	120	80	100	40	
36	30	80	80	30	40	70	60	40	100	
37	20	10	80	70	40	80	30	80	80	
38	10	40	30	30	40	70	10	30	20	
39	20	80	50	80	70	30	10	20	20	
40	30	30	40	30	30	30	40	40	30	
41	0	30	10	20	30	40	30	60	10	
42	10	40	20	10	0	10	50	0	0	
43	30	30	20	30	30	30	10	0	—	
44	0	30	30	0	10	10	10	—	—	
45	30	30	20	0	10	0	—	—	—	
46	10	0	10	0	0	—	—	—	—	
47	10	20	10	0	—	—	—	—	—	
48	0	10	0	—	—	—	—	—	—	
49	0	10	—	—	—	—	—	—	—	
All	11,090	18,310	23,440	20,750	23,560	24,220	22,590	22,230	22,590	

Table 1.2 All ever-married women classified according to their year of birth and age at first marriage
continued

<i>Age at first marriage</i>	<i>Year of birth</i>								
	1935	1936	1937	1938	1939	1940	1941	1942	1943
≤ 10	50	110	40	20	60	80	40	20	80
11	110	50	100	100	120	70	10	20	10
12	90	80	160	80	40	50	70	20	40
13	60	310	110	70	70	70	0	10	30
14	220	270	160	190	130	110	190	80	130
15	440	450	360	440	380	310	180	210	180
16	930	730	540	580	590	570	520	460	490
17	1,240	1,170	1,280	1,380	950	1,000	600	740	790
18	1,700	2,180	1,580	2,060	1,430	1,270	1,280	1,220	1,130
19	1,840	2,590	2,210	2,180	1,440	1,730	1,500	1,500	1,090
20	2,050	2,670	2,020	1,870	1,610	1,590	1,690	1,350	1,370
21	1,860	2,340	1,860	2,020	1,660	1,450	1,440	1,350	1,460
22	1,670	1,950	1,540	1,730	1,400	1,610	1,250	1,420	1,590
23	1,420	1,840	1,460	1,600	1,460	1,370	1,430	1,330	1,530
24	1,490	1,910	1,270	1,560	1,200	1,320	1,320	1,190	1,110
25	1,330	1,420	1,200	1,060	1,250	1,110	970	1,020	1,160
26	940	1,210	990	1,020	740	1,100	820	830	750
27	580	790	650	730	630	690	510	630	650
28	340	550	540	610	640	580	450	450	540
29	390	520	510	490	370	440	420	320	310
30	280	370	260	290	360	350	250	220	190
31	170	300	260	260	210	100	240	100	230
32	150	230	140	220	180	200	110	190	60
33	120	160	90	140	80	100	150	60	50
34	110	180	120	120	100	110	20	50	—
35	50	30	60	70	80	100	10	—	—
36	30	80	100	50	50	10	—	—	—
37	90	80	60	70	20	—	—	—	—
38	30	70	60	10	—	—	—	—	—
39	0	20	0	—	—	—	—	—	—
40	10	20	—	—	—	—	—	—	—
41	0	—	—	—	—	—	—	—	—
42	—	—	—	—	—	—	—	—	—
43	—	—	—	—	—	—	—	—	—
44	—	—	—	—	—	—	—	—	—
45	—	—	—	—	—	—	—	—	—
46	—	—	—	—	—	—	—	—	—
47	—	—	—	—	—	—	—	—	—
48	—	—	—	—	—	—	—	—	—
49	—	—	—	—	—	—	—	—	—
All	19,790	24,680	19,730	21,020	17,250	17,490	15,470	14,790	14,970

Table 1.2 All ever-married women classified according to their year of birth and age at first marriage
continued

Age at first marriage	Year of birth								
	1944	1945	1946	1947	1948	1949	1950	1951	1952
≤10	10	30	40	20	40	40	20	10	10
11	10	10	0	10	40	0	10	0	20
12	30	10	30	20	20	20	10	10	20
13	30	30	10	40	20	50	50	60	0
14	130	150	130	100	160	120	130	140	90
15	270	280	280	230	320	320	240	150	220
16	460	580	710	470	660	560	630	330	500
17	840	890	960	940	1,300	940	910	900	830
18	1,190	1,160	1,340	1,720	1,570	1,600	1,760	1,430	1,570
19	1,540	1,630	2,020	2,040	2,090	2,210	1,980	2,010	2,190
20	1,750	1,690	2,240	2,380	2,510	2,510	2,780	2,780	2,830
21	1,970	1,690	2,170	2,710	2,830	2,740	3,150	3,160	3,530
22	1,660	1,820	2,760	2,520	3,390	3,270	3,480	3,340	3,330
23	1,780	1,560	2,170	2,640	3,270	3,430	3,710	3,200	2,640
24	1,490	1,820	2,010	2,600	2,900	3,040	3,340	2,290	840
25	1,050	1,120	1,850	2,230	2,350	2,310	1,840	870	—
26	1,050	1,080	1,540	1,710	2,150	1,360	480	—	—
27	810	740	1,000	1,280	990	460	—	—	—
28	470	450	720	600	220	—	—	—	—
29	330	340	400	260	—	—	—	—	—
30	280	140	60	—	—	—	—	—	—
31	170	80	—	—	—	—	—	—	—
32	60	—	—	—	—	—	—	—	—
33	—	—	—	—	—	—	—	—	—
34	—	—	—	—	—	—	—	—	—
35	—	—	—	—	—	—	—	—	—
36	—	—	—	—	—	—	—	—	—
37	—	—	—	—	—	—	—	—	—
38	—	—	—	—	—	—	—	—	—
39	—	—	—	—	—	—	—	—	—
40	—	—	—	—	—	—	—	—	—
41	—	—	—	—	—	—	—	—	—
42	—	—	—	—	—	—	—	—	—
43	—	—	—	—	—	—	—	—	—
44	—	—	—	—	—	—	—	—	—
45	—	—	—	—	—	—	—	—	—
46	—	—	—	—	—	—	—	—	—
47	—	—	—	—	—	—	—	—	—
48	—	—	—	—	—	—	—	—	—
49	—	—	—	—	—	—	—	—	—
All	17,380	17,300	22,440	24,520	26,830	24,980	24,520	20,680	18,620

Table 1.2 All ever-married women classified according to their year of birth and age at first marriage
continued

Age at first marriage	Year of birth									All
	1953	1954	1955	1956	1957	1958	1959	1960	1961	
<10	10	10	0	0	20	0	0	0	0	1,420
11	10	0	20	0	10	20	0	0	0	1,480
12	10	10	10	0	10	0	20	30	0	1,700
13	10	20	20	10	30	10	10	0	0	2,510
14	40	80	100	120	120	140	80	50	0	5,850
15	250	240	220	340	280	270	110	80	30	11,970
16	390	500	530	640	680	700	290	30	—	23,240
17	890	1,010	1,180	1,170	1,180	810	230	—	—	39,670
18	1,590	1,450	1,650	1,750	1,040	310	—	—	—	54,190
19	2,050	2,230	2,480	1,360	430	—	—	—	—	64,700
20	2,770	2,490	1,790	570	—	—	—	—	—	64,440
21	2,940	1,990	870	—	—	—	—	—	—	61,310
22	1,990	860	—	—	—	—	—	—	—	56,290
23	840	—	—	—	—	—	—	—	—	49,830
24	—	—	—	—	—	—	—	—	—	43,070
25	—	—	—	—	—	—	—	—	—	32,370
26	—	—	—	—	—	—	—	—	—	24,560
27	—	—	—	—	—	—	—	—	—	16,700
28	—	—	—	—	—	—	—	—	—	11,820
29	—	—	—	—	—	—	—	—	—	8,560
30	—	—	—	—	—	—	—	—	—	5,870
31	—	—	—	—	—	—	—	—	—	4,080
32	—	—	—	—	—	—	—	—	—	3,300
33	—	—	—	—	—	—	—	—	—	2,190
34	—	—	—	—	—	—	—	—	—	1,920
35	—	—	—	—	—	—	—	—	—	1,080
36	—	—	—	—	—	—	—	—	—	850
37	—	—	—	—	—	—	—	—	—	810
38	—	—	—	—	—	—	—	—	—	450
39	—	—	—	—	—	—	—	—	—	400
40	—	—	—	—	—	—	—	—	—	330
41	—	—	—	—	—	—	—	—	—	230
42	—	—	—	—	—	—	—	—	—	140
43	—	—	—	—	—	—	—	—	—	180
44	—	—	—	—	—	—	—	—	—	90
45	—	—	—	—	—	—	—	—	—	90
46	—	—	—	—	—	—	—	—	—	20
47	—	—	—	—	—	—	—	—	—	40
48	—	—	—	—	—	—	—	—	—	10
49	—	—	—	—	—	—	—	—	—	10
All	13,790	10,890	8,870	5,960	3,800	2,260	740	190	30	597,770†

† Excluding 2,070 ever-married women of unknown age at first marriage.

Table 1.3 Mean age at first marriage of ever-married women married before age 25, according to current age and level of education

Current age	Level of education				
	Lower than primary	Primary	Secondary	University	All
25–29	20.3	21.0	21.9	23.0	21.3
30–34	19.9	20.7	21.6	22.8	20.9
35–39	19.9	20.4	21.2	22.2	20.4
40–44	19.8	20.1	20.6	22.1	20.1
45–49	19.7	19.8	20.4	21.2	19.8
25–49	19.8	20.5	21.5	22.5	20.5

Table 1.4 Mean age at first marriage of ever-married women married before age 25, according to current age and occupation of husband

Current age	Occupation of husband							
	Armed forces and occupation not classifiable	Professional technical and related workers	Administrative and managerial workers	Clerical and related workers	Sales workers	Service workers	Agricultural, animal husbandry and forestry workers and fishermen	Production and related workers, transport equipment operators and labourers
25–29	20.8	22.2	21.9	21.9	21.4	21.1	20.4	21.2
30–34	20.4	21.9	21.6	21.6	20.7	20.6	18.9	20.8
35–39	19.9	21.6	21.1	21.1	20.5	20.2	19.6	20.4
40–44	19.5	20.6	20.7	20.5	20.1	20.1	19.2	20.2
45–49	20.4	20.3	20.1	19.9	19.7	20.2	19.6	19.9
25–49	19.8	21.6	21.2	21.2	20.4	20.4	19.5	20.6

† Including unknown occupation of husband.

