



MEASURES OF KUWAITI WIVES' AND HUSBANDS'
ATTITUDES ON FERTILITY

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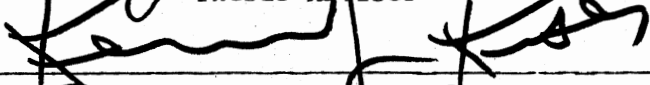

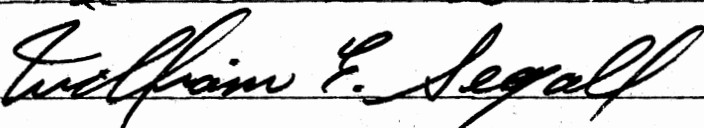
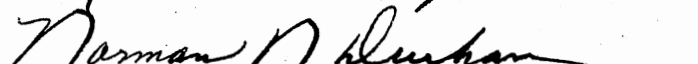
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CHAPTER I

INTRODUCTION

The investigation to follow is based on a social psychological approach which concentrates on the study of family interaction as it relates with fertility and the social and personal milieu. The review of literature in Chapter II of this study indicates social and economic factors can affect what Davis and Blake (1956) have called "intervening variables" so as to increase or depress fertility. In addition to that, such factors can also serve to affect fertility intentions, and they do that by altering the balance of resources, costs, and preferences available to and perceived by wives and husbands in different ways.

Research efforts, however, dealing with the question of when the wife begins to indicate a difference in preference from her husband is sparse. In other words, while some wives experience no change in attitudes toward a large number of children, others plan as to how many and when to get them. Examination of the educational level, occupational involvement, and other familial plus extra-familial activities helps one understand the various factors that affect the wife's outlook with regard to fertility.

The main point of this study deals with fertility planning and fertility preferences and the variations on the basis of interaction of other independent variables such as education, occupation of both husbands and wives, and particularly of wives.

Organization of the Study

Chapter I of this study introduces the general demographic attributes of the Kuwaiti population. Chapter II reviews the related literature that contributes to the theoretical mode formulated in Chapter III. The theoretical framework, assumptions, and hypotheses are discussed. Chapter IV presents the methods and analytical techniques used in this research. Chapter V presents the results of the investigation by an analysis of the data. The summary and conclusions are presented in Chapter VI.

Kuwaiti's Demographic Attributes

Population growth in Kuwait has been extremely rapid in the past 23 years. The population has increased over six-fold (657 percent, rising from 206,473 in 1957 to 1,355,827 people in 1980). Density of people per square kilometer has risen sharply from 12.9 persons per square kilometer in 1957 to 73.97 in 1980 (see Table I). The total land area of Kuwait between 1957 and 1980 increased slightly from 15,520 kilometers to 17,820 as a result of Neutral Zone decisions (Habib, 1971).

While both Kuwaiti and the non-Kuwaiti populations increased dramatically during this 23-year period, the non-Kuwaiti growth rate was higher. Thus, the Kuwaiti population increased by 495 percent between 1957 and 1980 while the number of non-Kuwaitis increased by 855 percent. Consequently, although the Kuwait population experienced a substantial increase, the percentage of Kuwaitis in the population of the country actually decreased between 1957 and 1980 from 55.0 percent of the total population in 1957 to 41.0 percent in 1980.

TABLE I
POPULATION DENSITY IN ALL CENSUS YEARS

Year	Total Population	Density/Square km	%, k
1957	206,473	12.9	55.0
1961	321,621	20.1	50.3
1965	467,339	29.2	47.1
1970	738,662	43.7	47.0
1975	994,837	56.3	47.5
1980*	1,355,827	73.9	41.0

*The early census data tabulation results which appeared in the newspaper.

Source: Ministry of Planning (1979).

Changes in the population size of a country can occur in two ways: the increase or decrease can occur if there is an imbalance between the number of births and deaths, and change can occur if there is an imbalance between the number of migrants into and migrants out of a country. A birth-death imbalance leads to natural increase or decrease and an out-in-migration imbalance leads to net migration increase or decrease. The rapid increase in the total population of Kuwait between 1957 and 1980 has occurred due to both natural increase and net migration.

Population growth among the Kuwaitis has been a result of natural increase and naturalization with the former by far the most important factor. In 1957, the birth rate among Kuwaitis was 45.4 per 1,000

population while the death rate was 6.2 per 1,000 population; the differential equals the natural increase, that is, the growth in that year was 39.2 per 100 Kuwaitis (see Table II). The natural increase figures for Kuwaitis has been stable between 1965 and 1975, never falling below 40.0 nor rising above 50.0 in each of the 10 years (see Table II).

A comparison of the Kuwaiti and non-Kuwaiti natural increase figures reveals that the Kuwaiti figures are consistently higher (see Tables II and III). In 1975, these figures show an increase of 32.8/1,000 population among the non-Kuwaiti; thus, the natural increase among Kuwaitis was 37.2 percent higher than among non-Kuwaitis in 1975. While the data reveal that both the Kuwaiti and non-Kuwaiti populations are increasing rapidly through natural increase, the increase among Kuwaitis is a consequence of this factor is at a substantially higher rate.

A closer look at the vital statistics components of natural increase shown in Table II indicates that the Kuwaiti crude birth rate (CBR) during the period 1965-1975 was most frequently in the low 50's (i.e., 50/1,000 population) and the CBR was generally around six or seven per 1,000. Among non-Kuwaitis, both of these figures are found to be consistently lower; the birthrate is mostly in the low 40's and upper 30's, and death rate averages around 4.0. These figures reflect the nature of the non-Kuwaiti sex and age distribution. The 1975 Kuwaiti CBR of 51.1/1,000 is 41 percent higher than the non-Kuwaiti CBR of 36.3/1,000 non-Kuwaitis. During the same year, however, the Kuwaiti CBR is 74.0 percent higher than the non-Kuwaiti rate (the relevant figures are 6.1 and 3.5/1,000, see Table II). Comparatively low death rate among non-Kuwaitis is largely a consequence of their age distribution; primarily young adults, they have comparatively few people in the extreme high and

TABLE II

CRUDE BIRTHS, DEATHS, AND NATURAL INCREASE/1,000 FOR KUWAITI AND NON-KUWAITI POPULATIONS

Year	Births			Deaths			Natural Increase		
	Total	Kuwaiti	Non-Kuwaiti	Total	Kuwaiti	Non-Kuwaiti	Total	Kuwaiti	Non-Kuwaiti
1965	46.3	52.7	40.4	5.2	7.2	3.4	41.1	45.6	37.1
1966	45.7	51.0	41.0	5.4	7.2	3.8	40.3	43.8	37.1
1967	49.8	54.5	45.6	5.5	6.8	4.3	44.3	47.7	41.3
1968	53.0	53.6	52.4	5.4	6.6	4.3	47.6	47.1	48.1
1969	51.4	55.8	47.5	4.9	5.8	4.1	46.4	50.0	43.3
1970	45.4	46.4	44.5	5.0	5.8	4.4	40.4	40.6	40.2
1971	45.1	48.3	42.3	4.9	6.1	3.8	40.3	42.2	38.5
1972	45.2	48.3	40.9	5.0	6.1	3.5	40.3	42.2	37.3
1973	44.2	52.4	37.6	5.0	8.0	3.5	39.2	45.4	34.1
1974	46.8	54.4	39.8	5.3	7.1	3.7	41.5	47.3	36.1
1975	43.4	51.1	36.3	4.8	6.1	3.5	38.6	45.0	32.8

Source: Ministry of Planning (1979).

low ages at which death is most common. Overall, this combination of a large number of births and a low number of deaths has led to high rates of natural increase. Kuwaiti population between 1965 and 1975 has experienced almost static birth rates, death rates, and rates of natural increase.

TABLE III
SEX RATIOS AMONG KUWAITIS AND NON-KUWAITIS IN
1957, 1961, 1965, 1970, AND 1975

Year	Sex Ratio		
	Total	Kuwaitis	Non-Kuwaitis
1957	177	109	365
1961	167	109	267
1965	158	105	236
1970	132	102	166
1975	121	100	142

Source: Ministry of Planning (1979).

Having observed a much higher natural increase rate among Kuwaitis than non-Kuwaitis in the country, it would seem logical to expect that the proportion of the total population of the country which is Kuwaiti would also be exhibiting a marked increase. However, an examination of the data presented in Table I indicates that the proportion of the population which is Kuwaitis has been stable at slightly over 47 percent

since 1965. The key factor which explains this seemingly inconsistency is the fact that while the increase among the Kuwaiti population is essentially a consequence of two important factors (i.e., natural increase and net migration). In sum, the country's rapid population increase has been a consequence of an exceedingly high natural increase among Kuwaitis and a high natural increase plus a high net migration (the number of people moving in, minus the number moving out) among non-Kuwaitis.

When the country experiences a significant voluntary in-migration, the numerical balance between the sexes in the population is frequently changed toward a preponderance of males. This is because migration tends to be selective of males since a primary motivation for voluntary migration is often to obtain employment and, in such situations, males are more common job seekers than females. Such a pattern is reflected in the sex ratios in Kuwait (the number of males/100 females in a population) which in 1975 was 121 (Table III).

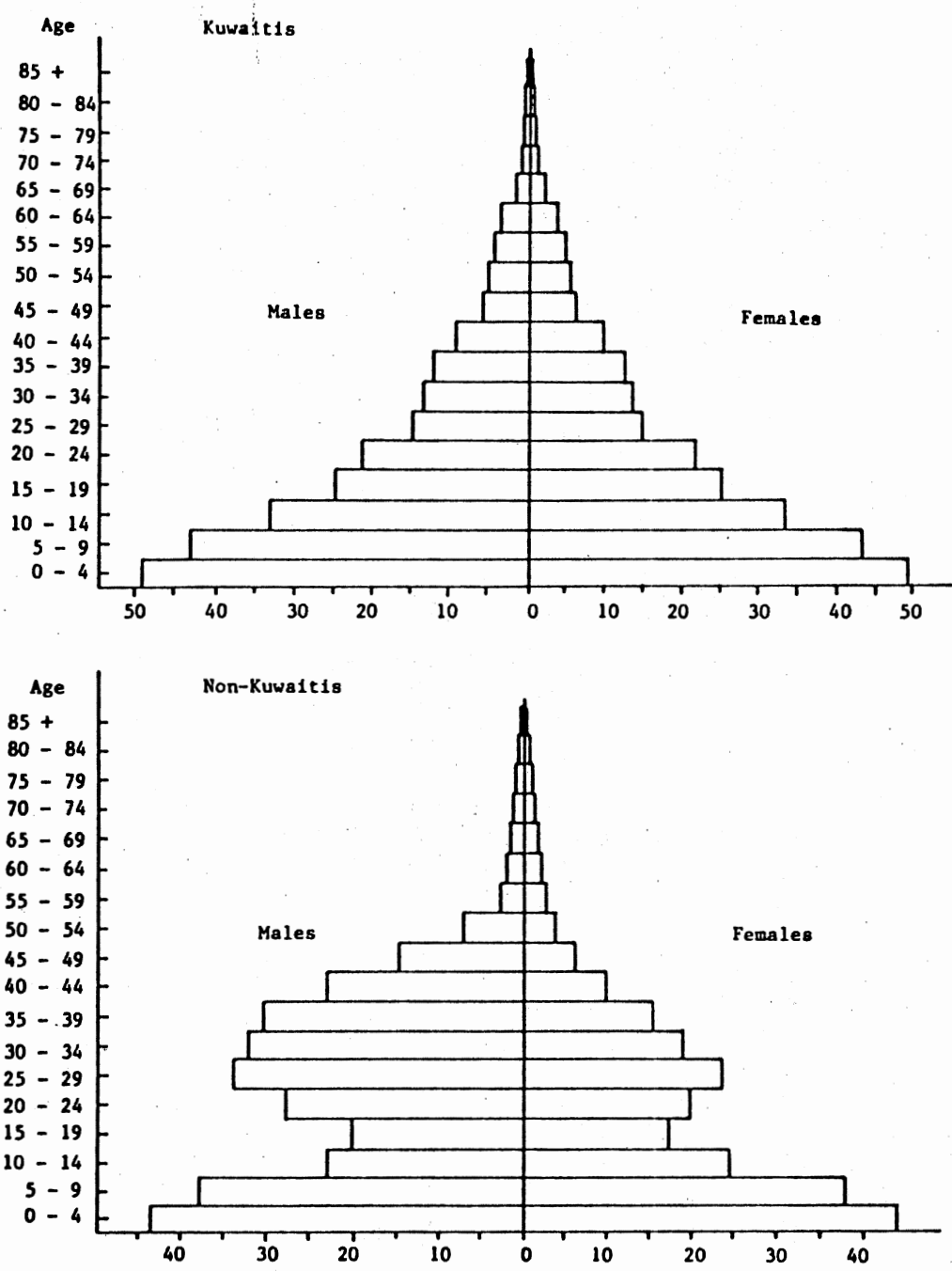
In the same year the sex ratio among Kuwaitis was 100, indicating the presence of an exact balance between Kuwait males and females in the country. Among non-Kuwaitis, however, the 1975 sex ratio indicates the presence of 142 non-Kuwaiti males for each 100 non-Kuwaiti females in the country. Despite the high differential of males relative to females, the sex ratio among the non-Kuwaitis has decreased over the years; since 1957 it was an exceedingly high 365, in 1961 it was 267, and in 1965 it was 236, compared to its 1975 figure of 142. This indicates that males who are presently migrating to Kuwait are much more often bringing their families with them and/or sending for wives and other family members after they have established themselves in the

country. This has been a growing pattern, especially since 1957, due to changes in Kuwait which occurred in that year.

