Part III.

DIFFERENTIAL FERTILITY.
CHAPTER 6.

FACTORS AFFECTING FERTILITY.

The sharp decline in the birth rates of Western Countries and their subsequent gradual recovery in some of them during the last four decades raised a storm of controversy on the continent as to the possible and probable causes of this vital demographic phenomenon. In the past two decades, considerable attention has been focused upon economic, social and political conditions which appear to be associated closely with the sharp fluctuations in the birth rate. A few studies were undertaken in the continental countries and elsewhere to gather statistical evidence on the suggested causes of fluctuations in the birth rate and the relative strength of these causes in their influence over the birth rate. The controversy is still in the boiling pot and has not taken a definite crystal shape. Much remains to be done before the issue can be
settled objectively. In the present chapter, the main arguments of some of the leading western demographers have been incorporated in a summary form.

A word may be added about the nature of the important methods of collecting and presenting differential fertility data as illustrated in these studies. Broadly speaking, four methods can be differentiated: first, by special inquiries from married women as to their families, past and present; secondly, from the particulars of parents and young children who happen to have been enumerated on the same census schedule — this requires no special questions to be asked and is thus a method that can be used at any time; thirdly, by a comparison of the census data with the registration information collected in the census year; and finally from registration data alone. Needless to say that, in view of the severe limitations of Indian Vital Statistics both Census and Registration, the first method has been used in the present study.

As is done by several recent authors, it is convenient to distinguish between (1) reproductive capacity and (2) deliberate effort
for controlling family size. Some authors like Spencer believed that the decline in fertility was due to causes other than family limitation. More recent authors have suggested that various factors of modern civilization may have reduced the reproductive capacity, such as an increase in alcoholism or venereal disease, the excessive practice of sport by women, the employment of women in factories, the frequent bathing with soap by women, a decrease in sexual intercourse due to the excessive nervous strain due to modern urban life and an increase of protein in diets. However, none of these factors is generally accepted and some of them are even heavily criticised. There is nowadays universal agreement that the decline in birth rate in Western countries is primarily due to the practice of family limitation. The main reason advanced for this kind of conclusion is the widespread belief that practices of birth control and abortion have of late increased greatly. Moreover, several features of the declining birth

1. This distinction is used by Cini and Royal Commission on Population.

rate are interpreted as pointing to the increasing use of birth control methods. These characteristics are the pace of decline, the pattern of its spread in neighbouring areas in socio-economic groups and in religious groups, the greater decline in birth rates at long durations of marriage than at short durations, the greater decline of fertility rates among older women than among younger women and the increase in the effect of economic fluctuations on fertility rates. Moreover, recent studies conducted in the Western Countries have shown that the practice of family limitation is widespread. Another finding of such studies is that the differences between the birth rates of different socio-economic, religious and other groups can be explained largely by differences in the extent and effectiveness of family limitation. Some authors like Myrdal and Royal Commission on Population have even argued that, if certain recent developments in the mode of life have tended to decrease reproductive capacity, other factors such as better health, improved nutrition may have operated to increase it. Some authors like Grotjahn and Beveridge have expressed the view

3. Ibid, P. 73.
that the spread of family limitation is mainly due to the invention and the increasing availability of modern mechanical and chemical contraceptives. Some other authors like Himes and My Kuczynski have equally forcefully rejected this view on the ground that the birth control methods have been known for a very long time. The propaganda carried on in support of the birth control measures and their adoption by the educated classes may have helped to popularise the idea of family limitation, but it cannot be taken to be the main reason for its adoption on a large scale. To quote the words of Himes, "while social and economic causes are the ultimate causative influences, democratised birth control is the immediate causative factor, the catalytic agent without which the whole reaction could not have taken place.