Table 1.5 Percentage of ever-married women in each marital status, according to years since first marriage within categories of current age

	Current marital status			
	Married	Widowed	Divorced/ separated	All
Panel 1: Current age 15–24				
Years since 1st Marriage				
<5	99.7	0.1	0.2	100.0
5–9	98.6	0.2	1.2	100.0
10–14	100.0	0.0	0.0	100.0
15+	0.0	0.0	0.0	0.0
All†	99.6	0.1	0.3	100.0
Panel 2: Current age 25–34				
Years since 1st Marriage				
<5	99.6	0.2	0.2	100.0
5–9	99.3	0.3	0.4	100.0
10–14	99.0	0.5	0.5	100.0
15–19	98.4	0.9	0.7	100.0
20–24	98.1	1.9	• •	100.0
25–29	*	*	*	*
30+	0.0	0.0	0.0	0.0
All†	99.3	0.3	0.4	100.0
Panel 3: Current age 35–44				
Years since 1st marriage				
<5	99.3	0.0	0.7	100.0
5–9	98.7	1.0	0.3	100.0
10–14	98.4	1.1	0.5	100.0
15–19	97.1	2.1	0.8	100.0
20–24	96.5	2.7	0.8	100.0
25–29	95.0	4.4	0.6	100.0
30–34	98.9	1.1	0.0	100.0
35+	*	*	*	*
All†	97.1	2.2	0.7	100.0

† Including ever-married women of unknown years since first marriage.

Table 1.5 Percentage of ever-married women in each marital status, according to years since first marriage within categories of current age *continued*

	Current marital status			
	Married	Widowed	Divorced/ separated	All
Panel 4: Current age 45+				
Years since 1st marriage				
<5	94.6	5.4	0.0	100.0
5–9	96.7	2.2	1.1	100.0
10–14	98.4	0.8	0.8	100.0
15–19	95.7	3.6	0.7	100.0
20–24	95.3	3.8	0.9	100.0
25–29	92.0	6.9	1.1	100.0
30–34	92.2	6.8	1.0	100.0
35+	95.2	4.8	0.0	100.0
All†	93.3	5.7	1.0	100.0
Panel 5: All ages				
Years since 1st marriage				
<5	99.7	0.1	0.2	100.0
5–9	99.1	0.4	0.5	100.0
10–14	98.8	0.7	0.5	100.0
15–19	97.1	2.1	0.8	100.0
20–24	96.2	3.0	0.8	100.0
25–29	93.0	6.1	0.9	100.0
30–34	92.7	6.4	0.9	100.0
35+	95.2	4.8	0.0	100.0
All†	97.5	1.9	0.6	100.0

† Including ever-married women of unknown years since first marriage.

Table 1.6 Percentage of ever-married women who were currently married, according to level of education, years since first marriage and within categories of current age

	<i>Level of education</i>				
	<i>Lower than primary</i>	<i>Primary</i>	<i>Secondary</i>	<i>University</i>	<i>All</i>
Panel 1: Current age 15–24					
Years since 1st marriage					
<5	100.0	99.7	99.8	98.6	99.7
5–9	100.0	98.6	98.1	0.0	98.6
10–14	*	*	*	*	*
15+	0.0	0.0	0.0	0.0	0.0
All†	100.0	99.5	99.6	98.7	99.6
Panel 2: Current age 25–34					
Years since 1st marriage					
<5	100.0	99.5	99.7	99.3	99.6
5–9	99.5	99.6	98.8	99.2	99.3
10–14	98.5	99.2	99.1	100.0	99.0
15–19	99.0	99.0	96.0	*	98.4
20–24	*	97.1	*	*	98.2
25–29	*	0.0	0.0	0.0	*
30+	0.0	0.0	0.0	0.0	0.0
All†	99.1	99.4	99.1	99.3	99.3
Panel 3: Current age 35–44					
Years since 1st marriage					
<5	100.0	99.2	99.1	*	99.3
5–9	97.6	98.8	99.1	98.5	98.7
10–14	97.3	99.0	98.6	97.5	98.4
15–19	96.9	97.3	96.7	96.6	97.1
20–24	96.6	96.4	97.4	88.1	96.5
25–29	95.6	94.7	93.4	*	95.1
30–34	100.0	96.7	*	*	98.9
35+	*	0.0	0.0	0.0	*
All†	96.7	97.2	97.6	96.8	97.1

† Including ever-married women of unknown years since first marriage.

Table 1.6 Percentage of ever-married women who were currently married, according to level of education, years since first marriage and within categories of current age *continued*

	Level of education				
	Lower than primary	Primary	Secondary	University	All
Panel 4: Current age 45+					
Years since 1st marriage					
<5	*	*	*	*	94.6
5–9	*	96.2	100.0	*	96.7
10–14	97.8	99.1	100.0	*	98.4
15–19	95.3	97.3	93.0	95.5	95.7
20–24	95.2	95.0	96.1	97.4	95.3
25–29	92.2	91.8	91.9	94.4	92.1
30–34	92.9	90.8	93.4	*	92.2
35+	94.2	95.5	*	*	95.2
All†	93.3	93.0	94.0	95.7	93.3
Panel 5: All ages					
Years since 1st marriage					
<5	99.9	99.6	99.7	99.2	99.7
5–9	99.2	99.3	98.8	99.0	99.1
10–14	97.9	99.1	98.9	97.7	98.8
15–19	96.9	97.5	96.3	96.5	97.1
20–24	96.2	96.1	97.0	92.6	96.2
25–29	93.3	92.8	92.3	95.1	93.0
30–34	93.5	91.2	94.1	*	92.7
35+	94.3	95.5	*	*	95.2
All†	96.0	97.7	98.5	98.0	97.5

† Including ever-married women of unknown years since first marriage.

Table 1.7 Percentage of ever-married women who were currently married, according to area of residence, years since first marriage and within categories of current age

	<i>Area of residence</i>			
	<i>Urban</i>	<i>Rural</i>	<i>Marine</i>	<i>All</i>
Panel 1: Current age 15–24				
Years since 1st marriage				
< 5	99.8	99.6	100.0	99.7
5–9	98.5	99.3	*	98.6
10–14	*	*	0.0	100.0
15+	0.0	0.0	0.0	0.0
All†	99.6	99.5	100.0	99.6
Panel 2: Current age 25–34				
Years since 1st marriage				
< 5	99.6	100.0	100.0	99.6
5–9	99.3	99.3	100.0	99.3
10–14	99.0	98.8	100.0	99.0
15–19	98.3	98.9	100.0	98.4
20–24	97.8	*	100.0	98.1
25+	0.0	*	0.0	*
All†	99.3	99.3	100.0	99.3
Panel 3: Current age 35–44				
Years since 1st marriage				
< 5	99.3	*	0.0	99.3
5–9	98.7	100.0	0.0	98.7
10–14	98.5	97.9	*	98.4
15–19	97.1	96.6	100.0	97.1
20–24	96.4	97.4	99.2	96.5
25–29	94.8	97.3	96.0	95.1
30–34	98.8	100.0	*	98.9
35+	*	0.0	0.0	*
All†	97.0	97.4	98.8	97.1
Panel 4: Current age 45+				
Years since 1st marriage				
< 5	94.6	0.0	0.0	94.6
5–9	96.6	*	0.0	96.7
10–14	98.3	*	0.0	98.4
15–19	96.3	88.5	*	95.7
20–24	95.3	94.0	100.0	95.3
25–29	92.0	92.3	91.8	92.1
30–34	91.8	96.1	94.6	92.2
35+	94.1	100.0	*	95.2
All†	93.3	93.7	93.7	93.3
Panel 5: All ages				
Years since 1st marriage				
< 5	99.7	99.7	100.0	99.7
5–9	99.1	99.3	100.0	99.1
10–14	98.8	98.6	100.0	98.8
15–19	97.1	96.2	99.0	97.1
20–24	96.1	96.7	99.3	96.2
25–29	92.9	94.1	93.7	93.0
30–34	92.4	96.7	94.9	92.7
35+	94.2	100.0	*	95.2
All†	97.4	97.5	98.4	97.5

† Including ever-married women of unknown years since first marriage.