In addition to sex differentials, migration also differentially affects age group distribution. As indicated previously, for economic reasons, migration tends to be selective since males are more common job-seekers than females; similarly, employment-seekers are apt to be in the 20 to 60 age groups. Since males of these ages generally have least difficulty in obtaining employment, migration is thus selective of males between the ages of 20 and 60. This means the sex ratio among the non-Kuwaitis who are between 20 and 60 years of age would be expected to be very high; among Kuwaitis, whose population increase is a result of natural increase, this statistic should be about 100.

Data depicting such patterns are presented in Figure 1 and Table IV. The approximate balance between the sexes in the Kuwaiti population in 1975 can be viewed by examining the top population pyramid of Figure 1 and the first data column of Table IV; the figure is around 100, showing that there are as many males as females among Kuwaitis in the population. Among the non-Kuwaiti population (see the bottom population pyramid of Figure 1 and the second data column of Table IV) the sex ratio for the years 20 to 60 is very high. This is depicted by the much longer bars which indicate numbers on the male side of the population pyramid (Figure 1) and the sex ratio which varies between 149 and 255 (Table IV).

Such a sex distribution can have serious consequences for many of the significant activities of life in a population. For example, a sex ratio of near 200 in the marriageable age groupings means that there are two males for each female of marriageable age in the population; a single male may find it difficult to find a wife. From a social point of view,



Source: Ministry of Planning (1979).

Figure 1. Population Pyramids--Kuwaitis and Non-Kuwaitis, 1975

such data mean that various problems which affect males of marriageable age may be common. And the types of recreational, shopping, family, religious, low enforcement, and educational patterns can all be affected by such a male-female distribution.

TABLE IV
SEX RATIO AMONG KUWAITIS AND NON-KUWAITIS BY
AGE GROUPINGS, 1975

Age Grouping	Sex Ratios	
	Kuwaitis	Non-Kuwaitis
Under 20	101	108
20 to 29	91	149
30 to 39	103	198
40 to 49	116	255
50 to 59	108	233
60 and over	102	104

Source: Ministry of Planning (1979).

There is also an employment-related consequence of the Kuwaiti and non-Kuwaiti age distributions that are depicted in the population pyramids in Figure 1. An examination of these distributions reveals that what may be termed the "dependent population" (i.e., those members of the population who are generally not in the work force and are supported by the employed members of the population--people under 15 and

over 65 years of age), are far greater in the Kuwaiti than in the non-Kuwaiti population. The relevant data are slightly over one-half in the category for the Kuwaiti population and slightly over 40.0 percent in the non-Kuwaiti population. If this observation is coupled with the previous one about the preponderance of males in the non-Kuwaiti population, the conclusion is reached that the non-Kuwaiti population is basically a blue-collar work force.

Further understanding of the type of people who are moving into Kuwait can be found in data on religion in the country. In 1957, 94.4 percent of the population in Kuwait listed their religion as Moslem, and 4.7 percent as Christian; in 1975 the corresponding percentages were 95.0 percent and 4.5 percent. This means that despite rapid population growth, the religious distribution within the country has remained essentially the same. These data suggest that a sizeable proportion of the migration into Kuwait is taking place from other Moslem countries.

Data on the nationality of the residents of Kuwait in 1975 reveals that 891,275 residents (representing 89.6 percent of 994,837 people in the country) are from Arab countries (Table V). Of this total, 472,088 or 47.5 percent are Kuwaitis. The largest group of people who are non-Kuwaiti come from Jordanian and Palestinian background; they constitute 204,178 or 20.5 percent of the population. All other Arab countries constitute 215,009 or 21.6 percent of the population. People from Iran, India, and Pakistan total 95,963 or 9.65 percent of the population. Other non-Arab countries total 7,599 or 0.76 percent of the population.

At this point, many people make the observation that Kuwaitis are a minority in their own country. This statement is a statistically valid one (472,088 compared to 522,749), but Kuwaitis are by far the

largest nationality grouping in the country. Thus, Kuwaitis number 472,088 in the country and the next largest nationality grouping has less than one-half of that number (the 204,179 from Jordan-Palestine), with the next largest group making up only 6.1 percent of the population (from Egypt). Kuwaitis are a minority in their own country, but they are very strong plurality.

TABLE V
NATIONALITY BACKGROUND OF THE RESIDENTS OF KUWAIT, 1975

Nationality Background	Number	Percent
Kuwaiti	472,088	47.5
Jordan-Palestine	204,178	20.5
Other Arab countries	215,009	21.6
Iran, India, Pakistan	95,963	9.65
Other non-Arab countries	7,599	0.76

Source: Ministry of Planning (1979).

The census of 1975 reveals that among Kuwaitis 59.1 percent of the females and 30.0 percent of the males 10 years of age and over, together constituting 44.6 percent of the total Kuwaiti population in this age grouping, are illiterate (Table V). Among non-Kuwaitis in the same year and in the same age grouping, the female illiteracy figure is 31.3

percent and the male figure is 27.5 percent. For the non-Kuwaiti population as a whole, the illiteracy percentage is 28.5 percent.

TABLE VI
ILLITERATE POPULATION 10 YEARS OF AGE AND OLDER, KUWAITI AND
NON-KUWAITI MALES AND FEMALES, 1957, 1965, AND 1975,
BY PERCENTAGE

Year	Kuwaiti			Non-Kuwaiti		
	Total	Males	Females	Total	Males	Females
1957	62.6	48.6	77.9	51.0	51.4	49.2
1965	56.3	41.5	72.0	40.9	40.8	41.5
1975	44.6	30.0	59.1	28.5	27.5	31.3

Source: Ministry of Planning (1979).

Among all the groupings mentioned, the percentage of the population which is classified as illiterate has been decreasing over the years. Thus, among the Kuwaitis 10 years of age and older between 1957 and 1975, there was a substantial drop from 62.6 percent classified as illiterate to 44.6 percent; among Kuwaiti males the decline was from 48.6 percent to 30.0 percent; and among females it was from 77.9 percent to 59.1 percent (Table VI). Among non-Kuwaitis the decline was from 51.0 percent to 28.5 percent, with illiteracy among males decreasing from 51.4 percent to 27.5 percent and among females from 49.2 percent to 31.3 percent. Close inspection of the data in Table VI shows that the decline in

illiteracy was more substantial between 1965 and 1975 than between 1957 and 1965. Such a speed-up in the decline suggests the influence of expanding educational opportunity in Kuwait and probably a net migration among non-Kuwaitis which is increasingly selective of educated people.

CHAPTER II

REVIEW OF SELECTED LITERATURE

Much of the following literature on fertility has some bearing on the study by Westoff, Potter, Sagi, and Mishler (1961) as well as the present research. On the whole, sociologists follow a socio-physiological point of view in their study of fertility. This will be illustrated in the following review of literature. There is, however, a cautionary story cited from the literature which is an object lesson to the conventional practice of taking a number of variables (unrelated to the actors' own explanations) and looking where the best correlation lies.

Stycos (1962) and Heer (1964) had both noticed a positive relation between fertility and economic development in parts of Latin America. Stycos' work was on Peru and Heer's on Ecuador and Bolivia. Stycos suggested that the explanation might be that the greater marital instability of the economically less-advanced Indians, as compared with the Spanish-speaking population, led to a smaller exposure to the risk of conception. Heer cast doubt on this hypothesis and suggested instead that the difference may be due to voluntary causes, such as abortion or infanticide. James (1966) re-examined their data, prompted it seems, by Stycos' tabulation of fertility in Peruvian "provincias" by altitude level and the proportion of the population speaking Spanish. He thus concluded that ethnic status, as indicated by language, was a more powerful determinant of fertility than altitude.

James suggests that Stycos' results would have been rather different had he dichotomized a little nearer the medians of the variables, and proceeds to test his assumption against data for the larger administrative units of Peru and Bolivia, and for "provincias" in Ecuador. He found that the product-moment correlation between fertility and altitude for Peru, Ecuador, and Bolivia are -0.805 , -0.761 , and -0.726 , respectively. The relationship between fertility and altitude, holding language constant, is stronger than that between fertility and language, holding altitude constant. The conclusion, therefore, seems to be that altitude is more closely related to fertility than is economic development (if the indicators of the latter are accepted). Heer (1967) accepted James' recalculations.

These recalculations have themselves now been challenged. For reasons outside their control, the official birth registrations being so deficient, James and Heer used the ratio of children under five to women between 15 and 49 as their measure of fertility. Whitehead (1968) has taken up James' admission that such a statistic disguises the effect of infant mortality, and has presented scattered field evidence to show that such mortality is in fact very high in the high-altitude regions of Bolivia and Ecuador (and by implication, Peru). True crude birth rates may be as high as 50, well in excess of those at lower altitudes. It is, therefore, unlikely that there can be any significant effect of altitude on fecundity, either through the male or the female. What records there are do suggest, as James expected, that there are a large number of abortions; but these appear to be voluntary and not spontaneous and thus to have a social cause. Neither is there any suggestion that the high infant mortality is a direct product of living at high

altitudes. Rather, it is explicable in terms of the social conditions of the depressed populations at these heights, populations that have yet to enjoy the substantial measures of preventive public health now enjoyed by the majority of developing communities. The most recent contribution to this debate at the present time confirms the tendency suggested by Whitehead from Peruvian data (Bradshaw, 1969). Bradshaw considers that the under-registration in Indian Peru may have disguised a fertility in excess of that in the Spanish-speaking districts and, therefore, that the fertility differentials in Peru are much more consistent with the pattern to be expected from the transition model than was at first thought.

This exchange of data and arguments contains three lessons. First, the greatest care has to be exercised in using deficient demographic data. The less refined the data are, the more likely they are to contain hidden effects that can make nonsense of one's inferences. Secondly, it reveals the dangers of simply taking hypotheses that fit one's preconceptions and not testing for factors conventionally treated by other workers. And third, it reveals how much more easily field evidence, including the direct interviewing of the childbearing population to elucidate their intentions as well as their fertility behavior, can lead to more accurate causal imputations.

There is, however, little doubt that sociological and economic factors are responsible for the demographic transition in fertility and mortality over the past 200 years. The problem is not that of mistaking a non-sociological process for a sociological one, but rather that of deciding which sociological factors have been responsible for which rate changes. Sorting out the various factors requires a supply of

information and a methodological sophistication that have only recently become realistic possibilities. The United Nations' (1953) review of the debate about the fertility transition illustrates how recently the leading authorities in the field were still somewhat at a loss to assess the relative contributions of the various factors, and the extent to which they were forced to resort to speculation. And, so long as the relative contribution of various socio-economic determinants is unknown, it is impossible to begin to suggest a mechanism that can account for the change.

Ryder (1959) makes this clear when, in summarizing the societal types that have accompanied the three main stages of the demographic transition, he points out that such a mechanism would necessarily be part of a wider explanatory theory of development; and that we have no such theory. His summary nevertheless contains at least some of the building blocks for one. The first societal type is typified by high fertility and morality, labor intensive agriculture, and consanguineal familism. In these societies, fertility is controlled by various combinations of infanticide, abortion, and abstinence. Some peasant societies in the Far East still display these characteristics. Second is the type characterized by somewhat lower fertility and mortality, agriculture which is still labor intensive, but in which consanguineal familism has been replaced by a conjugal pattern and where fertility is controlled by a later age at marriage. Such was the case in pre-industrial Europe in the sixteenth century. Third and last is that type characteristic of the modern west, where fertility and morality are low, industry replaces agriculture as the dominant economic activity,

individualism predominates over familial values and in which fertility is mainly regulated by contraception within marriage.