The statements so formulated, however, immediately pose the question why "The practice of family limitation" should have become so general in the Western world in the past century. What aspects of economic progress or modern civilization seem to make family

limitation so widespread in contemporary Western Society but so rare apparently in under-developed countries? This question can be approached by asking: (1) Why is fertility relatively low in developed countries? or (2) Why is it so high in under-developed countries? Presumably, the same types of factors are operative in either case. As might be expected, disagreements on these points arise less over facts themselves than over their interpretation. For instance, there is general agreement among the authorities that urbanisation and low fertility usually go together, but what is disputed is which features of urban life tend to bring down fertility. If the question is asked why urbanisation of a population tends to lower its fertility, multiplicity of factors can be named to be at work. As the U. N. O. report points out, the low fertility is the result of a particular development such as high standard of living, but as a characteristic of a new way of life, of a new civilization in general and the rational mentality accompanying family limitation. What constitutes rational mentality is stressed as freedom from tradition, the willingness to analyse and institutions, values, patterns of
behaviour which were traditionally accepted without question. If the question is put the other way about, namely, what kind of environment tends to increase fertility, the answer is probably similar; traditionalised ways of life, familial dominance, primacy of males, illiteracy, extreme poverty, and spatial, social and economic immobility. All these influences are likely to operate with diminished force in an urban environment. This leads us to the consideration of a complex of interrelated factors which act and react upon one another and jointly bring about fertility changes.

A large number of factors have been suggested as affecting marital fertility. Most of the important factors have been noted below and their influence, if any, on marital fertility will be examined in the succeeding Chapter.

Different authors have classified the factors affecting fertility in different ways. Some authors have distinguished "Voluntary" causes from "Involuntary" causes, while some

others have made distinction between "Physiological" or "Biological" Causes and "Psychological" or "Socioeconomic" Causes. In contrast to this, Mr. Raymond Pearl classifies the factors affecting fertility into "Direct" and "Indirect". Mr. Pearl lists six direct factors of biological or physiological character that affect individual and group fertility. They are: sexual desire, age specific innate reproductive capacity, coitus rate, conception rate, contraceptive rate and reproductive wastage rate. But like other writers, he also points out that these direct factors are not constant in their effect on fertility because they are modified by first order and second order "Indirect" factors. First order indirect factors include economic circumstances, density of population, religious taboos, institutions of property etc. which, in turn, fix the second order indirect factors: premarital fertility, age of marriage, education, occupation, personal values, physical and mental health etc.

The above classification of Pearl suggests that effort to influence fertility might

be aimed at either the first order or second order indirect factors or even at the direct factors. However, most specialists in these matters would probably argue that efforts to influence fertility by modifying the direct factors, while leaving the indirect factors as they are, would be largely ineffective. In other words, fertility control will be applied only by populations whose value systems and economic and social conditions make people wish to control fertility.

For the purpose of this study, the factors which affect fertility are grouped into two groups: (a) biological factors and (b) socioeconomic factors. The influence of biological factors on fertility has been emphasised by some writers. Among them, the argument of Hankins is worth noting. He observed that, in highly civilized societies, the energies of the people tend to be diverted from reproduction to the demands of mental and physical activities. Group differences in fertility reflected in some degree differences in the pressure of these demands. Hankins, therefore, attributed the decline in natality to increase in these pressures.
In the first group are considered here the following factors.

(1) **AGE OF THE MOTHER.**

Age of the mother is universally acknowledged to be the most important of all the factors affecting fertility. Yet not much light is available on the significant question as to what precise extent the variation in the specific fertility rates is due to the age of the mother. Here in the present study, an attempt will be made to measure the extent of this variation. Moreover, it will be the only factor affecting fertility that will be taken into account for the purpose of computing the specific fertility rates. Besides, the effect of all other factors affecting fertility will be studied with respect to age of the mother as the axis of reference.

(2) **AGE OF THE FATHER.**

Age of the father is a factor which is known to influence fertility. The data furnished by the fertility inquiry at the 1931 census in Travancore and Baroda showed that the larger the disparity between the ages of the mother and the father, the fewer were the
children. It should be noted however that this statement refers not to children born during a specific period, but to all children born before the date of the inquiry. Incidentally, it may be pointed out that the Census Superintendent also noted thus: "A strange correlation, the significance of which is not quite clear, is seen between fertility and the disparity in the ages of husbands and wives in regard to wives below 35 years of age. In such cases, the maximum fertility is reached when the husband is about 40 years old, whatever the age of the wife". In this connection, it may be remembered that no such correlation has been observed in Surat.