Table 2.1 Percentage of women with specified intervals from first marriage to first birth, within categories of years since first marriage and age at first marriage, for all women married at least five years

	Interval from first marriage to first birth					Mean length in years	% With no child in 5 years
	Less than 1 year	1 Year to less than 2 years	2 Years to less than 3 years	3 Years to less than 4 years	4 Years to less than 5 years		
Panel 1:							
Years since 1st marriage: 5–9							
Age at 1st marriage							
< 15	22.7	36.4	12.1	6.1	3.0	1.6	19.7
15–17	36.2	38.3	12.5	4.6	2.2	1.5	6.2
18–19	37.9	38.1	11.6	4.8	2.5	1.5	5.1
20–21	35.0	41.6	12.8	3.8	1.5	1.5	5.3
22–24	31.1	42.8	12.1	4.8	2.5	1.6	6.7
25–29	31.5	38.7	12.5	6.1	2.7	1.6	8.5
30+	28.4	29.2	11.0	3.4	3.1	1.5	24.9
All	33.3	39.9	12.2	4.7	2.3	1.5	7.6
Panel 2:							
Years since 1st marriage: 10–19							
Age at 1st marriage							
< 15	12.1	23.7	14.2	10.1	3.0	2.0	36.9
15–17	27.6	35.1	16.6	6.5	3.3	1.7	10.9
18–19	33.5	35.9	14.1	5.5	3.5	1.6	7.5
20–21	35.2	35.4	12.7	5.2	3.6	1.6	7.9
22–24	36.2	36.5	12.7	4.4	2.7	1.5	7.5
25–29	36.7	34.3	12.5	4.5	2.5	1.5	9.5
30+	34.3	28.9	11.4	5.2	3.2	1.5	17.0
All	34.4	35.0	13.2	5.1	3.1	1.5	9.2
Panel 3:							
Years since 1st marriage: 20+							
Age at 1st marriage							
< 15	4.4	8.7	5.7	5.5	6.2	2.5	69.5
15–17	15.2	19.2	15.5	10.4	7.9	2.2	31.8
18–19	22.9	24.5	15.5	9.5	6.6	1.9	21.0
20–21	28.1	26.6	14.9	8.2	5.0	1.8	17.2
22–24	32.0	28.6	14.4	7.1	4.3	1.7	13.6
25–29	34.9	26.3	12.5	6.8	3.6	1.6	15.9
30+	—	—	—	—	—	—	—
All	23.4	23.7	14.5	8.7	6.0	1.9	23.7
Panel 4:							
Years since 1st marriage: All†							
Age at 1st marriage							
< 15	6.7	12.6	7.4	6.3	5.5	2.3	61.5
15–17	20.9	25.6	15.4	8.7	6.1	1.9	23.3
18–19	28.7	30.3	14.4	7.5	5.0	1.7	14.1
20–21	32.3	33.5	13.6	6.1	3.6	1.6	10.9
22–24	33.5	36.3	13.0	5.2	3.1	1.6	8.9
25–29	35.0	34.3	12.5	5.3	2.7	1.5	10.2
30+	31.9	29.0	11.3	4.5	3.1	1.5	20.2
All	29.9	31.7	13.5	6.4	4.0	1.7	14.5

† Including ever-married women of unknown years since first marriage.

Table 2.2 Mean number of children born within first five years of marriage, among all women married at least five years, according to level of education, age at first marriage and within categories of years since first marriage

	<i>Level of education</i>			
	<i>Lower than primary</i>	<i>Primary</i>	<i>Secondary</i>	<i>University</i>
Panel 1: Years since first marriage: 5–9				
Age at 1st marriage				
< 15	0.8	1.6	1.6	0.0
15–17	1.7	1.9	1.7	0.0
18–19	2.0	2.0	1.7	1.2
20–21	2.1	2.0	1.7	1.3
22–24	2.1	1.9	1.6	1.3
25–29	1.7	1.9	1.5	1.4
30+	1.3	1.4	1.2	1.1
All	1.8	1.9	1.6	1.3
Panel 2: Years since first marriage: 10–19				
Age at 1st marriage				
< 15	1.1	1.3	1.1	0.5
15–17	1.8	1.9	1.7	1.5
18–19	2.0	2.0	1.7	1.5
20–21	1.9	2.0	1.8	1.3
22–24	2.0	2.0	1.7	1.4
25–29	2.0	1.9	1.7	1.4
30+	1.7	1.6	1.4	1.3
All	1.9	2.0	1.7	1.4
Panel 3: Years since first marriage; 20+				
Age at 1st marriage				
< 15	0.4	0.5	0.7	0.0
15–17	1.1	1.2	1.4	1.0
18–19	1.3	1.5	1.7	1.8
20–21	1.5	1.6	1.7	1.8
22–24	1.6	1.8	1.7	1.2
25–29	1.7	1.7	1.7	1.7
30+	—	—	—	—
All	1.3	1.5	1.6	1.4
Panel 4: Years since first marriage: All†				
Age at 1st marriage				
< 15	0.4	0.8	0.9	0.1
15–17	1.2	1.5	1.5	1.1
18–19	1.5	1.8	1.7	1.6
20–21	1.7	1.9	1.7	1.5
22–24	1.8	1.9	1.7	1.3
25–29	1.9	1.9	1.6	1.4
30+	1.6	1.6	1.3	1.2
All	1.6	1.8	1.6	1.4

† Including ever-married women of unknown years of first marriage.

Table 2.3 Number of children ever-born by current age

Panel 1: All ever-married women

Current age	Number of children ever-born										Mean	Stand-ard Devia-tion	Propor-tion males
	0	1	2	3	4	5	6	7	8	9 or More			
15–19	4,490	4,470	940	120	0	0	0	0	0	0	0.7	0.7	0.54
20–24	20,240	27,220	14,410	2,980	580	70	20	0	0	0	1.0	0.9	0.52
25–29	18,540	34,850	39,310	20,340	7,960	2,240	420	70	30	10	1.8	1.2	0.52
30–34	4,950	11,730	22,370	20,500	13,500	6,380	2,440	920	150	110	2.7	1.5	0.51
35–39	3,760	7,800	17,550	21,630	19,810	12,380	7,010	3,500	1,440	610	3.5	1.8	0.51
40–44	3,790	8,010	13,470	18,830	22,220	18,740	13,240	7,420	3,950	2,940	4.1	2.1	0.51
45–49	4,420	9,410	11,920	14,310	17,420	17,760	14,980	9,010	5,510	4,640	4.4	2.3	0.52
15–49	60,190	103,490	119,970	98,710	81,490	57,570	38,110	20,920	11,080	8,310	3.0	2.1	0.52

Panel 2: All currently-married women

15–19	4,450	4,440	940	120	0	0	0	0	0	0	0.7	0.7	0.54
20–24	20,200	27,010	14,350	2,950	560	70	20	0	0	0	1.0	0.9	0.52
25–29	18,390	34,500	39,070	20,230	7,950	2,240	420	70	30	10	1.8	1.2	0.52
30–34	4,880	11,520	22,120	20,280	13,390	6,330	2,410	920	150	110	2.7	1.5	0.51
35–39	3,640	7,460	17,150	21,240	19,340	12,200	6,820	3,440	1,420	580	3.5	1.8	0.51
40–44	3,600	7,380	12,860	18,030	21,460	18,150	12,930	7,130	3,850	2,910	4.1	2.1	0.51
45–49	4,070	8,380	10,690	13,320	16,340	16,680	14,230	8,490	5,260	4,410	4.4	2.3	0.52
15–49	59,230	100,690	117,180	96,170	79,040	55,670	36,830	20,050	10,710	8,020	3.0	2.1	0.52

Note: Excluding all institutional mothers.

Table 2.4 Number of children ever-born by years since first marriage

Panel 1: All ever-married women

Years since first marriage	Number of children ever-born										Mean	Stand-ard devia-tion	Propor-tion males
	0	1	2	3	4	5	6	7	8	9 or More			
< 5	43,770	58,580	23,050	2,090	130	50	0	0	0	0	0.9	0.8	0.53
5–9	6,100	19,260	47,020	26,430	8,720	1,570	210	60	10	0	2.2	1.1	0.51
10–14	2,980	7,300	20,850	26,630	18,440	8,360	2,770	840	200	80	3.0	1.4	0.52
15–19	2,000	5,570	12,310	19,830	21,250	13,800	7,830	3,350	1,300	470	3.8	1.7	0.51
20–24	2,260	4,930	7,530	12,260	17,350	16,680	11,920	6,830	3,330	2,300	4.4	2.1	0.51
25–29	1,700	5,040	6,410	8,260	11,790	13,290	11,540	7,430	4,340	3,700	4.7	2.3	0.52
30–34	830	2,050	2,150	2,480	3,040	3,390	3,470	2,190	1,710	1,640	4.8	2.6	0.53
35+	40	210	200	260	240	170	150	160	130	90	4.3	2.6	0.52
Unknown	480	290	270	250	350	180	140	20	40	30	—	—	0.54
All	60,160	103,230	119,790	98,490	81,310	57,490	38,030	20,880	11,060	8,310	3.0	2.1	0.52

Table 2.4 Number of children ever-born by years since first marriage *continued*

Panel 2: All currently-married women

Years since first marriage	Number of children ever-born										Mean	Standard deviation	Proportion males
	0	1	2	3	4	5	6	7	8	9 or More			
< 5	43,640	58,350	23,000	2,090	130	50	0	0	0	0	0.9	0.8	0.53
5–9	5,900	18,910	46,750	26,330	8,690	1,570	210	60	10	0	2.2	1.1	0.51
10–14	2,870	7,130	20,520	26,380	18,300	8,310	2,750	820	200	80	3.1	1.4	0.52
15–19	1,910	5,190	11,790	19,240	20,750	13,570	7,660	3,300	1,290	460	3.8	1.7	0.51
20–24	2,120	4,490	7,130	11,740	16,710	16,120	11,630	6,650	3,300	2,250	4.5	2.1	0.51
25–29	1,500	4,330	5,620	7,610	11,150	12,520	11,010	6,950	4,100	3,560	4.8	2.3	0.52
30–34	780	1,810	1,920	2,270	2,740	3,190	3,290	2,090	1,640	1,550	4.8	2.6	0.52
35+	30	190	190	260	220	160	140	160	130	90	4.4	2.6	0.52
Unknown	480	290	260	250	350	180	140	20	40	30	—	—	0.54
All	59,230	100,690	117,180	96,170	79,040	55,670	36,830	20,050	10,710	8,020	3.0	2.1	0.52

Note: Excluding all institutional mothers.

Table 2.5 Mean number of children ever-born by age at first marriage and years since first marriage

Panel 1: All ever-married women

Years since first marriage	Age at first marriage							All†
	< 15	15–17	18–19	20–21	22–24	25–29	30+	
< 5	1.3	1.0	1.0	0.9	0.9	0.8	0.7	0.9
5–9	1.9	2.3	2.3	2.3	2.1	2.0	1.6	2.2
10–14	3.1	3.3	3.4	3.3	3.1	2.8	2.3	3.0
15–19	3.5	4.0	4.1	3.9	3.7	3.4	2.9	3.8
20–24	4.0	4.6	4.7	4.6	4.3	3.7	—	4.4
25–29	4.2	4.9	4.9	4.6	4.4	—	—	4.7
30–34	4.4	4.9	4.6	—	—	—	—	4.7
35+	4.3	—	—	—	—	—	—	4.3
All†	3.9	3.8	3.6	3.1	2.6	2.3	1.8	3.0

† Including those ever-married women of unknown age at first marriage.