Leibenstein (1957) has provided a speculative account of the changing utilities of children through the period of development. He begins by making several assumptions about the fertility desires: Assuming that the desire for children for their own sake remains constant over the period of rising per capita income, it also being a basic assumption of the whole theory that this income is indeed rising. However, these children's utility as a source of productive labor to augment the family income and their utility as a source of security to offset the income drop at the end of the parents' productive life both decline. On the other hand, the direct cost of each child increases since, he assumes, the effect of rising income is to promote a desire for "higher quality" children.

The new occupational environment limits opportunities for child labour, requires more costly training for children, and necessitates smaller family obligations on the part of the parents so that they can take advantage of new and different economic opportunities (Leibenstein, 1957, p. 164).

Further, the indirect costs of children increase in the sense that there is a greater opportunity cost involved in looking after them.

Leibenstein makes two important qualifications of detail to his general model. First, he suggests that as infant mortality declines at the beginning of the transitional period, the number of expected child-utility years increases, and within the desired and so the actual number of children. Eventually it will be realized that the costs of caring for this extra load outweigh the ultimate benefits, and the fertility rate will then decline. This temporary rise and fall he terms the infant mortality hump. Second, he argues that the most important

determinant of fertility in the last period of the transition will be the cyclical fluctuations of the mature, industrial economy, whether they are called long (so-called "Kuznets cycles") or short (more usually referred to as "business cycles").

The first of these two qualifications, together with the general model, is supported by Lorimer's (1967) Calculation. Lorimer constructs models from six variables (the level and pattern of fertility, the level of mortality, consumption needs by sex and age, production potentials by sex and age, the relation of the nuclear family to other social structures, and productive resources) to simulate the following conditions: (1) traditional agriculture, high fertility, and high mortality; (2) the same, except for moderate mortality; (3) early industrialization, high fertility, and moderate mortality; and (4) the same, except for moderate fertility. His calculations, therefore, apply solely to the early period of transition. High fertility he takes to be 7.0, moderate 4.0; ages at marriage in the first three conditions are 18 for women and 21 for men, and are postponed five years for the fourth; it is assumed that children leave the parental family at marriage; and it is assumed that the first birth occurs after an interval of 1.0 to 1.9 years, successive intervals being of 2, 3, 3, 3, 3, and 4 years. Female expectations of life at birth are taken to be 30 years (high mortality) or 50 years (moderate mortality). Lorimer further assumes, from some Indian and Filipino data, that an adult male consumption unit is taken as 1.0, an adult female's will be 0.8, and that those of children of both sexes will be 0.3 under two years old, rising by equal amounts to 0.4 at five and thereafter by larger amounts to the adult level at 15 years. He remarks that this scale may be conservative. He takes the relative

productivity values under traditional agriculture as 1.6 adult male consumption units (males) and 0.8 units (females), with children of both sexes only contributing 0.15 at eight years, rising to a mean of the adult level (1.2) at 15 years. Half the children reaching 18, that is, the males, remain at home for another three years. Under early industrialization, male productivity rises to 1.8, female drops to 0.6 (giving the same couple equal productivity as in agriculture). Children reach 0.12 at 12 years, rising to the mean level (1.2) at 15. He remarks again that this too may be conservative in understanding agriculture-industry differences.

From these assumptions, which rest on contemporary demographic observations and a few surveys, Lorimer (1967) calculates that under the first set of conditions there is a net surplus of production-consumption units of 14.34. The period of deficit during the stage of family formation is 11 years but only amounts to -2.16 units. Under the second set, the surplus drops to 12.52, and the deficit period, also 11 years, amounts to -4.79 units. It is under the third set of conditions that the greatest stress occurs. There the overall surplus becomes an overall deficit, of -11.07 units, and the intermediate deficit period has extended to 23 years and -19.08 units. Finally, a net surplus re-emerges, albeit a small one (2.56 units), and the deficit period drops back to 15 years and -10.59 units. In this last stage, the delayed age at marriage does not affect production-consumption relations but changes their location in the family cycle.

These calculations are hypothetical in that they do not relate to one observed population. Lorimer has assembled data of various kinds

from various societies and analyzed their interactions in one model. Nevertheless, there is already some evidence that for presently developing societies, this model (and thus Leibenstein's too) does correspond to reality (Gupta and Malaker, 1963). These transitions differ internally, and economic historians and historical demographers cannot often agree on what exactly happened within one society (Krause, 1967; Razzell, 1965, 1967; Habbakuk, 1955, for Britain; Petersen, 1960, for the Netherlands; Wrigley, 1969).

There is, however, one crucial assumption behind Leibenstein's (1957) and Lorimer's (1954) work that cannot be evaded. This is that economic growth is, or was, largely independent of and prior to any demographic transition. Economists, economic historians, and demographers still do not agree about this, although there is at present a conventional wisdom, well summarized by Ohlin (1967), which would justify the assumption:

By and large, the growth of population in the past must to a large extent have been a response to economic advance in a broad sense. Instances of 'population pressure' undoubtedly occurred, but the broad sweep of growth is more easily interpreted as a consequence of the opening up of new territories and industries (Meade, 1968, p. 147).

[For more discussion of the issues and arguments, see, for example, the papers in United Nations (1967), Clark (1967)]. On the other hand, the growth of population in modern, under-developed, and developing societies has occurred much more swiftly and at a different stage in the process of economic advance, and the Leibenstein-Lorimer approach can only be justified on the assumption that these societies, despite their chronic demographic difficulties, can nevertheless manage to achieve some economic growth before population growth begins to

decelerate. Such an assumption, of course, begs one of the most crucial questions in the political economy of the presently developing nations. All one can say is that if economic growth does emerge, then these sorts of mechanisms will gradually come into play. All of which is not to deny the possibility of a reverse process, the possibility of couples deliberately limiting their families to a size below that necessary to maintain their standard of living, and thus creating a surplus for investment of various kinds. Most economic historians are skeptical of this (Wrigley, 1969), but whether or not family limitation was always practiced to balance resources or sometimes to increase them must remain open for economic and demographic history.

Leibenstein's second qualification, that in the last period of the demographic transition the main determinant of fertility and marriage rates will be cyclical fluctuations in the economy, was supported by one study that he researched and wrote (Galbraith and Thomas, 1941). His work has since been corroborated by others (Kirk and Nortman, 1958; Kirk, 1960; Silver, 1965). Two cross-sectional studies, however, have found no relation between recessions or booms and fertility (Westoff, Potter and Sagi, 1963; Freedman and Coombs, 1966). Thomas pointed out that the persistence of correlations of between .70 and .90 between business cycles and marriage rates "is perhaps, one of the most firmly based empirical findings in any of the social sciences" (comment to Kirk, 1960, p. 258). Silver's work on the United States, the United Kingdom, and Japan did not produce quite such startling associations (the coefficients of determination were of the order of .50), but they are still good. The association with fertility is less strong, and its absence in the two cross-sectional studies suggests that business cycles

may have their strongest effect on marriage rates and first-parity births. In short, they are perhaps determinants of the timing rather than of the quantity of vital events, although if a recession delays the reproductive behavior of couples in which the wife is towards the higher end of the child-bearing period then there might well be an effect on total fertility. Studies in the United States suggest this (Campbell, 1967), and Ryder (1969) implies that this was the effect of the relative depression before the Second World War. Easterlin's (1962, 1966) empirical work has been on the impact of longer Kuznets cycles, and in it he has made the necessary connections between the aggregate events and the micro-economics and micro-sociology of which those events are the intellectual construction. He sees economic conditions working in part via the income effect and in part via preferences by shaping primarily material aspirations during adolescence. This is slightly at variance with some earlier studies of the relationship between business cycles and fertility, in which it was assumed that the effect was achieved through the impact of fluctuations in the rate of unemployment. There is no direct evidence for this assumption and the second of the two published Princeton studies by Westoff, Potter and Sagi (1963) reveals that couples most affected by a recession that happened to fall between the two surveys were more likely to be contraceptively effective; thus nullifying, if not actually reversing, the expected relationship. More affected in the expected direction were those groups of higher status.

However, several sociologists have assumed that since there is no direct relationship between income and fertility in recent cross-sectional (as distinct from time series) studies, so that hypothesis two must be discarded (Blake, 1967, 1968). A glance at the findings of both

the Princeton and the Growth of American Families studies would seem to bear out this skepticism, and it is also corroborated by some census data from other societies [see, for instance, the data for West Germany reported by Clark (1967)]. Blake's argument, for example, is simple. Once fertility control has become "diffused" evenly through an industrial society, one would expect a positive relationship between income and ideal, desired, expected, or actual fertility. She takes this point of departure from Becker (1960). However, she points out such a positive relationship does not exist. Indeed (and excepting for the moment Catholics, who constitute a comprehensible special case in this respect), there is virtually no relationship at all. The income-fertility hypothesis, she thus concludes, must be abandoned. She adduces additional circumstantial evidence to suggest that the crucial determinants are rather much more straightforwardly sociological, in that they have to do with non-economic norms.

This argument misunderstands the sophisticated economic thesis and the misunderstanding is revealed by some other evidence of the impact of income on fertility in both advanced and developing, or undeveloped, societies. It is brought out in Easterlin's (1960, 1969) own argument against Becker. Easterlin (1969) insists that the effect of income must be seen as the effect also of tastes, preferences, or norms for the disposal of that income:

Per capita income growth operates through two channels. On the one hand, it has the effect usually emphasized of tending to increase the fertility by giving the second generation more resources. On the other hand, it tends to lower fertility by increasing the relative desire for material goods. Since these two influences may be more or less off-setting, it no longer follows that per capita income growth tends to increase fertility secularly (p. 147).

It does not follow, however, from this that one may ignore the income variable altogether. The nature and extent of the offsetting process is an empirical question to be determined afresh for each sample studied.

Evidence from Easterlin's argument is of two kinds. The first argument he makes bears directly on tastes. Freedman and Coombs (1966) found in a 1961 Detroit sample that there was an inverse relationship between fertility expectations and aspirations for children. They also found that when income expectations (a rough measure of potential or permanent income) were matched against fertility expectations, there was a positive relation. It follows from this, although it was not directly tested, that the highest fertility would be likely to accrue to those whose income rose over time but whose tastes did not, and that the lowest would accrue to those whose tastes did rise but whose income did not. Secondly, there is indirect evidence which may be interpreted to measure the effect of tastes. Freedman (1963) found that an income above the mean for the husband's occupation, age, and educational status was conducive to more children than was normal for the values on these latter three dimensions with the mean income, and that when the income fell below the mean, there were fewer children. "Being in a higher income," she adds, "means fewer children if the higher income is only what is usual for the husband's age and occupational status" (p. 419). This interesting finding is corroborated from some old Swedish census data in which income and occupation were cross-tabulated for fertility (Hyrenius, 1946). Stys (1957), in his famous article on the effect of holding size on the fertility of peasants in southern Poland (birth cohorts, 1885-1929), noticed that the absolute values of the relative

differences between the richer peasants, with higher fertility, and the poorer ones, with lower fertility, were lower in those villages near towns. This implies some impact of tastes spreading out from the urban zone to the rural settlements. The steady differential between the richer peasants and the poorer peasants, steady in its direction if not its magnitude, would lead one on the present hypothesis to assume that tastes were more nearly constant across all peasant strata. The upturn in fertility among the land-less peasants is explained by Stys as the effect of their guaranteed employment as laborers on large estates. Easterlin (1969) himself quotes work by Goldberg (1958, 1960) and Duncan (1965) to show that the more positive relation that emerges between income and fertility when farm background and education are controlled might indicate that once taste-forming factors have been eliminated, the relationship is as expected. Duncan's (1964) work on the Indianapolis data also supports this. [Goldberg's (1960) and Duncan's (1964) reinterpretations of the 1941 Indianapolis data--see Whelpton and Kiser (1943, 1944, 1945, 1946, 1947, 1948)--are open to the contamination of income classes in those data by differential, and associated planning success, see Blake (1968)]. However, the study of background variables assumed or known from other sociological and social-psychological studies to be determinants of attitudes, norms, tastes, or whatever can only be a second-best alternative to the kind of inquiry conducted by Freedman and Coombs (1966).