3. **DIFFERENCE BETWEEN AGES OF THE MOTHER AND THE FATHER.**

Age of the father is no doubt a significant factor likely to affect marital fertility. But since its effect will be sought to be analysed with age of the mother as the principal axis of classification and since age of the father is likely to be highly correlated with that of the mother, the effect of this factor


Census of India, Baroda, 1931, P. 178.
is more likely to be concealed than revealed. Moreover, fertility is being studied here with woman and not man as the basis and surely, the couple fertility approach is not followed in the present study. It is also thought that the difference between the ages of the mother and the father rather than the age of the father is likely to be a more significant factor affecting fertility.

(4) **AGE AT MARRIAGE.**

The age at marriage is an important relevant factor in the study of fertility. The importance of this factor is enhanced when, as in India in general and in Surat in particular, artificial methods of family limitation do not intervene to any significant extent to upset the slow changing natural processes.

(5) **DURATION OF MARRIAGE.**

It is necessary to remember two points in this connection. First, the duration of marriage has been counted in all cases from the age at present marriage so that the duration is the duration of the present marriage. Secondly, where the age at marriage was below 13, the duration of marriage was counted as from age 13. Thus by the duration of marriage is meant here the
duration of present marriage within the fertile period. Lastly, it may be noted that the duration of marriage is a very significant factor in fertility studies and can compete successfully with age of the mother for the status of the principal axis of classification.

The following are the socio-economic factors which are suggested by several authorities as affecting marital fertility.

1. **Urbanisation**

   The decline in fertility in many countries has been preceded and accompanied by a shift of the population from the country to the city. This particular phenomenon has led some authors to suggest the causal relationship between the rapid increase in the proportion of population living in the city and the decline in fertility. Some recent studies have shown that families are larger among rural than among urban populations. This evidence is usually cited in support of this contention. Many writers, without emphasising urbanisation, believed that large cities have provided favourable environment for the development of attitudes towards family limitation. Several others have regarded the urban environment as an essential condition for
this development and attributed the decline of family size elsewhere to be a consequence of the transmission of urban mentality from the cities to the villages. Many factors have been suggested which are responsible for family limitation in the city to a greater extent than in the country. Firstly, it is said that family life in the city is less cohesive because family members participate in other institutions and have good many contacts outside the family. Secondly, children are not regarded as an economic asset in the city. A smaller proportion of children contributes in the family income in the city. Thirdly, status aspirations are probably more prominent in the cities than in the villages. These status aspirations are handicapped where support of a large family is mandatory. Lastly, the importance of the spirit of nationality and independence of tradition have been emphasised. Many writers have advanced the opinion that the urban mentality rather than mere residence in the city is responsible for decline in the family size.

(2) SOCIAL Mobility:

The desire to rise in the social scale has been emphasised by some writers as an
important motive for family limitation. Dumont, in the latter half of the 19th century, conducted a series of studies on this point and named the phenomenon as "Social Capillarity". Just as a column of liquid must be thin in order to rise under the force of capillarity, so also must a family be small in order to improve its lot in the social scale. Dumont and others have advanced an argument that the increase of mobility between social classes was accompanied by a decline in the family size. Social mobility seems to affect fertility to the extent that the money, time and effort involved in the rearing of children is otherwise used to rise in the social scale. Thus one or two children rather than a large number is more conducive to social mobility.

(3) STATUS OF WOMEN:

Changes in the status and role of women have been advanced by some authors as a contributing cause and by certain others as the principal cause for the decline in family size. The traditional role of women as the homemaker and the bearer of children has undergone a fundamental change. The factors responsible for this changing attitude among women can be enumerated as increased female education, equality
for women in many spheres of public life, the emphasis upon the woman's role as an equal companion in marriage and the opportunity for personal development and independence.