Panel 2: All currently-married women

Years since first marriage	Age at first marriage							All†
	< 15	15–17	18–19	20–21	22–24	25–29	30+	
< 5	1.3	1.0	1.0	0.9	0.9	0.8	0.7	0.9
5–9	2.0	2.3	2.4	2.3	2.1	2.0	1.6	2.2
10–14	3.1	3.3	3.4	3.3	3.1	2.8	2.2	3.1
15–19	3.5	4.0	4.1	4.0	3.7	3.4	2.9	3.8
20–24	4.1	4.7	4.8	4.6	4.3	3.8	—	4.5
25–29	4.2	4.9	4.9	4.7	4.5	—	—	4.8
30–34	4.4	5.0	4.7	—	—	—	—	4.8
35+	4.4	—	—	—	—	—	—	4.4
All†	3.9	3.8	3.1	3.1	2.6	2.3	1.8	3.0

† Including those currently-married women of unknown age at first marriage.

Table 2.6 Number of children ever-born by level of education according to years since first marriage, for all ever-married women

Panel 1: Years since first marriage: <10

Level of education	Number of children ever-born										Mean	Stand- ard devia- tion
	0	1	2	3	4	5	6	7	8	9 or more		
Lower than primary	2,870	4,430	5,190	3,700	1,800	470	50	20	0	0	1.9	1.3
Primary	20,240	34,960	36,190	17,200	5,610	940	150	40	10	0	1.6	1.1
Secondary	24,590	35,730	26,840	7,270	1,400	210	10	0	0	0	1.2	1.0
University	2,190	2,920	1,960	400	40	0	0	0	0	0	1.1	0.9
All	49,890	78,040	70,180	28,570	8,850	1,620	210	60	10	0	1.5	1.1

Panel 2: Years since first marriage: 10–19

Lower than primary	1,230	2,860	5,180	9,190	11,100	8,370	4,970	2,260	900	310	3.9	1.8
Primary	2,090	5,470	13,480	23,910	21,710	11,420	4,980	1,800	550	230	3.5	1.5
Secondary	1,450	3,980	12,500	12,310	6,680	2,320	650	110	40	10	2.7	1.3
University	210	600	2,030	1,130	280	70	20	20	10	0	2.3	1.1
All	4,980	12,910	33,190	46,540	39,770	22,180	10,620	4,190	1,500	550	3.4	1.6

Panel 3: Years since first marriage: 20+

Lower than primary	2,260	5,610	6,460	9,300	14,090	16,220	15,110	10,400	6,250	5,510	4.9	2.2
Primary	1,780	4,690	6,520	9,990	14,360	14,510	10,230	5,510	2,920	1,970	4.4	2.0
Secondary	710	1,780	3,010	3,720	3,770	2,820	1,750	730	360	250	3.7	1.9
University	80	160	340	340	300	40	50	10	0	0	2.8	1.4
All	4,830	12,240	16,330	23,350	32,520	33,590	27,140	16,650	9,530	7,730	4.6	2.2

Panel 4: Years since first marriage: All†

Lower than primary	6,390	12,940	16,890	22,310	27,190	25,150	20,180	12,690	7,180	5,840	4.3	2.3
Primary	24,300	45,280	56,330	51,200	41,800	26,960	15,440	7,360	3,490	2,210	2.9	1.9
Secondary	27,000	41,590	42,420	23,330	11,880	5,350	2,420	840	400	260	1.9	1.6
University	2,500	3,680	4,330	1,870	620	110	70	30	10	0	1.6	1.2
All	60,190	103,490	119,970	98,710	81,490	57,570	38,110	20,920	11,080	8,310	3.0	2.1

† Including ever-married women of unknown years since first marriage.

Table 2.7 Number of children ever-born by area of residence, according to years since first marriage, for all ever-married women

Panel 1: Years since first marriage: <10

Area of residence	Number of children ever-born										Mean	Stand- ard devia- tion
	0	1	2	3	4	5	6	7	8	9 or more		
Urban	47,280	73,630	65,700	26,500	7,850	1,370	160	60	10	0	1.5	1.1
Rural	2,320	3,810	3,920	1,820	740	150	40	0	0	0	1.7	1.2
Marine	290	600	560	250	260	100	10	0	0	0	2.0	1.4
All	49,890	78,040	70,180	28,570	8,850	1,620	210	60	10	0	1.5	1.1

Table 2.7 Number of children ever-born by area of residence, according to years since first marriage, for all ever-married women *continued*

Panel 2: Years since first marriage: 10–19

<i>Area of residence</i>	<i>Number of children ever-born</i>										<i>Mean</i>	<i>Standard deviation</i>
	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9 or more</i>		
Urban	4,800	12,290	31,990	44,360	37,230	19,730	8,980	3,270	1,100	370	3.3	1.6
Rural	180	580	1,090	2,040	2,210	1,970	1,190	660	280	100	4.1	1.8
Marine	0	40	110	140	330	480	450	260	120	80	5.3	1.8
All	4,980	12,910	33,190	46,540	39,770	22,180	10,620	4,190	1,500	550	3.4	1.6

Panel 3: Years since first marriage: 20+

Urban	4,610	11,680	15,560	22,080	30,250	30,760	24,010	14,310	7,960	5,810	4.5	2.2
Rural	180	550	690	1,200	2,100	2,500	2,630	1,810	1,160	1,080	5.4	2.2
Marine	40	10	80	70	170	330	500	530	410	840	7.1	2.2
All	4,830	12,240	16,330	23,350	32,520	33,590	27,140	16,650	9,530	7,730	4.6	2.2

Panel 4: Years since first marriage: All†

<i>Area of residence</i>												
Urban	57,180	97,880	113,490	93,180	75,650	52,010	33,280	17,650	9,110	6,210	2.9	2.1
Rural	2,680	4,960	5,730	5,070	5,080	4,640	3,870	2,480	1,440	1,180	3.7	2.4
Marine	330	650	750	460	760	920	960	790	530	920	5.1	2.8
All	60,190	103,490	119,970	98,710	81,490	57,570	38,110	20,920	11,080	8,310	3.0	2.1

† Including ever-married women of unknown years since first marriage.

Table 2.8 Number of children ever-born by occupation of husband, according to years since first marriage, for all ever-married women

Panel 1: Years since first marriage: <10

<i>Number of children ever-born</i>	<i>Occupation of husband</i>									<i>All</i>
	<i>Not classifiable by occupation, and armed forces</i>	<i>Professional, technical and related workers</i>	<i>Administrative and managerial workers</i>	<i>Clerical and related workers</i>	<i>Sales workers</i>	<i>Service workers</i>	<i>Agricultural, animal husbandry and forestry workers and fishermen</i>	<i>Production and related workers, transport equipment operators and labourers</i>	<i>Unknown</i>	
0	1,780	4,150	1,770	6,330	4,540	5,530	760	19,480	5,550	49,890
1	1,640	5,950	3,220	8,240	8,000	8,470	800	34,210	7,510	78,040
2	1,380	4,380	3,540	6,380	7,920	7,740	760	32,190	5,890	70,180
3	440	1,280	1,080	1,750	3,580	3,230	360	14,660	2,190	28,570
4	210	230	250	290	1,120	950	300	4,830	670	8,850
5	60	30	40	50	290	110	80	820	140	1,620
6	0	10	20	10	40	20	10	100	0	210
7	10	0	0	0	0	20	0	30	0	60
8	0	0	0	0	0	0	0	10	0	10
9 or more	0	0	0	0	0	0	0	0	0	0
Mean	1.3	1.2	1.5	1.2	1.6	1.5	1.6	1.6	1.3	1.5
Standard deviation	1.2	1.0	1.0	1.0	1.1	1.1	1.4	1.1	1.1	1.1

Panel 2: Years since first marriage: 10–19

0	240	240	0	710	240	1,420	0	1,180	950	4,980
1	520	1,060	620	980	1,420	1,330	160	4,290	2,530	12,910
2	1,000	2,860	2,360	3,270	3,760	3,430	240	11,830	4,440	33,190
3	1,270	2,560	2,210	3,770	6,230	5,000	430	20,250	4,820	46,540
4	940	1,090	1,190	2,060	5,830	4,880	650	19,620	3,510	39,770
5	550	470	520	820	3,270	2,820	790	10,820	2,120	22,180
6	280	180	160	330	1,590	1,060	690	5,220	1,110	10,620
7	120	30	60	90	660	430	430	1,970	400	4,190
8	40	20	20	40	320	120	220	630	90	1,500
9 or more	40	0	0	10	80	30	100	260	30	550
Mean	3.2	2.7	2.9	2.8	3.6	3.3	4.9	3.6	3.0	3.4
Standard deviation	1.7	1.3	1.2	1.4	1.6	1.7	1.9	1.5	1.7	1.6

Table 2.8 Number of children ever-born by occupation of husband, according to years since first marriage, for all ever-married women *continued*