A further problem involved in examining the relationship between income and fertility, and which may at first sight seem merely technical, is that of measuring income. Quite apart from the distinction between income and wealth, and no study to this investigator's knowledge has

yet looked thoroughly at both together, there is the question of current versus past and potential (or permanent) income. Freedman and Coombs (1966) and Freedman (1963) took this into account, but most of the more common cross-sectional studies have taken a cross-sectional view of income. This is likely to be a particularly severe distortion for those couples, usually in middle and upper status-groups, whose income typically rises more or less steadily over time, especially when those couples are observed at the beginning of their married lives. Taking a simple view of the costs involved in bringing up children, Mincer (1963) has attempted to examine the effect of foregone potential income on fertility. Making Becker's (1960) assumption that when contraceptive efficiency in a population is high, fertility will respond to income in the direct way that classical demand theory suggests (an assumption already criticized, but which does not violate the interest of the analysis), Mincer regresses husband's and wife's income onto fertility for a sample of 400 families from a 1950 survey of consumer expenditures in which the wife was between 35 and 45. He finds a positive effect of husband's income outweighed by a negative effect of wife's income: the former is 0.10, the latter 0.19. His inference is that the wife's income represents the opportunity cost of children to her, a cost that outweighs the benefit of the income itself which, taken alone, might be expected to show the positive effect on fertility of the husband's income. These results can be further interpreted to contradict Mincer's original assumption from Becker (1960) that income and fertility are directly related, since it is likely that as the husband's income rises, so does that of the wife (given the high degree of assortative mating in all societies). Since the latter income

measures the opportunity cost of children to the wife (if not to the couple), the upshot is likely to be the lack of a clear relation between income and fertility--just as it is found from other cross-sectional studies. Perhaps the conclusion to studies of the income effect must be that independent of changing tastes, income is directly related to fertility, but that tastes are rarely independent, and thus that the observed relationships are likely to vary within narrow limits around the measure of no association. Perhaps one can conclude by suggesting that the positive effect of income over time will be marked temporarily as tastes, which characteristically lag behind, catch up.

Five points may be made about this work on the association between income and fertility. First, income is the factor most obviously related to economic development, and thus to the main theses about the causes of the various demographic transitions in various societies. Secondly, however, it has been relatively neglected. This can only partly be explained by the very considerable practical difficulties involved in obtaining information about it. Thirdly, is the fact that it is deceptively difficult to measure. This does not apply to the more usual notion of current income, but to the more meaningful one of permanent or potential income. Fourthly, income has frequently been adduced without sufficient attention to the way in which it might affect behavior generally and fertility in particular. Fifthly, the complexity of the demonstrated income effects on fertility is powerful in itself against the more embracing measures of social position that are commonly used. A simple association between "socio-economic status" and fertility can be interpreted in a variety of ways. At its simplest, it could be measuring the effects of class rather than the status (in the Weberian

senses of these terms). At its most complex, it could be measuring the effects, some of them contradictory, of a host of factors: absolute and relative income and wealth, occupational security, occupational and community prestige or status, educational experience, consumption patterns, and so forth. The offsetting effects of income and tastes for material and social advancement would be quite lost within the great majority of standard social class or socio-economic status measures. Occasionally, one can gather information on the class dimensions, but depend upon the extensive reporting of qualitative interviews. This material usually does not appear in tabulations. It is inadequate to hope for, rather than expect, such precision.

Determinants of Preferences and Intentions

The following review of literature deals with the social factors other than income that seem to have some effect on fertility intentions. These factors, which include the level of education, religious belief, etc., can be seen as determining of preferences, and thus as complementary to income.

Religion

The difficulty with many of the socio-economic, social, and socio-psychological factors that can be seen as affecting preferences is that they are also strongly related to the level of income. A well-educated couple is also likely to be a prosperous one. Several surveyors have not held income constant when tabulating fertility by education, and this practice makes for uncertain interpretations (Whelpton, Campbell, and Patterson, 1966). But perhaps the factor least dependent upon

socio-economic status and yet strongly related to preferences for children is that of religious affiliation. Studies of fertility in both developing and developed societies and regions have found it to be highly related. The greatest differences appear between Moslems and other in the Middle East, Central Asia, and the Indian sub-continent (Driver, 1963; Kirk, 1967; Mazur, 1967, Rizk, 1963, Yaukey, 1961). Indian studies have also pointed to the relatively high Hindu fertility (exceeded only by that of Moslem groups). In review of the social correlates of fertility among 36 ethnic groups in the U.S.S.R., Mazur (1967) also points to the high fertility of Buddhists. The exact interpretation of the meaning of these religious differentials is not easy. Given the fact that Moslem, Hindu, and--to a lesser extent--Buddhist practices predominate in societies in which, for the reasons that were discussed in Leibenstein's (1957) thesis, there is a strong need for male survival under conditions of labor-intensive agriculture, it is dangerous to assume that religious affiliation has a truly independent effect on fertility. It may so happen that the religious prescriptions coincide with economic necessity, and that it is therefore possible to see both fertility and religion as dependent upon economic considerations. It should in principle be possible to test the independence of religious affiliation by assembling cross-tabulations of fertility by both religion and economic resources (or some proxy variable). The hypothesis would predict that religious fertility differentials would decline in the same proportion in a transition from one economic base to another. Data is provided by Yaukey (1961) in his study of Christians and Muslims in rural and urban Lebanon.

Assuming that the economic base in the villages differed from that in the towns (Yaukey provides no detailed information about this), the hypothesis is not borne out. The decline from country to town is greater among Christians than among Moslems, and even after a period of education the Moslem resistance to lower fertility is strong. And by no means all of the differences can be attributed to the differential availability of birth control (differential use being a measure of motivation and thus irrelevant as a confounding factor in this argument). At first sight, evidence such as that provided by Mazur (1967) on the fertility differences among eastern Orthodox groups would appear to be more favorable for the hypothesis. Eastern Orthodox fertility is generally below the median level of that in the U.S.S.R. as a whole, but there is one subgroup--the Eastern Orthodox Yakuts--in which it is startlingly high. As many as 20 children appear in Yakut families, and children are regularly purchased. The economic system is one of extremely labor-intensive agriculture. It is, thus, possible that the power of religious affiliation to act independently of economic circumstances is very limited. However, the Eastern Orthodox faith, like Protestantism in all but its extreme anabaptist forms, makes no strong prescriptions either way about fertility, and allows its practitioners to regulate their fertility according to other criteria. The conclusion can only be that until more is known about the inter-relations between religious belief and economic behavior it is best to treat as independent of each other and thus to be surprised at interdependence, rather than by its absence.

Blake (1966a, 1966b) has documented the comparative ideal family sizes of Catholics and non-Catholics in the United States, and both the

Princeton and Growth of American Families studies found a direct relationship between Catholic education and ideal, desired, expected, and achieved family size. Catholic education below the high school level did not seem to have much effect, and the greatest impact was visible in those with a college education. These findings corroborated in the more particular study by Westoff and Potvin (1966). Blake's ideal family size studies now in some cases a U-shaped relation, rather than a direct one, holds. These Protestant-Catholic differentials do seem to be lessening as Catholics become more similar in other respects to Protestants (Traina, 1974; Westoff and Jones, 1977).

Education

Fertility decisions are less certain for educational level. The researcher has already mentioned the well-known direct relationship between educational level and contraceptive usage and effectiveness, and without sophisticated cross-tabulations it would be difficult to ascertain the impact of education on fertility intentions were the relationship between fertility and education an inverse one. Both the Princeton and Growth of American Families studies found a direct, although somewhat weak, relationship between fertility and education. The stronger positive relationship between education and contraceptive effectiveness suggests that the total, and inverse, correlation may mask a small positive relationship between education and fertility intentions (Blake, 1967). Recent British evidence supports this. The new differential between self-employed professionals and professional employees, which appeared in 1961 (General Register Office, 1966), cannot reasonably

be attributed to differences in contraceptive effectiveness, and at a glance at the tables of fertility by the terminal education age of the parents shows that, with the exception of those few couples in which the husband's education stopped at 17 or below and the wife's continued until after 20, the highest fertility fell to those couples in which both partners had been in full-time education up to and beyond the age of 20. The suggestion is that a change in preferences is occurring at this level. Rindfuss, Bumpass, and St. John (1980) found that once the process of childbearing has begun, education has very little effect on fertility, but it has an indirect effect through age at first birth. They found that older ages at first birth lead to longer interbirth intervals (Bumpass and Mburugu, 1978), more effective contraceptive use (Vaughn, Trussell, Menken and Jones, 1977), and preferences for fewer children.

Female Employment

Blake (1965) and Davis (1967) have together argued that if fertility reduction is to be the goal of population policy, especially in developing countries, then encouraging couples to limit their fertility to their expressed desires will not be enough. The desires themselves have to be lowered. One way of doing this, Blake maintained, would be to demonstrate the advantages of gainful employment to the mothers. Qualifying her confidence by admitting that the direction of the causal relationship is not always clear, she nevertheless asserts that the "association between married women working and family size is generally acknowledged to be one of the strongest, most persistent over time and space, and most theoretically reasonable" (p. 738) in the field of social determinants of fertility.

To begin with, and as Blake (1957) admits, there is a considerable proportion of working women who seek employment as a result of subfecundity. The second Growth of American Families study found that 55 percent of the women in its sample who had been working 4.5 years or more were in this category. It is perhaps for this reason that this group of women (working for this length of time or more) expected fewer children than they said they wanted. There is a further discussion within those who were not subfecund and who also worked. On the one hand are those who worked because they liked working, few of whom expected more children than they wanted, and those who worked in order to supplement the family income, more of whom expected more than they wanted. The former group were clearly better planners than the latter, but of course the latter come from those socio-economic groups who are in any event characterized by less success in birth control than those in other groups. It seems possible that for the second of these groups, the wife's working worsens the conjugal relationship, and this could cause poorer planning success. Blake does not consider such possibilities. Several other studies document the relation between female employment and fertility, if in less detail than the G.A.F. authors (United Nations, 1953; Freedman, Baumert, and Bolte, 1958; Ridley, 1959; Blood and Hamblin, 1960).

Several native analysts of conditions in the U.S.S.R. have attributed low fertility there to working women (Davtyan, 1967; Sadvokasova, 1967; Urlanis, 1967), and Szabady, Tekse, and Pressat (1966) have suggested a similar relationship in eastern Europe. All, however, distinguish between urban areas, where the association is clear, and rural areas where it is much less so.

There is some evidence in the literature of some concern directed toward the relationship between members within the nuclear family in an industrialized society. Stycos (1962) indicates that one of the facilitating conditions for effective fertility planning or control is the extent to which family structure facilitates sharing of goals and knowledge: effects of segregation of the sexes, dominance patterns, ease of communication, stability of conjugal bonds, and articulation of family with other social institutions. On a societal basis it is assumed that male-dominant family systems are causally related to high fertility. The authority of the husband, the importance of demonstrating virility in terms of number of male offspring as well as the assumed economic values of male children, the separation of the woman, and her limited opportunities for experience in nondomestic roles are elements of the patriarchal system that are thought to be causal social antecedents of high fertility. The absence of fertility planning and the rigidity of marital roles are also characteristic of such societies. This hypothesis has been applied across cultures (Lorimer, 1954; Rizk, 1963; Yaukey, 1961) and within cultures (Westoff et al., 1961; Westoff, Potter, and Sagi, 1963; Hill, Stycos, and Back, 1959).

Ramification of woman's employment outside the house, and the greater involvement of husbands in matters concerning fertility, also the greater planning tends to move couples toward equality (Goldberg, 1958). This is an organized pattern that developed among employed spouses in order to arrange their life to achieve their goals and maintain their own separate careers in addition to familyhood. This pattern of authority balance is important for the female in order for her to maintain her career outside as well as inside the home (Hill, Stycos, and Back, 1959).

Summary

In conclusion, this brief review of literature leads to several points: (1) there are several social and economic factors that can affect what Davis (1967) and Blake (1965) have called the "intervening variables" so as to increase or depress fertility; (2) such factors can also serve to affect fertility intentions, and they do so by altering the balance of resources, costs, and preferences available and perceived by the husband and the wife. The five-factor explanatory model enables one to collapse the often bewildering array of independent variables into a meaningful order so that considerable explanation is achieved. However, to say that fertility can be explained by the interaction of these five components is not to state a testable theory, it is, rather to specify what variables a theory must contain. It is only when specific values are attached to each variable (including fertility) that a testable and potentially explanatory theory can emerge. To develop a theoretical foundation in its most general form is to open oneself to charges of vacuity; and to specify causal connections between particular reason of particular behavior is perhaps opening oneself to charges of triviality. It may well be that one cannot construct general causal laws in the stronger sense of "general" by looking at the effect reasons have on behavior. The laws may only be confirmed or rejected by one instance because they are only applicable to that one instance. Whether or not one describes that instance as unique seems to be a matter of one's own conceptualization. The indication perused here is to concentrate more on the so called unique, to conceptualize phenomena so that one can be exact rather than general in the discussion of fertility. Through the years, sociologists have become more sophisticated in their

use of paradigm. They are now moving towards showing in detail how the insights of that paradigm can generate precise explanations of specific aspects of beliefs, values, and behaviors. The paradigm will stand or fall, depending on these explanations.