(4) EMPLOYMENT OF WOMEN:

Some authors believe that participation of women in gainful employment is an alternative for them to the bearing and rearing of children. However, recent studies in the proportions of married women gainfully employed have not established the fact that the increased employment of women is a major factor influencing the family size. Some writers have stressed not only employment but also the type of employment in which women engage themselves as a factor tending to reduce the family size. In the good old days when the economy was mostly agrarian, it was never prescribed that men should be workers and women the houseworkers. Women did participate in the economic activities engaged in by the men-folk of the household and this function was easily combined with that of bearing and rearing children. However, urbanisation and industrialisation

snatched the woman away from the home and hearth and the economic activities became competitive with child-bearing, child-rearing activities. It is today generally admitted that, in industrialised societies, women avoid child-bearing. Both the gainful employment of woman and her abstention from childbearing result in a standard of living for a couple which would be impossible with additional members and without the wife's income.

(5) FAMILY ORGANISATION:

Some authors, the chief of them being Le Play, have pointed out the changing pattern of family organisation as responsible for decline in the birth rate and family size. They believed that the transition from the traditionally stable family to the unstable transitory family was an important factor in the direction of family limitation. Modern Western writers chiefly Davis have emphasised the fact that the family is no longer an economically productive unit and its functions in childbearing are meeting increasing competition and opposition from schools and voluntary associations. Some of them have also stressed the changing pattern of interpersonal relationship between parents and children. For instance, Aries has pointed out that with the
increasing concern of the parents for the welfare of their children, the family has become increasingly child-centred. Parents devote more time and leisure to the emotional and cultural needs of their children. It is this emotional concentration upon children which has paradoxically become the reason for family limitation.

(6) STANDARD OF LIVING

The importance of wealth as a factor influencing fertility was stressed by Brentano. It was observed that the size of the family was smallest in countries where income levels were highest; that the rise in average real income occurred during the period of declining fertility; that the rich generally had fewer children than the poor. It has, therefore, been suggested that increasing wealth decreases fertility. On the other hand, Oldenberg, Wolf and others have pointed out that there is not simple relationship between income levels and fertility levels, in support of which is pointed out that the decline in fertility among the rich is followed by the spread of decline among the poor. The question, therefore, that naturally arises is why an increase in wealth should produce a decline in fertility. The theory put forward by Brentano is that the balance between
competing sources of pleasure changes as wealth increases; that greater income makes possible a wider selection of leisure time pursuits; that child-rearing may be taken to interfere with the satisfaction of these desires. Consequently, family size may be limited. A theory similar to this is developed by Spengler in "France Faces Depopulation". Another theory is contained in the Report of the Royal Commission on population, United Kingdom. It has been pointed out that increasing income makes possible the rational planning for one's future and that of one's children. Striving for a rise in the social status and thriftiness may develop. This chain of processes builds up rational mentality which, in turn, fosters a desire for family limitation. Such incentives are lacking with the people who are maintained at the subsistence level.

(7) COST OF REARING CHILDREN-

Several writers have stressed the fact that birth rate declined during the period when the cost of rearing children increased greatly. In the olden days, children used to participate in the farming activities and were extensively employed in the handicrafts. Child labour in our days is banned by legislation. Besides, children are required to be sent to school and the average
period of education is extended. The net result is that children have to be supported by their parents for a much longer period now than previously. As Kutzner has pointed out, there is yet another factor enhancing the period of economic dependence of children and it is the great increase in technical and professional education, the cost of which is borne mostly by the parents. Also, higher standards of medical care and child care enhance considerably the costs of rearing children.

(8) RELIGION:

Religion is often assumed to influence size of the family. It is generally conceded that interest in religion declines as the traditional values give way to rationalist modes of thinking. Thus loosening of religious faith is supposed to give rise to the belief that family limitation is increasingly more a personal and a family matter, falling outside the jurisdiction of religion. Aries conducted studies in the patterns of fertility of various regions of France with reference to the attitude of the population towards the Catholic Church. His finding was that, in sections of the population where attachment to religion was strong, fertility was, in general, above the average. However, the
study failed to establish an association between decline in fertility and religion. Freedman and Whelpton conducted a study among the Protestant Couples in one city in the United States and tested the hypothesis of association between religious interest and the effective practice of contraception and the family size. His finding was that there was little association between the degree of religious faith and contraceptive practice. Slightly higher relationship was noticed between the degree of religious interest and family size, but the association was shown to be derived from the extreme categories with respect to which family size was largest and smallest respectively where religious interest was highest and lowest. The authors generally concluded that their findings "do not indicate that religion is of great importance in explaining variations in fertility behaviour".