Panel 3: Years since first marriage: 20⁺

Number of children ever-born	Occupation of husband									All
	Not classifiable by occupation, and armed forces	Professional, technical and related workers	Administrative and managerial workers	Clerical and related workers	Sales workers	Service workers	Agricultural, animal husbandry and forestry workers and fishermen	Production and related workers, transport equipment operators and labourers	Unknown	
0	410	0	0	0	1,060	210	20	1,040	2,090	4,830
1	800	300	380	500	1,320	1,300	170	2,730	4,740	12,240
2	980	600	800	960	1,620	1,390	230	4,300	5,450	16,330
3	1,540	890	920	1,490	2,750	2,810	430	6,870	5,650	23,350
4	2,010	1,080	1,010	1,850	4,550	3,700	650	11,330	6,340	32,520
5	2,210	700	860	1,570	5,110	4,120	810	12,600	5,610	33,590
6	1,890	440	570	1,060	4,030	3,660	1,150	10,030	4,310	27,140
7	1,360	240	300	460	2,240	2,190	870	6,390	2,600	16,650
8	650	50	190	270	1,820	990	830	3,360	1,370	9,530
9 or more	680	70	90	130	1,000	780	1,010	2,850	1,120	7,730
Mean	4.7	4.0	4.1	4.2	4.7	4.8	6.1	4.9	3.9	4.6
Standard deviation	2.3	1.8	1.9	1.8	2.2	2.1	2.3	2.1	2.3	2.2

Panel 4: Years since first marriage: All[†]

0	2,430	4,390	1,770	7,040	5,840	7,160	780	21,700	9,080	60,190
1	2,970	7,320	4,230	9,730	10,770	11,130	1,140	41,340	14,860	103,490
2	3,370	7,850	6,720	10,620	13,300	12,590	1,240	48,430	15,850	119,970
3	3,270	4,730	4,230	7,040	12,580	11,060	1,220	41,920	12,660	98,710
4	3,170	2,410	2,460	4,230	11,530	9,540	1,610	35,990	10,550	81,490
5	2,820	1,200	1,430	2,440	8,730	7,060	1,700	24,320	7,870	57,570
6	2,170	630	750	1,410	5,660	4,780	1,850	15,410	5,450	38,110
7	1,490	270	360	550	2,920	2,640	1,300	8,390	3,000	20,920
8	690	70	210	310	2,140	1,110	1,050	4,040	1,460	11,080
9 or more	720	70	90	140	1,080	810	1,110	3,130	1,160	8,310
Mean	3.6	2.1	2.6	2.2	3.3	3.0	4.7	3.0	3.0	3.0
Standard deviation	2.4	1.6	1.7	1.8	2.2	2.1	2.7	2.1	2.2	2.1

[†] Including ever-married women of unknown years since first marriage.

Table 2.9 Mean number of children ever-born, according to the woman's area of residence and level of education, within categories of years since first marriage, for all ever-married women

	<i>Area of residence</i>			
	<i>Urban</i>	<i>Rural</i>	<i>Marine</i>	<i>All</i>
Panel 1: Years since 1st marriage: <10				
Level of education				
Lower than primary	2.0	1.7	2.1	1.9
Primary	1.6	1.7	1.5	1.6
Secondary	1.2	1.5	1.0	1.2
University	1.1	0.7	0.0	1.1
All	1.5	1.7	2.0	1.5
Panel 2: Years since 1st marriage: 10–19				
Level of education				
Lower than primary	3.8	4.4	5.4	3.9
Primary	3.4	4.2	4.1	3.5
Secondary	2.7	2.8	5.0	2.7
University	2.3	2.3	0.0	2.3
All	3.3	4.1	5.3	3.4
Panel 3: Years since 1st marriage: 20+				
Level of education				
Lower than primary	4.8	5.6	7.1	4.9
Primary	4.4	4.9	6.0	4.4
Secondary	3.6	4.3	0.0	3.7
University	2.7	4.3	0.0	2.8
All	4.5	5.4	7.1	4.6
Panel 4: Years since 1st marriage: All†				
Level of education				
Lower than primary	4.2	4.7	5.3	4.3
Primary	2.9	3.2	2.6	2.9
Secondary	1.9	2.2	3.0	1.9
University	1.6	1.6	0.0	1.6
All	2.9	3.7	5.1	3.0

† Including ever-married women of unknown years since first marriage.

Table 2.10 Mean number of children ever-born, according to the woman's level of education and the occupation of husband, within categories of years since first marriage, for all ever-married women

Panel 1: Years since first marriage: <10

<i>Occupation of husband</i>	<i>Level of education</i>				
	<i>Lower than primary</i>	<i>Primary</i>	<i>Secondary</i>	<i>University</i>	<i>All</i>
Not classifiable by occupation, and armed forces	2.3	1.7	0.9	0.7	1.3
Professional, technical and related workers	2.1	1.6	1.2	1.0	1.2
Administrative and managerial workers	2.5	1.9	1.4	1.4	1.5
Clerical and related workers	1.7	1.6	1.1	1.2	1.2
Sales workers	1.7	1.9	1.3	1.1	1.6
Service workers	1.7	1.6	1.2	1.8	1.5
Agricultural, animal husbandry and forestry workers and fishermen	1.9	1.3	1.9	1.0	1.6
Production and related workers, transport equipment operators and labourers	2.1	1.6	1.3	1.5	1.6
All†‡	1.9	1.6	1.2	1.1	1.5

Panel 2: Years since first marriage: 10–19

Not classifiable by occupation, and armed forces	3.7	3.7	2.4	2.2	3.2
Professional, technical and related workers	3.2	2.9	2.6	2.5	2.7
Administrative and managerial workers	3.9	3.4	2.8	2.3	2.9
Clerical and related workers	2.6	3.1	2.7	2.5	2.9
Sales workers	4.1	3.7	3.0	1.7	3.6
Service workers	3.6	3.4	2.8	2.0	3.3
Agricultural, animal husbandry and forestry workers and fishermen	5.2	4.6	3.4	3.0	4.9
Production and related workers, transport equipment operators and labourers	4.0	3.6	2.9	2.3	3.6
All†‡	3.9	3.5	2.7	2.3	3.4

Panel 3: Years since first marriage: 20+

Not classifiable by occupation, and armed forces	5.1	4.4	3.9	3.3	4.7
Professional, technical and related workers	4.6	4.5	3.6	3.2	4.0
Administrative and managerial workers	5.0	4.7	3.3	2.9	4.1
Clerical and related workers	4.8	4.4	3.6	2.6	4.3
Sales workers	5.2	4.4	4.3	2.7	4.7
Service workers	5.0	4.5	4.0	2.0	4.8
Agricultural, animal husbandry and forestry workers and fishermen	6.4	5.0	4.5	3.0	6.2
Production and related workers, transport equipment operators and labourers	5.2	4.6	4.2	3.1	4.9
All†‡	4.9	4.4	3.7	2.8	4.6

Panel 4: Years since first marriage: All†

Not classifiable by occupation, and armed forces	4.7	3.8	1.9	1.4	3.6
Professional, technical and related workers	3.7	2.8	1.8	1.7	2.1
Administrative and managerial workers	4.5	3.4	2.1	1.9	2.6
Clerical and related workers	3.7	2.9	1.6	1.7	2.2
Sales workers	4.4	3.4	2.2	1.5	3.3
Service workers	4.2	2.9	1.8	1.9	3.1
Agricultural, animal husbandry and forestry workers and fishermen	5.3	3.5	2.8	2.5	4.7
Production and related workers, transport equipment operators and labourers	4.3	2.8	1.9	1.9	3.0
All†‡	4.3	2.9	1.9	1.6	3.0

† Including ever-married women of unknown years since first marriage.

‡ Including unknown occupation of husband.

Table 2.11 Mean number of children ever-born, according to the woman's area of residence and the occupation of husband, within categories of years since first marriage, for all ever-married women

Panel 1: Years since first marriage: < 10

<i>Occupation of husband</i>	<i>Urban</i>	<i>Area of residence</i>		<i>All</i>
		<i>Rural</i>	<i>Marine</i>	
Not classifiable by occupation, and armed forces	1.2	1.3	0.0	1.3
Professional, technical and related workers	1.2	1.7	1.0	1.2
Administrative and managerial workers	1.5	1.8	0.0	1.5
Clerical and related workers	1.2	1.8	0.0	1.2
Sales workers	1.6	2.2	2.5	1.6
Service workers	1.5	1.6	3.0	1.5
Agricultural, animal husbandry and forestry workers and fishermen	1.7	1.4	1.9	1.6
Production and related workers, transport equipment operators and labourers	1.6	1.8	2.0	1.6
All‡	1.5	1.7	2.0	1.5

Panel 2: Years since first marriage: 10–19

Not classifiable by occupation, and armed forces	3.4	2.7	5.0	3.2
Professional, technical and related workers	2.7	2.7	0.0	2.7
Administrative and managerial workers	2.9	4.9	0.0	2.9
Clerical and related workers	2.9	3.5	0.0	2.8
Sales workers	3.6	4.5	4.9	3.6
Service workers	3.3	4.4	6.0	3.3
Agricultural, animal husbandry and forestry workers and fishermen	4.2	4.9	5.5	4.9
Production and related workers, transport equipment operators and labourers	3.6	4.2	5.1	3.6
All‡	3.3	4.1	5.3	3.4

Panel 3: Years since first marriage: 20+

Not classifiable by occupation, and armed forces	4.6	5.6	9.3	4.7
Professional, technical and related workers	4.0	4.3	0.0	4.0
Administrative and managerial workers	4.1	5.1	0.0	4.1
Clerical and related workers	4.2	5.0	0.0	4.2
Sales workers	4.7	4.9	5.4	4.7
Service workers	4.7	5.4	5.7	4.8
Agricultural, animal husbandry and forestry workers and fishermen	6.0	5.8	7.1	6.1
Production and related workers, transport equipment operators and labourers	4.8	5.6	7.2	4.9
All‡	4.5	5.4	7.1	4.6

‡ Including unknown occupation of husband.