The literature argues for the existence of intervening variables in the process of explaining the fertility decision making. Multivariate analysis has been the standard statistical procedure used. Since the present research represents the first sociological study of fertility decision making in Kuwait, it was felt by this researcher that a bivariate analysis constitutes a sound first step toward the development of a fertility paradigm. This not to undermine the importance of multivariate application.

CHAPTER III

THEORETICAL FOUNDATION

This model is specifically designed to provide a theoretical framework through which the relationship between fertility decision making and societal, social-psychological, biological, as well as economic components can be analyzed. Model is used here as the utilitarian sense of the term rather than the deductive sense of modeling. This means a support of one variable does not lend support for the whole model. However, the model is general in nature and could possibly be used to investigate any activity which presumably activates decision making and planning. Models concerning the nature and behavior of human beings are based on certain basic assumptions. In order to explicate the explanations which are the basis of the model presented in this chapter, the concepts of critical importance in this study will be defined.

Nominal Definitions of Concepts

1. Fertility--The actual number of children born. It is also referred to as the physiological ability to reproduce.
2. Fecundity--The potential reproductive capacity of the human being.
3. Number of Births--The number of children ever born to the couple. This includes live and still births.
4. Number of Live Births--The number of live children ever born.

5. Desired Family Size--It is taken as a class of fertility. These preferences vary from couple to couple in such respects as the strength of preference, spouse consensus, and stability over time. The agreement between actual family size and the desired size is rarely perfect.

- a. Birth postponement--The degree to which couples are able to achieve desired delays in their pregnancies and births.
- b. Biological components of fertility--Factors that may have some bearing on fertility (e.g., heredity, reproductive span, nutrition, sterilizing operation).
- c. Societal components of fertility--Value system, social regulations of marriage, religions, and cultural expectations to have children.
- d. Social-psychological components of fertility--Opportunities and motivations for child bearing.
- e. Economic components of fertility--Government services to aid and motivate family planning and higher standards of hygiene.

Assumptions

1. The degree to which religious and traditional values are internalized is directly related to desire for children.
2. There is a curvilinear relationship between age at marriage and fertility. The lower the age at marriage, the higher the fertility.
3. Income is presumed to be related to the level of health and nutrition in a positive manner.
4. General mortality of the population and particularly the infant mortality level is positively related to fertility.
5. Female level of education is both related to level of contraceptive knowledge and communication.

6. Female education is highly related to planning in general and family planning in particular.

7. Female education is seen to be negatively related to fertility due to postponement of childbearing.

8. The compatibility assumption: this assumption states that a particular pattern of fertility performance and control depends on the extent to which having another child (or a certain number of children) is compatible with other life values and interests. Although at the level of truism, this serves to bring into prominence the notion that a fertility choice (whether implicit or explicit) involves a "cost" for the individual and for the family (i.e., certain desires and interests are either yielded or compromised in preference to others). This assumption underlies most of the broad "theme" hypotheses and specific variables discussed.

9. The type of economic insecurity reported by a respondent at a high level of income is qualitatively different than that reported by a respondent at a subsistence level, a factor to be taken into account in the analysis and interpretation of relationships.

10. Urbanization, due to the availability of extra familial activities, may have a depressing effect upon fertility.

11. Government services to individuals, depending upon the type of service, can be seen as a motivating factor to either increase or depress fertility.

Major Components of Fertility

Fertility refers to the actual number of children born as distinguished from fecundity, the potential reproductive capacity of human

beings. Physiologically, a woman can bear children for a period of approximately 30 to 33 years, from about the age of 12 or 15 to the age of 45 years depending on the quality of nutrition. Since there are periods of infertility after each child is born, the maximum number a human female can have, excluding multiple births, is about 20 to 25. Although a few women may come close to this maximum, there is no society in which all, or even most, women are so fertile.

Fertility is a product of biological factors as well as complex social and cultural forces that may encourage childbearing or discourage and limit it. Changes in the fertility are due to shifting cultural and social patterns. Whether children will actually be born and have many (given the capacity to reproduce) is largely a result of the social environment in which people live. Figure 1 shows the major components of fertility: economical, sociological, and social-psychological components of fertility.

The means for regulating fertility have been labeled in population studies as the intervening variables (Davis and Blake, 1956). These are the factors through which any social factors influencing the level of fertility must operate. According to Davis and Blake, there are three phases of fertility: intercourse, conception, and gestation. Intercourse is required if conception is to occur; if conception occurs, successful gestation is required if a baby is to be born alive. The process can be interrupted at any point. The following is a discussion of various components of fertility.

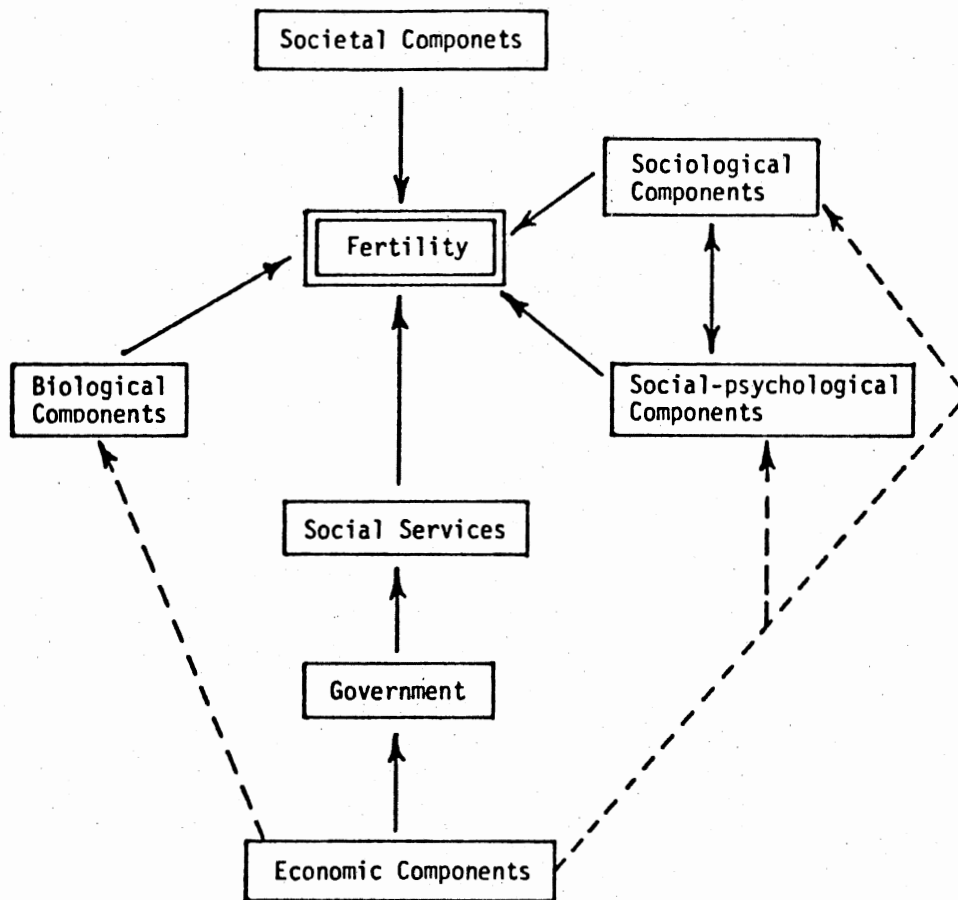


Figure 1. Model One--Major Components of Fertility

Determinants of Fecundity: A Component
of Fertility

There are many factors that affect the fecundity, the physiological ability to reproduce, of the human female.

Heredity. Evidence is not clear; however, one factor influencing the innate ability to reproduce is the relative fecundity of one's parents. On the one hand, fecundity can be impaired by any one of a number of defects in the sexual organs, and a predisposition toward such constitutional impediments can be inherited. Certain of such heredity defects inhibit reproduction and with others offspring die before they procreate. The inheritance of a high fecundity is suggested by the proportion of multiple births which correlate with the general fertility. Heredity can have great influence, positive or negative, on such factors as inbreeding or marrying within the same blood group.

Reproductive Span. Generally, the reproductive span of the human female varies between 30 to 33 years, which starts from the age of 12 or 15 to 45. Therefore, the longer the female waits, the shorter the time when she is at risk of bearing children.

Nutrition or Diet and Disease. The literature on the subject of nutrition, as related to fertility, suggests that the level of diet and some specific constituents of diet may affect the onset of the menarche (or first menstruation) which is usually taken to define puberty. The studies analyzing the age at menarche indicate the following: (1) the better the food, the lower the age; (2) certain diseases sometimes delay the onset of menstruation; (3) because of these two factors, there is a

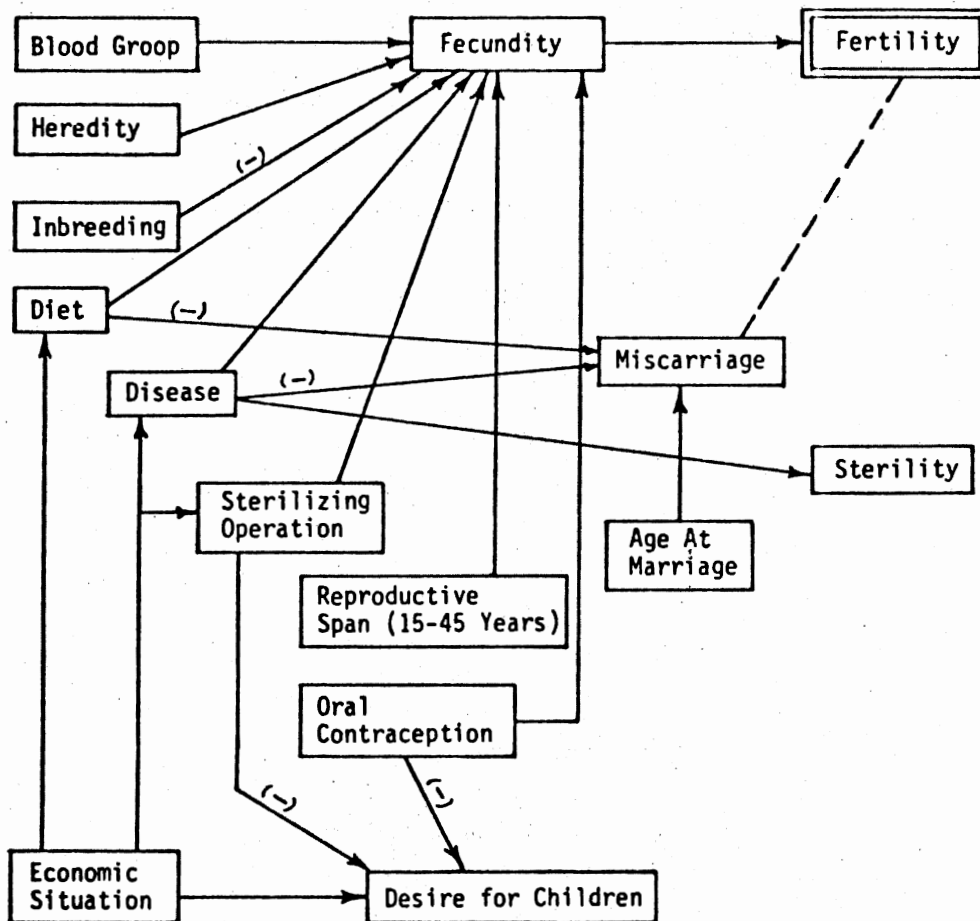


Figure 2. Model Two--Determinants of Fecundity

difference in the average age of menarche according to the country's social development (Pearl, 1939; Kumar, 1967). With regard to disease, there are other diseases that may lead to sterility (such as venereal diseases).

Sterilizing Operation and Oral Contraceptives. These two variables can impair fecundity; however, these factors are not produced by heredity but induced and by social factors such as the desire for children.