(9) *AGE STRUCTURE AND MARRIAGE PATTERNS*

The question whether changes in the age composition and marriage pattern of the population affect the birth rate has received good deal of attention. Existing studies have shown...

10. As quoted in *Determinants and Consequences of Population Trends*, P. 81.

that the decline in the crude birth rate is not the result of a decline in the proportion of persons in the reproductive age group. As a matter of fact, the proportion of women of childbearing age group increased some what in many countries at a time when the birth rate was declining. It has also been shown that the tendency to marry and the age at which they marry are not, to any great extent, responsible for decline in the crude birth rate. In fact, the proportion of all women aged 15 years and over who are married and the proportion of women in the child-bearing age group have not declined. Other studies have revealed that there has been little change in the proportion of women who remain unmarried till the end of the reproductive period and no increase in age at first marriage during the period of declining birth rate. Ireland is an exception to this kind of experience. Other factors like rates of dissolution of marriages by divorce or by death of husband or

wife and the rates of remarriage are considered as less important in long term changes in fertility.

Differences of fertility as between one caste or class of castes and another would be expected on a priori grounds. The Brahmins, for example, have long been regarded as less fertile than the rest of the population; indeed they have steadily diminished as a proportion of the total Hindu population despite an infiltration from other castes of persons who manage to pass as Brahmins. It will certainly be illuminating to supply empirical evidence to these suspected caste differentials in fertility. The above assertion becomes more emphatic when it is realised that Surat is a Caster-bound society and almost every aspect of the city life is imprinted with caste customs and conventions and caste taboos. Thus, owing to the existence of rigid caste system, the position of Surat city has become more complex.

Caste is a factor of immense

17. "Kingsley Davis; Population of India and Pakistan, 1950, P. 78.
sociological significance in India and it is but natural that its effect on fertility should attract attention of the research workers in this field. It is sometimes said that caste is a decaying institution and much capital need not be made out of it. But then it must be pointed out that the decaying process is very slow and there do not appear any signs of its speedy disappearance from the Indian life. It will for long remain a potent force in the social, economic and political life of the Indian community.

Prof. N. V. Sovani has classified caste in what he calls the sociobiological group of factors. It has been chosen here to include caste in the socio-economic group of factors. Castes, except in a few cases, do not represent distinct racial groups. Of course, the existence of restrictions on intermarriage has given to each caste a certain bias and distinctness. But it is felt that this kind of distinctness cannot have any biological significance. There is also a certain amount of correspondence between castes and classes, the higher castes being assumed to be better biologically endowed, both physically and

mentally as well as economically. And yet fertility is higher among lower classes than among higher classes. These and other related matters aroused our interest in the study of caste differentials in fertility.

(11) OTHER FACTORS:

Some writers have stressed the importance of decline of mortality among infants, young children and aged persons as promoting family limitation. The greater survival rate of children would mean a greater burden for their support, unless the practice of family limitation is resorted to. The findings of some statistical studies have revealed a tendency for couples to have yet another child to replace a child which did not survive. The greater survival rate of children therefore, may lead to limitation of the number of children born. The decline in infant mortality is generally regarded as only one element in the "total social situation" favourable to family limitation. The greater survival rate of the aged results in their slower elimination from the labour force, making the


economic situation more difficult for the young; and in increase in the dependency burden, thereby encouraging smaller families. Housing shortages, poverty, economic insecurity, unemployment and fear of war have been suggested as other causes to explain the declining birth rate. Objection to these causes is raised on the ground that there is no intensification of these factors in countries where the birth rate has declined. While individuals give these as reasons to explain why they are not having more children, the genuineness of such motives is doubted by many authors.

22. As quoted in Determinants and Consequences of Population Trends, P. 82.