Table 2.11 Mean number of children ever-born, according to the woman's area of residence and the occupation of husband, within categories of years since first marriage, for all ever-married women *continued*

Panel 4: Years since first marriage: All†

Occupation of husband	Area of residence			All
	Urban	Rural	Marine	
Not classifiable by occupation, and armed forces	3.6	3.1	8.4	3.6
Professional, technical and related workers	2.1	2.7	1.0	2.1
Administrative and managerial workers	2.5	3.8	0.0	2.6
Clerical and related workers	2.2	3.1	0.0	2.2
Sales workers	3.3	4.2	4.9	3.3
Service workers	3.0	3.3	4.8	3.0
Agricultural, animal husbandry and forestry workers and fishermen	4.6	4.5	5.2	4.7
Production and related workers, transport equipment operators and labourers	3.0	3.7	4.6	3.0
All‡	2.9	3.7	5.1	3.0

† Including ever-married women of unknown years since first marriage.

‡ Including unknown occupation of husband.

Table 2.12 Number of living children by current age

Panel 1: All ever-married women

Current age	Number of living children										Mean	Standard deviation
	0	1	2	3	4	5	6	7	8	9 or More		
15–19	4,530	4,410	930	120	0	0	0	0	0	0	0.7	0.7
20–24	20,570	26,990	14,350	2,890	530	60	20	0	0	0	1.0	0.9
25–29	18,980	34,900	39,100	20,170	7,790	2,180	380	70	30	10	1.8	1.2
30–34	5,130	11,870	22,320	20,570	13,320	6,230	2,350	890	160	60	2.7	1.5
35–39	3,940	7,850	17,770	21,800	19,890	12,350	6,710	3,250	1,260	500	3.4	1.8
40–44	4,010	8,320	13,750	19,130	22,390	18,760	13,030	7,200	3,480	2,280	4.0	2.1
45–49	5,440	10,060	12,400	14,620	17,870	17,440	14,540	8,560	4,810	3,430	4.2	2.3
All	62,600	104,400	120,620	99,300	81,790	57,020	37,030	19,970	9,740	6,280	2.9	2.1

Panel 2: All currently-married women

15–19	4,500	4,400	930	120	0	0	0	0	0	0	0.7	0.7
20–24	20,540	26,850	14,320	2,860	510	60	20	0	0	0	1.0	0.9
25–29	18,800	34,620	38,930	20,110	7,780	2,180	380	70	30	10	1.8	1.2
30–34	5,060	11,690	22,100	20,410	13,230	6,180	2,330	890	160	60	2.7	1.5
35–39	3,810	7,560	17,400	21,400	19,480	12,190	6,530	3,190	1,250	480	3.5	1.8
40–44	3,780	7,700	13,160	18,380	21,680	18,250	12,730	6,950	3,400	2,270	4.1	2.1
45–49	4,920	9,040	11,180	13,650	16,840	16,460	13,770	8,100	4,610	3,300	4.2	2.3
All	61,410	101,860	118,020	96,930	79,520	55,320	35,760	19,200	9,450	6,120	2.9	2.1

Note: Excluding all institutional mothers.

Table 2.13 Number of living children by years since first marriage

Panel 1: All ever-married women

Years since first Marriage	Number of living children										Mean	Standard deviation	Proportion males
	0	1	2	3	4	5	6	7	8	9 or More			
< 5	44,420	58,280	22,860	1,940	120	50	0	0	0	0	0.9	0.8	0.53
5–9	6,450	19,540	46,930	26,360	8,360	1,470	220	50	0	0	2.2	1.1	0.51
10–14	3,130	7,430	21,010	26,670	18,280	8,310	2,600	780	180	60	3.0	1.4	0.52
15–19	2,210	5,730	12,630	19,930	21,490	13,480	7,530	3,190	1,150	370	3.7	1.7	0.51
20–24	2,500	5,140	7,780	12,540	17,870	16,610	11,670	6,540	2,940	1,800	4.3	2.0	0.51
25–29	2,180	5,420	6,650	8,750	12,030	13,300	11,460	7,150	3,850	2,710	4.6	2.2	0.52
30–34	1,100	2,300	2,320	2,640	3,030	3,460	3,260	2,080	1,500	1,260	4.5	2.5	0.52
35+	120	250	190	200	240	190	150	160	100	50	3.9	2.5	0.51
Unknown	490	310	250	270	370	150	140	20	20	30	—	—	0.54
All	62,600	104,400	120,620	99,300	81,790	57,020	37,030	19,970	9,740	6,280	2.9	2.1	0.51

Panel 2: All currently-married women

< 5	44,280	58,060	22,810	1,940	120	50	0	0	0	0	0.9	0.8	0.53
5–9	6,240	19,180	46,670	26,270	8,330	1,470	220	50	0	0	2.2	1.1	0.51
10–14	3,000	7,260	20,690	26,420	18,130	8,270	2,590	760	180	60	3.0	1.4	0.51
15–19	2,090	5,350	12,130	19,340	20,980	13,270	7,360	3,130	1,140	370	3.7	1.7	0.51
20–24	2,340	4,690	7,370	11,990	17,210	16,090	11,390	6,400	2,890	1,770	4.4	2.0	0.51
25–29	1,880	4,700	5,850	8,090	11,370	12,590	10,840	6,710	3,700	2,620	4.6	2.2	0.52
30–34	1,000	2,070	2,070	2,410	2,790	3,250	3,080	1,970	1,420	1,220	4.5	2.5	0.52
35+	90	250	180	200	220	180	140	160	100	50	4.0	2.5	0.51
Unknown	490	300	250	270	370	150	140	20	20	30	—	—	0.54
All	61,410	101,860	118,020	96,930	79,520	55,320	35,760	19,200	9,450	6,120	2.9	2.1	0.51

Note: Excluding all institutional mothers.

Table 2.14 Number of living children by number of children ever-born and current age, for all ever-married women

Panel 1: Current age < 25

Number of children ever-born	Number of living children										Mean
	0	1	2	3	4	5	6	7	8	9 or More	
0	24,710	—	—	—	—	—	—	—	—	—	0.00
1	320	31,280	—	—	—	—	—	—	—	—	0.99
2	60	90	15,170	—	—	—	—	—	—	—	1.99
3	0	30	90	2,980	—	—	—	—	—	—	2.95
4	10	0	20	20	530	—	—	—	—	—	3.83
5	0	0	0	10	0	60	—	—	—	—	*
6	0	0	0	0	0	0	20	—	—	—	*
7	0	0	0	0	0	0	0	0	—	—	0.00
8	0	0	0	0	0	0	0	0	0	—	0.00
9 or More	0	0	0	0	0	0	0	0	0	0	0.00
All	25,100	31,400	15,280	3,010	530	60	20	0	0	0	0.98

Note: Excluding all institutional mothers.

Table 2.14 Number of living children by number of children ever-born and current age, for all ever-married women *continued*

Panel 2: Current age 25–34

Number of children ever-born	Number of living children										Mean
	0	1	2	3	4	5	6	7	8	9 or More	
0	23,490	—	—	—	—	—	—	—	—	—	0.00
1	370	46,110	—	—	—	—	—	—	—	—	0.99
2	140	570	60,890	—	—	—	—	—	—	—	1.99
3	50	60	490	40,140	—	—	—	—	—	—	2.98
4	60	10	30	560	20,770	—	—	—	—	—	3.96
5	0	10	10	40	310	8,250	—	—	—	—	4.95
6	0	0	0	0	30	150	2,680	—	—	—	5.93
7	0	0	0	0	0	10	50	930	—	—	6.93
8	0	0	0	0	0	0	0	20	160	—	*
9 or More	0	10	0	0	0	0	0	10	30	70	*
All	24,110	46,770	61,420	40,740	21,110	8,410	2,730	960	190	70	2.15

Panel 3: Current age 35–44

0	7,550	—	—	—	—	—	—	—	—	—	—	0.00
1	170	15,580	—	—	—	—	—	—	—	—	—	0.99
2	90	400	30,480	—	—	—	—	—	—	—	—	1.98
3	40	110	800	39,430	—	—	—	—	—	—	—	2.97
4	30	60	160	1,100	40,560	—	—	—	—	—	—	3.96
5	30	20	50	260	1,360	29,360	—	—	—	—	—	4.93
6	30	0	10	60	250	1,330	18,520	—	—	—	—	5.89
7	0	0	10	60	80	310	820	9,610	—	—	—	6.82
8	10	0	10	20	10	80	350	600	4,310	—	—	7.67
9 or More	0	0	0	0	20	30	50	240	430	2,780	—	8.95
All	7,950	16,170	31,520	40,930	42,280	31,110	19,740	10,450	4,740	2,780	—	3.77

Panel 4: Current age 45+

0	4,410	—	—	—	—	—	—	—	—	—	—	0.00
1	380	9,020	—	—	—	—	—	—	—	—	—	0.96
2	190	480	11,230	—	—	—	—	—	—	—	—	1.93
3	190	280	590	13,210	—	—	—	—	—	—	—	2.88
4	150	130	260	710	16,140	—	—	—	—	—	—	3.87
5	60	80	150	480	1,150	15,800	—	—	—	—	—	4.82
6	50	50	100	150	380	1,110	13,110	—	—	—	—	5.78
7	10	10	20	40	110	380	910	7,520	—	—	—	6.73
8	0	0	30	30	70	100	380	690	4,190	—	—	7.57
9 or More	0	10	20	0	20	50	140	350	620	3,430	—	8.79
All	5,440	10,060	12,400	14,620	17,870	17,440	14,540	8,560	4,810	3,430	—	4.17

Panel 5: All ages

0	60,160	—	—	—	—	—	—	—	—	—	—	0.00
1	1,240	101,990	—	—	—	—	—	—	—	—	—	0.99
2	480	1,540	117,770	—	—	—	—	—	—	—	—	1.98
3	280	480	1,970	95,760	—	—	—	—	—	—	—	2.96
4	250	200	470	2,390	78,000	—	—	—	—	—	—	3.94
5	90	110	210	790	2,820	53,470	—	—	—	—	—	4.90
6	80	50	110	210	660	2,590	34,330	—	—	—	—	5.85
7	10	10	30	100	190	700	1,780	18,060	—	—	—	6.79
8	10	0	40	50	80	180	730	1,310	8,660	—	—	7.62
9 or More	0	20	20	0	40	80	190	600	1,080	6,280	—	8.85
All	62,600	104,400	120,620	99,300	81,790	57,020	37,030	19,970	9,740	6,280	—	2.93

Note: Excluding all institutional mothers.