Societal Components of Fertility

To avoid extinction, the society will always attempt to have favorable attitudes toward human reproduction. Therefore, the major concern here is with survival. Survival here will refer to human survival as well as ideological survival. Fertility differences among various groups reflect contrasting values, institutions, and social organizations (Lorimer, 1954). Survival in terms of human numbers and ideology lead society to gear its value system toward one that supports high fertility. The intensity of these values depends upon the type of society (that is, tribal, traditional rural, or modern urban type of society). Also, the intensity of the value system toward high fertility is influenced by the health, the well being of that society, and the level of infant as well as the level of the general mortality rate. If infant and general mortality are high, the society will favor high fertility for the sheer survival. In classical China, fertility was encouraged by ancestor worship. This practice required a large number of children to ensure appropriate observances for the dead. Women in the traditional Chinese family wished to have children because their

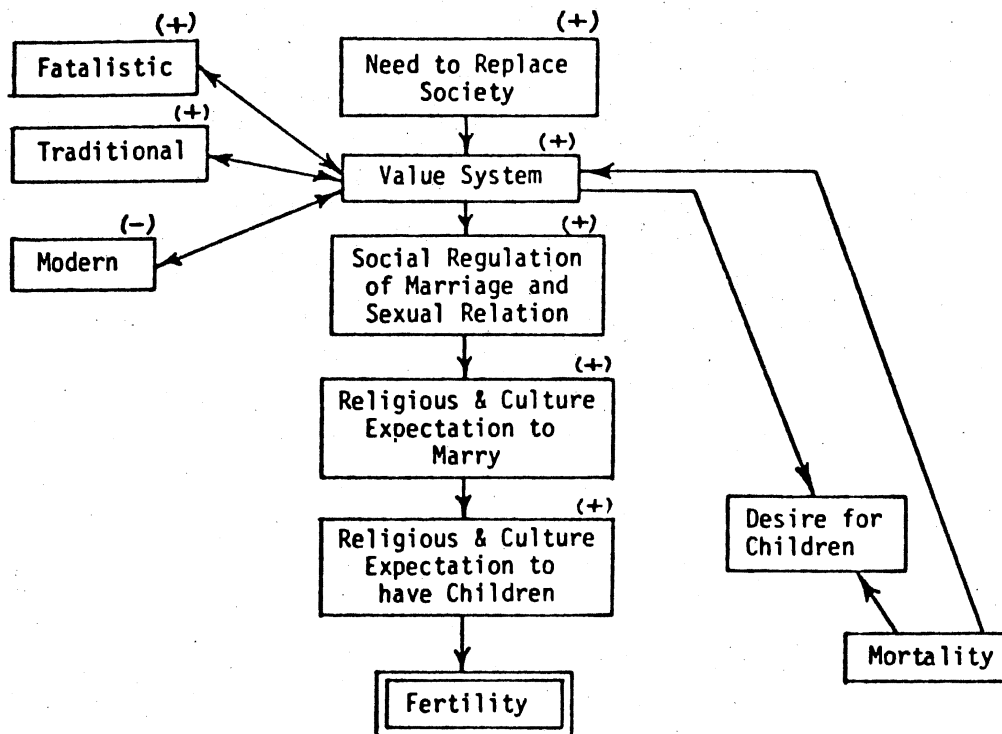


Figure 3. Model Three--Societal Components of Fertility

status in their husband's family improved, particularly when they produced sons.

According to Davis (1955), the population goes through three stages of development: Stage 1--The population experiences stable growth and the population has high fertility equaled by high mortality. Stage 2--The population experiences explosive growth due to the progress and advancement in health technology. The mortality, as a result, drops very drastically. In the mean time, fertility remains the same. Therefore, fertility out numbers mortality and this leads to high population growth, characteristic of many developing countries. Stage 3--Fertility starts to drop and the population growth begins to stabilize. This characterizes industrialized countries such as the United States. Based on existing societal values, every society will have certain regulations with regard to marriage and sexual relation. Therefore, every society will have high expectations to marry coupled with high expectations to have children. Finally, the relationship between the value system of a society will be positively correlated with fertility. The variability that exists in family size in terms of number of offspring is influenced by a great many other social, economic, as well as social-psychological factors.

Social and Social-Psychological Components of Fertility

The opportunities and motivations for childbearing vary considerably from one social environment to another, and the result is great variability in the number of children women have. According to the Guinness Book of World Records (McWhirter and McWhirter, 1975), the individual record

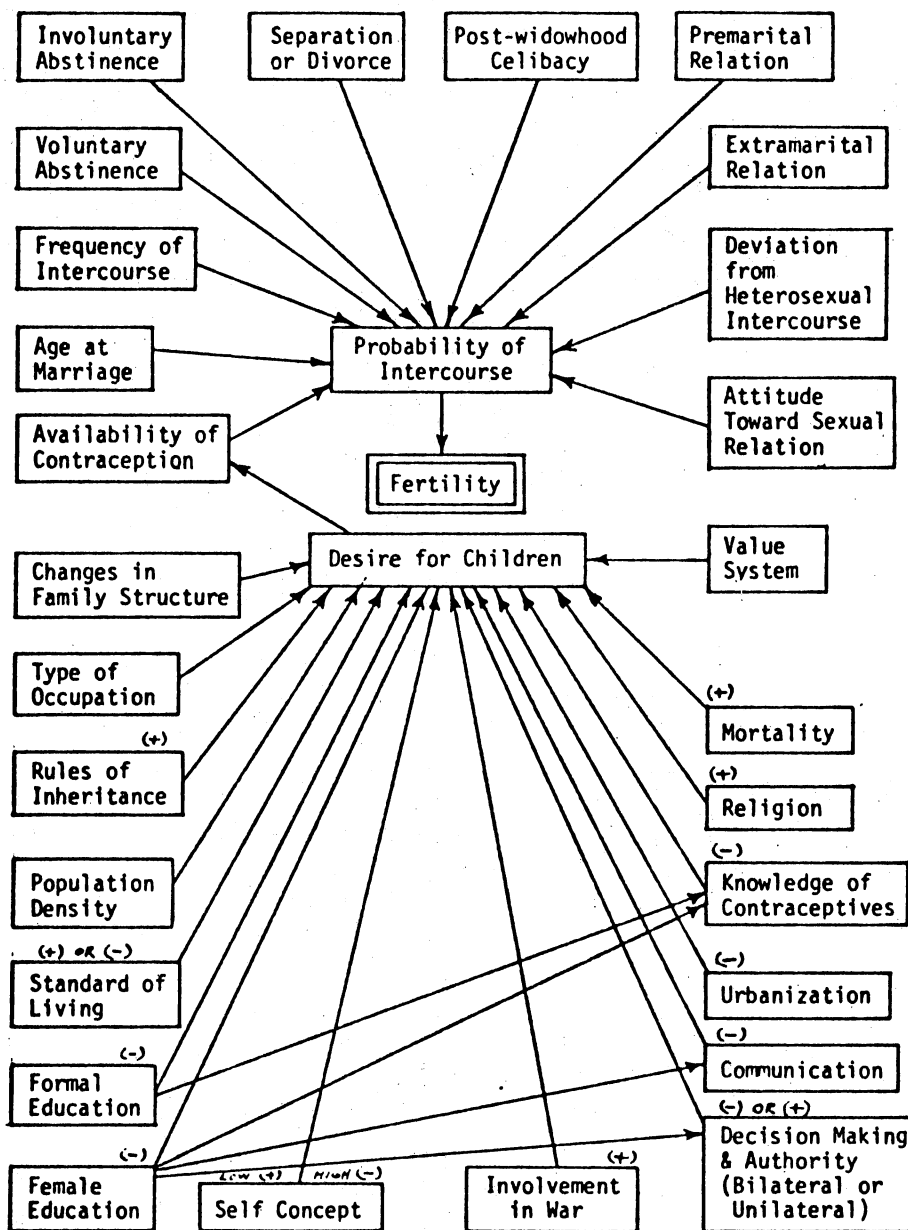


Figure 4. Model Four--Social and Social-Psychological Components of Fertility

for fertility is held by a Russian woman of the nineteenth century who in 27 different pregnancies gave birth to 69 children, most of whom lived to adulthood. For a group, however, the highest childbearing record belongs to the Hutterites (an anabaptist sect in North and South Dakota, and parts of Canada). In the nineteenth century, there were about 400 Hutterites who migrated from Switzerland and in a span of 100 years they have doubled their population about five times to a current total of more than 15,000 (Westoff and Westoff, 1971). There are other factors that affect fertility directly such as the probability of intercourse. Other factors to a lesser degree also affect fertility, such as abortion, non-oral contraception, and miscarriage. Countless social factors related either positively or negatively to the "probability of intercourse" variable. The following discussion deals with these factors.

Age at Marriage. This is a factor which studies have shown to be important. Based on these studies, an increase in age at marriage of two years from 15 to 17 years, the crude birth rate reduction is insignificant. It appears there is a critical level below which postponement of marriage will not reduce the fertility index to a significant extent. However, if the mean age at marriage changes from 15 to 19 years, the crude birth rate falls by 11 percent. The increase in mean age at marriage of six years, from 15 to 21 years, the crude birth rate falls by about 24 percent (Malaker, 1972). Leasure (1963) showed similar findings among the Bolivian and Turkish females. Cole and Tye (1961) demonstrated also that postponement of marriage can contribute substantially to a reduction in birth rate and population growth. This contribution is potentially greatest in those countries which have high

fertility and a low average age at marriage. So when the reproductive span is reduced by increasing the age at marriage, the result is a shorter time when she is risking a pregnancy.

Age at marriage seems to have a curvilinear relationship with regard to miscarriage (i.e., those who are very young and those who are at the end of their reproductive span will more likely have a miscarriage than females in the zenith of their reproductive years.

Frequency of Intercourse. In a study done in Lebanon, Yaukey (1961) found that during the first years of marriage among women who were not using contraceptives, the more frequently intercourse was engaged in, the less time it took for a woman to get pregnant. Studies in the United States have produced similar results. Furthermore, Kinsey (1953) found that among stable married couples, frequency of intercourse tended to decrease steadily as age increased.

In the west, voluntary abstinence is uncommon except shortly after childbirth, since a woman does not ovulate during this time. In pre-industrial societies, postpartum taboos on intercourse occasionally extend to several months or even a few years in societies in which intercourse is forbidden while a mother is nursing a child. The reasoning is that intercourse will somehow harm either the mother or child (Davis and Blake, 1956). Involuntary abstinence, on the other hand, could be a result of either impotence or involuntary separations. Voluntary abstinence can have an effect on fertility in a negative way. Separation or divorce can be classified under involuntary abstinence, along with post-widowhood celibacy.

Premarital and Extramarital Relations. Without the knowledge or the availability of contraceptives, these activities could be positively related to fertility. However, when taking age into account, the female engaging in premarital sex may be more vulnerable to pregnancy than the person engaged in extramarital sex. That is, young females who engage in premarital relations are more likely to become pregnant than older females who engage in extramarital relations. This is due to the perceived social cost of a pregnancy on the part of the female as well as her partner who are involved in extramarital relations.

Deviation from Heterosexual Intercourse. It seems obvious that the factor will be negatively related to fertility unless it exists along with heterosexual relationships. This area is under-researched. With sexual liberation with regard to homosexuality, the greater prevalence and popularization of these life styles in the United States and the west in general can have devastating long-run negative influences upon fertility. The knowledge of its prevalence or what it may entail in the future is not very accurate.

Desire for Children as Related to Fertility. A very important variable related to the probability of intercourse. This variable is influenced by the value system in a society, as well as an intervening variable, namely, the availability of contraceptives. For example, if the desire for children is very high, the use of contraceptives will be zero and the probability of intercourse will be very high. If the desire for children is very low, the use of contraceptives will be high, and probability of intercourse will be high. On the other hand, if the

desire for children is very low, but contraceptives are not available, the probability of intercourse will be low to prevent childbearing.

There are countless economic, social, and social-psychological variables that work either to intensify or alter the desire for children. Two factors that seem to heighten the desire for children, not taking socio-economic factors into account, are religion and involvement in war or perceived threat of war. Other factors such as urbanization, socio-economic status of male and female occupation type, standard of living, education, female education in particular, communication, decision making (whether it is bilateral or unilateral), plus other social-psychological factors such as self concept and how females derive self-identity and gratification.