Table 2.15 Mean number of children ever-born, still alive and deceased by current age (in single year), for all ever-married women

<i>Current age</i>	<i>Mean number of children</i>		<i>Ever born</i>	<i>Number of women</i>
	<i>Living</i>	<i>Deceased</i>		
15	*	*	*	110
16	0.50	...	0.50	340
17	0.56	...	0.56	1,510
18	0.62	0.01	0.63	2,930
19	0.73	0.01	0.74	5,100
20	0.80	0.01	0.81	7,010
21	0.88	...	0.88	10,030
22	0.98	0.01	0.99	12,660
23	1.05	0.01	1.06	15,880
24	1.18	0.01	1.19	19,830
25	1.39	0.02	1.41	22,850
26	1.53	0.02	1.55	25,240
27	1.79	0.01	1.80	25,610
28	1.94	0.01	1.95	25,700
29	2.16	0.02	2.18	24,210
30	2.39	0.02	2.41	19,640
31	2.66	0.03	2.69	17,540
32	2.72	0.02	2.74	16,220
33	2.92	0.02	2.94	14,450
34	2.98	0.03	3.01	15,050
35	3.10	0.03	3.13	16,390
36	3.28	0.04	3.32	17,840
37	3.38	0.04	3.42	19,200
38	3.65	0.06	3.71	20,140
39	3.68	0.05	3.73	21,750
40	3.77	0.07	3.84	22,450
41	4.04	0.07	4.11	21,340
42	4.06	0.07	4.13	22,370
43	4.16	0.10	4.26	22,840
44	4.19	0.11	4.30	23,350
45	4.19	0.13	4.32	23,480
46	4.23	0.14	4.37	22,420
47	4.26	0.14	4.40	21,950
48	4.25	0.18	4.43	21,460
49	3.94	0.33	4.27	19,860
15-49	2.93	0.07	3.00	598,750

Note: Excluding all institutional mothers.

Table 2.16 Mean number of live births in the past five years, among all currently married women married at least five years, by current age and number of living children

<i>Current age</i>	<i>Number of living children</i>										<i>All</i>
	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9 or more</i>	
15-19	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	1.4
20-24	0.0	0.9	1.7	2.5	2.8	*	*	0.0	0.0	0.0	1.7
25-29	..	0.7	1.4	1.7	1.9	2.1	2.6	*	2.0	*	1.4
30-34	..	0.5	0.8	1.0	1.1	1.3	1.6	2.0	2.6	*	1.0
35-39	..	0.3	0.4	0.4	0.5	0.6	0.8	1.0	1.5	1.8	0.5
40-44	..	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.7	1.0	0.2
45-49	0.0	..	0.1	..	..	..	0.1	0.1	0.2	0.4	0.1
15-49	...	0.4	0.8	0.8	0.6	0.4	0.4	0.5	0.6	0.7	0.6

Table 2.17 Mean number of live births in the past five years by current age and age at first marriage, for all currently married women married at least five years

<i>Current age</i>	<i>Age at first marriage</i>							<i>All</i>
	<i><15</i>	<i>15–17</i>	<i>18–19</i>	<i>20–21</i>	<i>22–24</i>	<i>25–29</i>	<i>30+</i>	
15–19	1.4	—	—	—	—	—	—	1.4
20–24	1.3	1.6	1.8	—	—	—	—	1.7
25–29	1.1	1.0	1.3	1.6	1.6	—	—	1.4
30–34	0.7	0.6	0.7	0.9	1.1	1.3	—	1.0
35–39	0.4	0.3	0.4	0.4	0.5	0.7	1.1	0.5
40–44	0.1	0.2	0.2	0.2	0.2	0.3	0.5	0.2
45–49	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
15–49	0.4	0.5	0.6	0.7	0.7	0.5	0.5	0.6

Table 2.18 Sex ratio of live births in the past five years by current age and age at first marriage, for all currently married women married at least five years

<i>Current age</i>	<i>Age at first marriage</i>							<i>All</i>
	<i><15</i>	<i>15–17</i>	<i>17–19</i>	<i>20–21</i>	<i>22–24</i>	<i>25–29</i>	<i>30+</i>	
15–19	714.3	—	—	—	—	—	—	714.3
20–24	1,125.0	952.1	1,016.6	—	—	—	—	991.7
25–29	1,346.2	1,077.1	1,135.9	1,056.1	1,024.9	—	—	1,070.1
30–34	904.8	1,186.6	1,113.2	1,106.3	1,041.5	1,082.1	—	1,080.4
35–39	750.0	816.1	1,011.7	1,156.9	1,111.1	1,071.4	962.4	1,046.1
40–44	1,041.7	1,312.5	1,129.5	1,121.2	1,097.8	1,056.8	1,059.6	1,114.0
45–49	1,000.0	1,461.5	812.5	788.5	1,042.6	933.3	847.5	952.5
15–49	1,004.2	1,051.9	1,084.5	1,077.4	1,048.6	1,070.8	982.3	1,063.1

Table 2.19 Mean number of live births in the past five years by current age and level of education, for all currently married women married at least five years

<i>Current age</i>	<i>Level of education</i>				<i>All</i>
	<i>Lower than primary</i>	<i>Primary</i>	<i>Secondary</i>	<i>University</i>	
15–19	0.0	1.7	1.0	0.0	1.4
20–24	1.6	1.8	1.5	0.0	1.7
25–29	1.7	1.5	1.3	1.1	1.4
30–34	1.1	1.0	0.9	0.9	1.0
35–39	0.6	0.5	0.4	0.5	0.5
40–44	0.3	0.2	0.2	0.2	0.2
45–49	0.1	0.1	0.0	0.1	0.1
15–49	0.4	0.7	0.7	0.5	0.6

Table 2.20 Mean number of live births in the past five years by current age and area of residence, for all currently married women married at least five years

<i>Current age</i>	<i>Area of residence</i>			<i>All</i>
	<i>Urban</i>	<i>Rural</i>	<i>Marine</i>	
15–19	1.6	0.7	*	1.4
20–24	1.7	1.8	2.0	1.7
25–29	1.4	1.6	2.1	1.4
30–34	0.9	1.2	1.6	1.0
35–39	0.5	0.7	1.2	0.5
40–44	0.2	0.4	0.8	0.2
45–49	0.1	0.2	0.3	0.1
15–49	0.6	0.8	1.2	0.6

Table 2.21 Mean number of live births in the past five years by current age and occupation of husband, for all currently married women married at least five years

<i>Current age</i>	<i>Occupation of husband</i>								<i>All†</i>
	<i>Not classifiable by occupation, and armed forces</i>	<i>Professional, technical and related workers</i>	<i>Administrative and managerial workers</i>	<i>Clerical and related workers</i>	<i>Sales workers</i>	<i>Service workers</i>	<i>Agricultural, animal husbandry and forestry workers and fishermen</i>	<i>Production and related workers, transport equipment operators and labourers</i>	
15–19	1.7	0	1.5	0	2.0	1.5	1.0	2.0	1.4
20–24	1.6	1.5	1.6	1.7	1.4	1.7	1.9	1.7	1.7
25–29	1.3	1.2	1.2	1.2	1.5	1.4	1.9	1.5	1.4
30–34	0.8	0.9	1.0	0.8	1.0	0.9	1.5	1.0	1.0
35–39	0.5	0.5	0.4	0.5	0.5	0.5	0.9	0.5	0.5
40–44	0.2	0.2	0.1	0.2	0.2	0.2	0.5	0.3	0.2
45–49	..	0.1	..	..	0.1	0.1	0.2	0.1	0.1
15–49	0.3	0.6	0.6	0.6	0.6	0.5	0.8	0.7	0.6

† Including unknown occupation of husband.

Appendix B

Questionnaire for 1976 By-Census

CONFIDENTIAL
LAND BY-CENSUS 1976
FORM A

Reference No.	TU	SB	EB	LQ	HH	Sample
Please Check the No. Carefully						
Degree of Sharing	Living Quarters Accommodation	Type of Household	Household Size		Household Composition	
			Usual	Last Night		
		Domestic Collective				