There are many studies related to the effect of urbanization on fertility. The growth of cities, which has often accompanied industrialization (although some large cities have no industry, and modern industry has sometimes been located in the rural areas), generally contributes to a lower birth rate. Jaffee (1942) found similar differences in Sweden in the mid-eighteenth century, in the United States throughout the nineteenth century, and in various other countries in both past and present. There are changes in the interpersonal relationships between the sexes which lead to greater freedom of males or females to associate informally outside the home, to choose their own friends, and to select the persons they will marry. There are changes in the family power structure in general. There are changes in the social roles of the family members both within the home and outside it. Behavior tends to be individualized and roles often uncoordinated. This may lead to

diversification interests and decline of family solidarity (Gist and Fava, 1964).

Based on 1,384 household survey cases collected in Iran, Paydarfar (1975) demonstrated that there are significant differences with regard to fertility attitudes and practices among three groups (tribal, rural, and urban groups). Tribal dwellers had the highest and the urban residents the lowest fertility pattern. Paydarfar also found that modern values, high socio-economic, and high social mobility reduced fertility among the urbanites; however, it produced the opposite among the tribal groups. The reason for the high fertility among the tribal group is that they equated large numbers with power and authority. He also noted that tribal groups were the most fatalistic as compared to the urban, educated; those who held modern urban values were the least fatalistic.

Other factors such as the standard of living, female education, education in general, communication, female income, and type of female occupation were all related to each other. For example, high standard of living facilitated education and female education which leads to the unintended consequences of that which leads to higher aspiration, greater awareness, on the part of the female, of their potential in their participation in the labor force and consequent reduction of fertility. Higher education, especially female education, increases her ability communication and authority lead to be bilateral rather than unilateral (Coombs and Fernandez, 1978).

In addition to female education, it was female income and the type of occupation she held which was related very highly with the desire for children. Upward occupation mobility and high female income lower the desire for children (DeFronzo, 1976).

There has been little research directly related to the question of how population density affects humans. There is consistent evidence that high density, or perhaps the presence of large numbers of individuals that have to interact, produces negative effects in a wide variety of nonhuman animals. These effects include increased adrenal size, decreased testes size, and severe breakdowns in social and reproductive behavior. Many researchers have been tempted to generalize from this work on animals to human response to density; however, this is very questionable and may be a risky type of generalization. There is not enough research to show the effects of density on human responses and in fact the demographic studies that dealt in this area failed to find an effect of density when other factors are controlled (Freedman, 1973).

A number of studies have demonstrated dramatic effects of overpopulation among animals. The most famous laboratory study was conducted by Calhoun (1962). A small number of rats were placed in an enclosed area, given sufficient food and water, and allowed to increase freely. Under these conditions, the population of the colony increased rapidly for a while, then began to fall off, and finally decreased sharply. According to Calhoun, the maximum population achieved was considerably less than the space would have supported. Whether or not that is true, the population did reach a maximum that was less than would actually fit in the available space and that this maximum was not maintained.

Upper Class Elite's Fertility. Sly and Richards (1972) found that wealth was positively related to fertility, on the average the number of children was between 2.6 and 2.8. They found elite Catholics' fertility much lower than that of the elite who were Protestant; and in terms of

education, those who did not finish college had the lowest fertility. The explanation is that among men with marginal education and who are Catholic, to maintain their elite position required them to have low fertility. At this level the female is more likely to be a homemaker and children are not costly.

The Economic Components of Fertility

The economist, Spengler (1966), has explained the general response of desired birth rate to income in terms of the economic and social changes that occur during the process of industrialization. He believes that each family, consciously or unconsciously, weighs the value and cost of an additional child against the resources the family has available to devote to that child. This process results in a general attitude about family size that shifts as income increases.

The "value" of a child includes monetary considerations, such as the child's labor contribution to the family farm or business and the eventual dependence on the child's support when the parents reach old age. As the country becomes industrialized, child labor laws, compulsory education, and social security provisions all reduce the potential monetary value of a child. "Value" also includes the more intangible values of a child as an object of love, a carrier of the family name, an inheritor of the family property, and a proof of masculinity. These values tend to be important in any society and so the reward function always has a positive value. It is particularly important in poor societies, where there are almost no alternative modes of personal gratification.

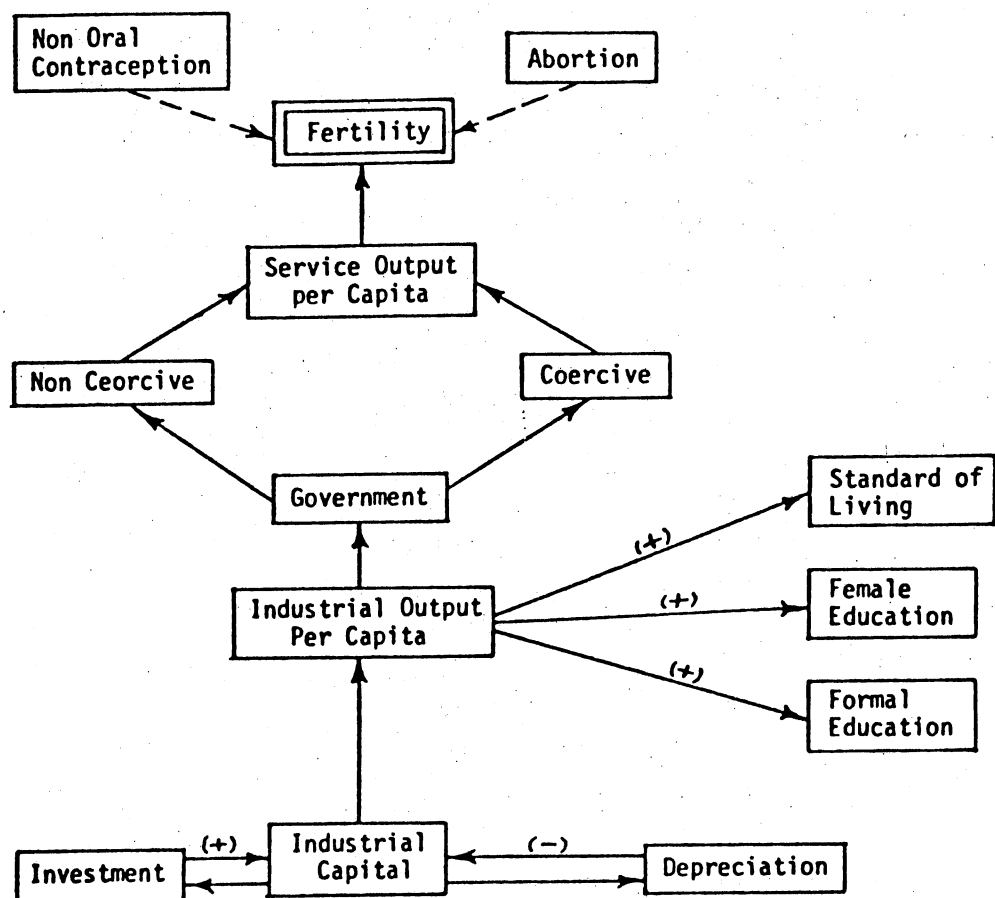


Figure 5. Model Five--Economic Components of Fertility

The "cost" of a child includes the actual financial outlays necessary to supply the child's needs, the opportunity costs of the mother's time devoted to child care, and the increased responsibility and decreased freedom of the family as a whole. The cost of children is very low in traditional society. No additional living space is added to house a new child, little education or medical care is available, clothing and food requirements are minimal. The mother is generally uneducated and assigns no value to her time. The family has little freedom to do anything that a child would hinder, and the extended family structure is there to provide child care if it should become necessary (for example, for a parent to leave home to find a job).

As family income increases, however, children are given more than the basic food and clothing requirements. They receive better housing and medical care, and education becomes both necessary and expensive. Travel, recreation, and alternative employment for the mother become possibilities that are not compatible with a large family. The extended family structure tends to disappear with industrialization, and substitute child care is costly.

The "resources" that a family has to devote to a child generally increase with income. At very high income, the value and cost become nearly invariant with further increases in income, and the resource becomes the dominant factor in the composite desired birth rate. Thus, in the rich countries, such as the United States, desired family size becomes a direct function of income. Here also one must emphasize that "resources" are partially a social-psychological concept in that present actual income must be modified by an expectation of future income in planning family size.

The model of fertility presented in this paper is applicable to any society, one that has an increasing population or one that has a decreasing population. This paper, by no means, is exhaustive of the variables that operate on fertility.

Model Application

The model identifies a group of dependent variables to be predicted. These denote different aspects of fertility process. The main dependent variable is the total number of children or actual family size. Other dependent variables of interest are the pattern of fertility planning and desired versus actual fertility.

There are two broad classes of independent variables to be analyzed in search of explanations of variations in these dependent variables. The first is concerned with the socio-cultural environment of the respondents--both as a historical and the contemporary setting for their values, attitudes, and behavior. Second, is concerned with those social-psychological variables that determine the respondents' personal orientation toward various aspects of their life situations.

All of the components of the independent variables are located within one of four major substantive areas: religion, socio-economic status, family, and residence. In other words, each specific independent variable, whether an aspect of the respondents' socio-cultural environment or of their personal orientations, refers directly to one of these four dimensions of social life.

The basic rationale for concentrating on these particular areas is that there is either a body of accumulated evidence or strong plausible speculation that variations within each of them are relevant for

differences in fertility. Thus, there is some evidence that those who marry early have larger families, that rural and bedouin populations have a different fertility history from that of endogenous urbanites and so on.

To state that these relationships are "known" is both an overstatement and a simplification of our current state of knowledge. What is known is that within each of these content areas there is a variable or cluster of variables operating that is sufficiently strong so that comparisons between gross categories reveal significant differences among a wide range of fertility--connected variables. To take education as an example, there is a considerable body of evidence that family size and education are negatively correlated. What is known, however, is whether this relationship is an effect of an intervening correlation between intelligence and the efficiency of contraceptive practice or whether the lower income segments of the population actually want more children.

Numerous other illustrations could be offered of instances where significant associations have been observed between fertility and such gross environmental variables as religion, occupation, and income. One of the primary objectives of the study and of the selection of variables has been that of attempting to trace the influence on completed family size of these socio-environmental variables, and to elucidate the social-psychological variables that mediate between an environmental factor and fertility preference (e.g., level of income and feeling of economic security). Or put another way, although existing empirical evidence links fertility to variables that are grouped into a category termed the socio-cultural environment, a more meaningful explanation of these fertility differentials requires an intervening set of

psychological concepts which show how these large-scale social facts are translated into individual fertility events. The category of personal orientation is intended primarily to serve this function.

In summary, the variables within the socio-cultural environment category provide a description of the major characteristics of the social milieu within which individuals must act. They are the conditions to which they react and to which they adjust in one form or another. The personal orientation variables are conceived as the resultants of this reaction and adjustment process. It is these orientations that are viewed as impinging directly on the fertility process although clearly, in terms of action potential, they are filtered through and no doubt partly determined by the personalities of wife and husband.

Hypotheses

The general hypotheses constituting the basic framework for the study are exploratory rather than systematic. The flow is from a variety of empirical and theoretical sources rather than from one unified theory and they serve the function of opening up the problem for exploration in terms of a wide range of variables rather than of providing a test of a restricted number of hypotheses.

H₁: Highly religious and highly traditional individuals are likely to favor large families and are likely to have large families.

H₂: A high level of security in the area of socio-economic status is associated with desires for larger families. The direction of association is positive.

H₃: Education, particularly female education, is related in a negative manner to the level of fertility.

H₄: Females married at a younger age will tend to have a larger family than those married at an older age.

H₅: High aspirations for social mobility will be associated with the desire for a smaller family. It is expected to see larger families as being incompatible with successful social mobility and, therefore, respondents for whom the latter is important are likely to show a preference for small families.

H₆: The absence of fertility planning and the rigidity of roles are associated positively with fertility.

CHAPTER IV

METHODS AND PROCEDURES

Introduction

This chapter deals with the methodological and procedural techniques used in this research. The focus of this research was the evaluation of the social and psychological aspects of fertility. Emphasis was placed on the motivation in family planning and family size preferences.

The first section of this chapter contains a discussion of the objectives of this research. Included in this section are the factors related to fertility to be analyzed. The second section of this chapter is concentrated around the population sample and the characteristics of the sample. The third section of this chapter is addressed to the discussion of the sampling procedure. The fourth section includes a discussion on the interview schedule, the manner in which the interview schedule was put together, and a step-by-step description of the method and procedure employed in the selection of the final items in the schedule. The last section in this chapter is a summary of procedures used.

Research Objectives

The objectives of this research included the following:

1. The derivation and measurement of social-psychological factors

and their impact on fertility as suggested by the review of literature.