MATERNITY HISTORY—TO BE COMPLETED FOR MOTHERS BORN BETWEEN 8.1926—7.1961

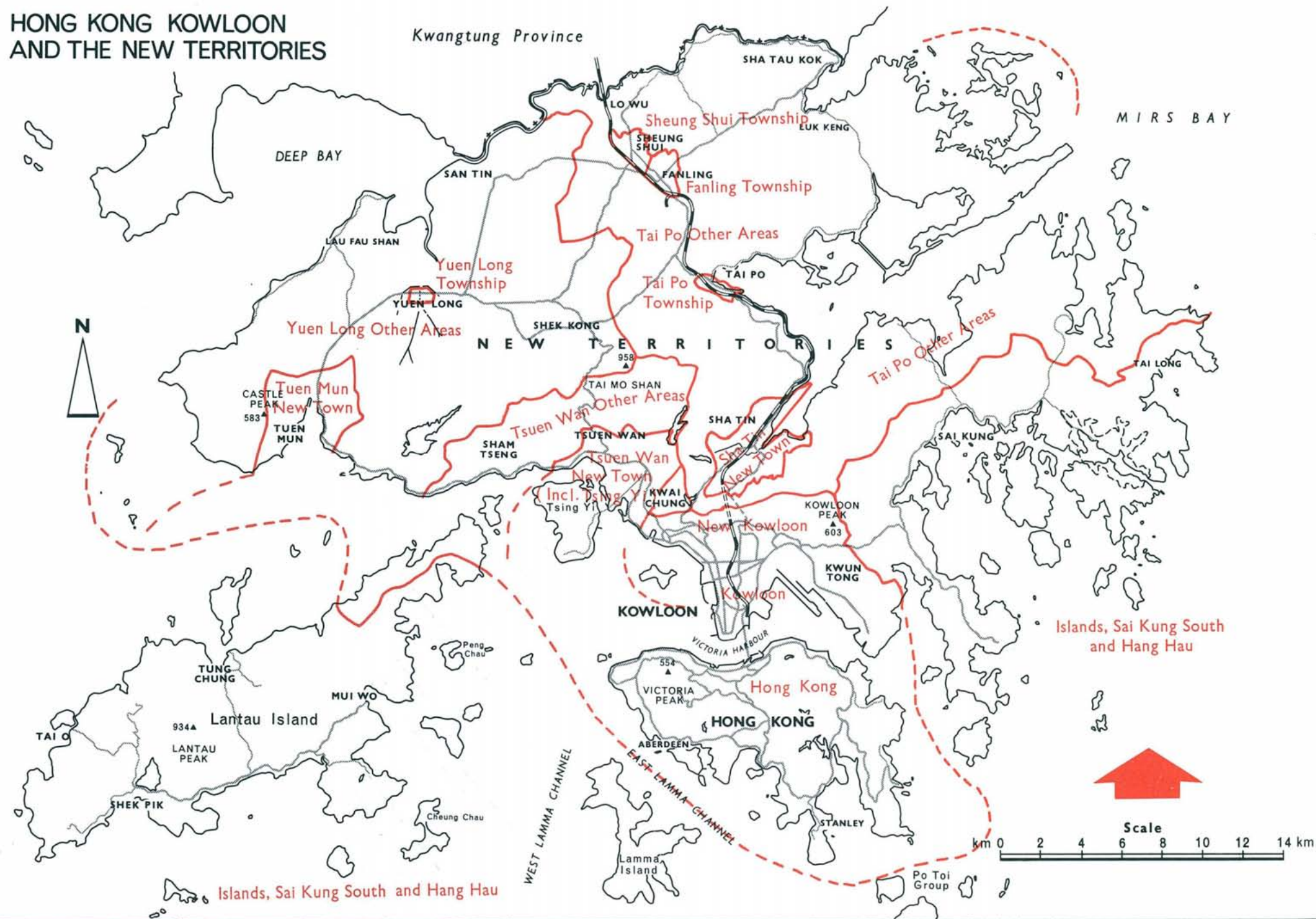
103

Appendix C

Maps of Hong Kong

This is a detailed topographic map of Hong Kong, showing the main island and surrounding areas. The map includes labels for various districts and geographical features, such as Sheung Wan, Central, Wan Chai, Kowloon, and the New Territories. It also shows surrounding islands and waters, including Victoria Harbour, the East Lamma Channel, and the Po Toi Island Group. A red arrow points to the scale bar, which is labeled 'SCALE 1:75000'.

HONG KONG KOWLOON AND THE NEW TERRITORIES



Appendix D

Definitions of Terms

Appendix D

Definitions of Terms

Age – The number of complete years passed since birth.

Age-marital-specific fertility rate – The ratio of the number of live births occurring to mothers in each child-bearing age group during a calendar year to the total number of currently married women in that age group at the middle of that year.

Age-parity-specific fertility rate – The ratio of the number of live births occurring to mothers of each birth parity in each child-bearing age group during a calendar year to the total number of women of that birth parity in that age group at the middle of that year.

Age-specific birth rate by birth order – The ratio of the number of live births of each birth order occurring to mothers in each child-bearing age group during a calendar year to the total female population in that age group at the middle of that year.

Age-specific fertility rate – The ratio of the total number of live births occurring to mothers in each child-bearing age group during a calendar year to the female population in that age group at the middle of that year.

Birth cohort – A group of persons all born during the same year being analysed as a unit through their lifetime.

Birth order – The number of births to a mother.

Birth rate – The ratio of the total number of live births occurring during a calendar year to the population at the middle of that year. The birth rate calculated on this basis is described as the crude birth rate since it is averaged over the population at large and disguises what can be quite significant differences between the various ages.

Cumulative fertility – The total number of children born by an ever-married woman during her reproductive life-span.

Duration of marriage – The period from the date of first marriage to the time of the 1976 By-census.

Educational attainment – The highest level (class or year) of general education attained in primary, secondary and matriculation classes or at a university.

Primary – Primary I–VI in the Hong Kong school system, including private tuition.

Secondary – Middle I–V in Chinese schools or Form I–V in English or Anglo-Chinese schools.

Matriculation – Middle VI in Chinese schools or Lower and Upper Forms VI in English or Anglo-Chinese schools.

University – This refers to persons attending full-time courses at a university/other post-secondary institution leading to a degree or diploma, or persons taking a correspondence course leading to a degree, or persons who had undertaken full-time degree courses but failed, or persons who had obtained first or higher degrees at a university/other post-secondary institution.

(Note: For persons who were undertaking/had undertaken technical/vocational training, only their highest level of general education was recorded in the By-census.)

Ever-married women – Women who were either currently married, widowed, or divorced/separated.

Fecundity – The potential level of reproductive performance (or physical capacity for bearing children) of a population.

Fertility – An actual level of reproductive performance in a population, based on the number of live births that occur.

Infant mortality – The ratio of the number of deaths below age one occurring during a calendar year to the number of live births in that year.

Marine – The waters adjoining the areas of Hong Kong Island, Kowloon, New Kowloon and the New Territories up to the international square boundary.

Marital status – The personal status of each individual in relation to marriage.

(Note: For the By-census purposes, 'marriage' was recorded solely if so reported by respondents regardless of whether any kind of ceremony had taken place or whether or not the 'marriage' had been registered. Persons aged under 15 were classified as 'never married' regardless of the status claimed.)

Median – The average value so calculated that 50% of items has the value above this figure while the other 50% has the value below it.

Mortality rate – The ratio of the total number of deaths occurring in a specific sector of the population during a calendar year to the number of persons in that sector at the middle of that year.

Net reproduction rate (NRR) – The total number of female children that would be born per women to a cohort of women as they pass through the child-bearing ages 15–49, allowing for mortality of some of the women up to and during this period, according to constant fertility and mortality conditions.

Number of children ever-born – The number of live births to an ever-married woman. This does not include adopted children or children born to her husband by a different wife.

Number of children living – The number of children ever-born and still alive at the time of the enumeration.

Nuptiality – Study dealing with the frequency of marriages, i.e. unions between persons of opposite sexes which involve rights and obligations fixed by law and customs.

Occupation – The kind of work done during the reference period by a person employed (or performed previously by the unemployed). The classification used in the By-census follows the major groups of the International Standard Classification of Occupations.

Professional, technical and related workers – Includes qualified professional scientists, doctors and dentists, architects, engineers and surveyors, marine and aviation officers and engineers; university academic staff, qualified teachers; systems analysts and computer programmers; lawyers, accountants; members of religious orders; writers, artists, sportsmen, librarians, social workers; nurses and other para-medical workers; and other technicians.

Administrative and managerial workers – Includes administrative officers in government service; consular staff; directors, managers and working proprietors (except wholesale and retail trade, import and export, catering and lodging services) in industry, commerce, transport and services.

Clerical and related workers – Includes executive officers in government service; stenographers and typists, punching and computing machine operators, book-keepers and clerks of any kind; transport conductors, postmen, telephone operators, ship's radio officers and flight radio operators.

Sales workers – Includes managers and working proprietors in wholesale and retail, import and export trade; sales supervisors, salesmen, shop assistants and hawkers.

Service workers – Includes managers and working proprietors of catering and lodging services; hotel and domestic staff, building caretakers; laundry workers, barbers and hairdressers; police and other disciplined services; tourist guides and other service workers.

Agricultural workers and fishermen – Includes master farmers, farm hands, gardeners in parks; master fishermen, fishermen, fish farmers and oyster culturists.

Production and related workers, transport equipment operators and labourers – Includes foremen and supervisors in manufacturing and construction industries; miners and quarrymen, metal and chemical processors, food and beverage processors, tobacco workers, textile workers, tailors and other clothing workers, shoe-makers and other leather workers, blacksmiths, tool-makers, fitters and machinists, radio and electrical workers, goldsmiths and jewellers, glass and pottery workers, rubber and plastic product workers, printing and painting workers, musical instrument makers and other production workers; bricklayers, carpenters and other construction workers, and stationary engine operators; hand packers, dockers and loaders, riggers and crane operators; seamen, drivers and lighthouse operators.

Armed forces and unclassifiable – Includes members of the armed services of Britain and other countries, persons in occupations inadequately described or unclassifiable.

Reproductive ages – Ages 15 to 49.

Rural areas – All the areas in the New Territories excluding the new towns and market towns.

Standardized birth rate – The overall birth rate discounting the sex and age structure of the population.

Standardized mean age at first marriage – The mean age at first marriage of ever-married women aged 25–49 in specific socio-economic groups discounting the age differences between these groups.

Standardized mean number of children ever-born – The mean number of live births to ever-married women aged 15–49 in specific socio-economic and geographical groups discounting the differences in marriage duration between these groups.

Survivorship ratio – The ratio of the total number of children living to the total number of children ever-born.

Tertiary planning unit – The smallest town planning unit. For town planning purposes, the whole area of Hong Kong is delineated into primary planning units, secondary planning units and tertiary planning units. There are altogether 234 tertiary planning units.

Total fertility rate (TFR) – The total number of children a hypothetical cohort of 1,000 women would bear during their lifetimes according to fertility conditions specified by the age-specific fertility rates for a particular year. It assumes that this hypothetical cohort of women suffers no mortality.

Urban areas – The areas comprising Hong Kong Island, Kowloon, New Kowloon and all new towns (i.e. Tsuen Wan New Town, Tuen Mun New Town and Sha Tin New Town) and market towns (i.e. Yuen Long Township, Tai Po Township and Sheung Shui/Fan Ling Township).