2. An analysis of the differences in fertility of each proposed social-psychological variable with regard to:

- a. Number of children desired.
- b. Number of children ever born.
- c. Number of children considered ideal.

An interpretation of the findings in this study have been based upon the above research variables and upon an examination of social as well as the motivational aspects of fertility desired from a factor analysis of the items used in the interview schedule.

The Sample

To achieve the research objectives, it was necessary to obtain couples of different backgrounds, different age groups, and different family sizes (couples who are in the process of completing their family size and older couples who have already completed their family size).

The two methods of collecting data were incorporated. Each of these methods included a wife's interview schedule and a husband's interview schedule. One hundred individuals were interviewed by the author. The 100 individuals (50 couples) were native-born Kuwaiti citizens. These couples, utilized in this research, lived in 23 residential areas: Sharq, Dasma, Da'iyah, Abdulla Alsalem, Shamiah, Nuzha, Faiha, Keefan Hawalli, Salmiya, Sha'ab, Rawda, Adeliya, Khalidiya, Rumaithiya, Funtas, Rega, Sabahia, Mansouriya, Kheetan, Mishrif, Bayan (Mishrif and Byan are brand new residential areas), and Nugra.

A brief description of the sample in terms of several demographic variables is presented in Table VII). First, age, many of the husbands were clustered between the ages of 20 and 30 years (56 percent); 38 percent were between 31 and 40 years of age. Only six percent of the husbands were over the age of 40. The distribution of the wives was as follows: 37 percent of the wives were between the ages of 20 and 30 years, with six percent under the age of 20 and 20 percent were above the age of 30. The wives were generally younger than the husbands. Second, in terms of occupation, a little over 35 percent of the husbands were in the teaching profession as opposed to 50 percent of the wives in the same profession (35.4 percent, 50.0 percent, respectively). The rest of the husbands and wives were widely spread among other occupations. In terms of education, the husbands were unequally distributed with regard to the various levels of education; 36 percent had a higher learning degree (such as a Masters or Ph.D.) as compared to only 14 percent of the wives. The wives, on the other hand, were more evenly distributed with regard to the different levels of education (Table VII). Husbands appear to have higher education than wives. Finally, the couples were widely spread over the different variations with regard to residence.

The Sampling Procedure

This research began with the idea of studying not only fertility patterns, but various aspects of the social milieu as well as the motivational factors that orient some individuals favorably for additional children while others toward fertility restriction.

TABLE VII
DESCRIPTION OF SAMPLE

Characteristics	Categories	N	%
<u>Age:</u>			
Husbands	20 to 30 years	28	56.0
	31 to 40 years	19	38.0
	Over 40 years	3	6.0
Wives	Under 20 years	3	6.0
	20 to 30 years	37	74.0
	Over 30 years	10	20.0
<u>Education:</u>			
Husbands	No education	1	2.0
	Read and write (no formal education)	2	4.0
	Elementary and junior high school	9	18.0
	High school	8	16.0
	Technical Institute (degree more than high school but less than college)	10	20.0
	College education (degree)	2	4.0
	Higher learning (Masters or Ph.D.)	18	36.0
Wives	No education	3	6.0
	Read and write (no formal education)	1	2.0
	Elementary and junior high school	11	22.0
	High school	11	22.0
	Technical Institute (degree more than high school but less than college)	11	22.0
	College education (degree)	6	12.0
	Higher learning (Masters or Ph.D.)	7	14.0
<u>Occupation:</u>			
Husbands	Clerk	7	14.6
	Teacher	17	35.4
	Government job	4	8.3
	Private business	11	22.9
	Law	2	4.2
	Engineer	6	12.5
	Physician	1	2.1
Wives	Housewife	12	25.0
	Student	3	6.0
	Secretary	7	14.6
	Teacher	24	50.0
	Private business	1	2.1
	Engineer	1	2.1

TABLE VII (Continued)

Characteristics	Categories	N	%
<u>Place of Residence:</u>			
	Sharq	1	2.0
	Dasma	3	6.0
	Da'iyā	3	6.0
	Abdulla Alsalem	2	4.0
	Shamiya	1	2.0
	Nuzha	1	2.0
	Fiaha	2	4.0
	Keefan	2	4.0
	Hawalli	1	2.0
	Salmiya	2	4.0
	Sha'ab	4	8.0
	Rawda	3	6.0
	Adeliya	5	10.0
	Khalidiya	1	2.0
	Rumaithiya	1	2.0
	Funtas	1	2.0
	Rega	8	16.0
	Sabahia	2	4.0
	Mansuria	1	2.0
	Kheetan	2	4.0
	Mishrif	1	2.0
	Bayan	3	6.0

The sample was selected on a "snowball" basis, i.e., a number of people agreed to be interviewed, then they were asked to guide the researcher to other couples they knew who in turn agreed to tell about others.¹ There was no guarantee that the interviewees selected in any way constituted a random or a representative sample of the Kuwaiti

¹Hunter (1953) used the same sampling technique with slightly different goals in mind in his study of the community power structure in the city of Atlanta.

families. However, particular attention was given to having people across age, class, education, and occupational background. The interviewees were visited several times. The first visit was usually an introduction of the researcher and acquainting the respondent with what the researcher wanted to do and the purpose of the research. Generally speaking, the first visit was an establishment of a communication line and obtaining the consent of the people to be interviewed. The other visits were to conduct an interview separately with the wife and then the husband. All the people the researcher was introduced to were very cooperative and did not object at all to being interviewed.

Interview Schedule

The items utilized in this research were constructed with the following purposes in mind: (1) to provide support or qualifying information with regard to findings in the review of literature; (2) to provide a comparison to work by Westoff et al. (1961) in the social and the psychological aspects of fertility using several of his original questionnaire items, with a few modifications and translation into Arabic for the purpose of comprehension.

The wife's interview schedule contained 29 questions, placed at the beginning of the interview schedule. The purpose was to get such data as age, education, occupation, place of residence, etc. Included in that first portion of the interview schedule was information about contraceptive use and also the type used, the desire and expectation toward another child, and the general attitude toward family planning. Fifty-six items [adopted from Westoff et al. (1961) comprising 10 different social-psychological scales, were added. The total number of items was

85. The husband's interview schedule was considerably shorter. Only eight questions to obtain general data and 40 items comprising five different scales [also adopted from Westoff et al. (1961)] were added.

The interview schedule was administered to all. It consisted of open-ended questions as well as forced choice items. The interview schedule was the primary source for gathering data. The idea of collecting data this way is that it opened the door for a richer body of information. In addition, the interviewer recorded the manner in which people responded to questions, the way the respondents expressed themselves, whether or not they thought a particular subject was appropriate for discussion, and why they thought subjects were appropriate.

Method of Analysis

Once the quantitative data had been collected, it was coded and transformed into data cards and analyzed utilizing the Statistical Analysis System (SAS) computer program. Factor analysis was employed as a device for studying the structure of relationships among items composing a multi-dimensional measure, and as a means of selecting items that appear to measure some general underlying dimension. A bivariate analysis is utilized in order to establish the existence or the non-existence of a pattern with regard to fertility decision making.

Selecting Items

Items judged to have common content were included. Items were factor analyzed and the first centroid factor extracted corresponded closely to the common content of the items judged as face validity and large factor loadings. Items with very small loadings were eliminated

from inclusion. The following summary gives a quick idea about the scales adopted from Westoff for wives and husbands:

Wife's schedule:

1. Religiousness
2. Achievement of life goals.
3. Satisfaction with husband's work.
4. Feeling of economic security.
5. Drive to get ahead.
6. Aspiration for children's college education.
7. Marital adjustment.
8. Liking for children.
9. Dominance patterns.
10. Patterns of help available to wives.

Husband's schedule:

1. Husband's level of status satisfaction.
2. Commitment to work.
3. Feeling of economic security.
4. Drive to get ahead.
5. Importance of getting ahead.

These factors plus the items that comprise them with their factor loading and Westoff's first factor loading are represented in Table VIII. In addition, the sample mean response for each item is included in the table. The responses were arranged so that the lowest response represents a negative attitude toward fertility and a high response represents a positive attitude toward fertility. The following items were eliminated as a result of their low loadings: Items Q35, Q58, Q60, Q62, Q67, M15, M18, M19, M23, M40, M47.

TABLE VIII

PRESENTATION OF THE RESULTS OF FACTOR ANALYSIS FOR THE
VARIOUS SCALES AND THEIR ITEMS

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally	
					I	II
<u>Wives</u>						
<u>1. Religiousness</u>						
Q222. Aside from attendance at religious services, how religious-minded would you say you are? Very, more than average, less than average, or not at all?				-		
**Q35. Have you ever gone to see a religious person for advice or help on family or personal matters since you have been married?	-	0.06	-	-	-	-
**Q34. To what extent is religion included in the home activities of your family? For example, family prayers, reading the Quran, or other religious materials, saying grace at meals, and so forth.	3.65	0.34	<u>0.34</u>	-	0.02	<u>0.81</u>
**Q30. If you have the opportunity, which would you rather teach?	2.41	0.44	<u>0.46</u>	0.69	<u>0.50</u>	0.01
Q16. Which is more important to you? Religion or Politics?				0.70		
Q27. What would you rather have a son of yours do? Follow a career in the church or follow a career in the Army?				0.63		
**Q33. How religious-minded would you say you are?	3.37	0.53	<u>0.54</u>	-	0.21	<u>0.81</u>
*Q31. Would you like to be a missionary?	1.92	0.44	<u>0.45</u>	0.50	<u>0.67</u>	0.36
Q49. Which spouse would you prefer? One who will command admiration or one who likes to read religious books?				0.59		
**Q32. Whom would you rather have been? Playwrite or social and religious writer?	1.92	0.79	<u>0.78</u>	0.85	<u>0.69</u>	0.36
**Q36. Which spouse would you prefer? A deeply religious one or a rich and good provider?	1.98	0.77	<u>0.78</u>	0.84	<u>0.81</u>	0.13

TABLE VIII (Continued)

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally	
					I	II
**Q37. Would you prefer to read: a book with religious theme, social, nonfiction, romantic, police or other?	5.35	0.56	<u>0.50</u>	0.70	<u>0.50</u>	0.11
2. Achievement of Life Goals						
Q38. We all have our own picture of the kind of life we would really like to lead and the things we would really like to do in life. Whatever your picture, how much do you feel that you are reaching it?	3.54	0.67	<u>0.67</u>	0.64		
Q39. What do you think the chances are of the living the kind of life you would like to have?	3.36	0.76	<u>0.76</u>	0.68		
Q40. Some people feel they can make pretty definite plans for their lives for the next few years, while others feel they are not in a position to plan ahead. How about you? Do you feel you are able to plan ahead or not?	2.36	0.63	<u>0.63</u>	0.60		
Q41. Do you feel you now know and can look forward to the kind of life you will have 10 years from now?	1.30	0.62	<u>0.62</u>	0.60		
3. Satisfaction with Husband's Work						
Q42. In general, how well satisfied are you with your husband's present job or work?	2.50	0.70	<u>0.70</u>	0.82		
Q43. More wives are more satisfied with some things about their husband's job than they are with others. How satisfied are you, for example, with the steadiness of his work?	3.24	0.67	<u>0.67</u>	0.50		
Q44. How do you feel about his hours and working conditions?	2.70	0.54	<u>0.54</u>	0.45		
Q45. How do you feel about his chances to get ahead in his work?	3.22	0.83	<u>0.83</u>	0.64		
Q46. Finally, how satisfied are you with your husband's income?	2.86	0.74	<u>0.74</u>	0.72		

TABLE VIII (Continued)

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally	
					I	II
4. Feeling of Economic Security						
Q47. All in all, what kind of breaks do you feel you and your husband are having financially?	2.80	0.81	<u>0.81</u>	0.88		
Q48. Are there times when you feel you have to deny yourself many of the extras you want because of your income?	-	-0.21	-	0.67		
Q49. Suppose you ran into an unexpected heavy expense. Do you feel that your income and savings are enough to handle it?	2.20	0.57	<u>0.57</u>	0.68		
Q50. In general, how would you describe your present financial situation?	2.88	0.90	<u>0.90</u>	0.90		
Q51. Are you ever faced with the possibility of your husband getting a large cut in income or being out of work for several months?	2.80	0.59	<u>0.59</u>	0.40		
Q52. On the whole, what would you say your financial future looks like?	3.30	0.68	<u>0.69</u>	0.86		
5. Drive to Get Ahead						
*Q53. For example, if getting ahead meant that you had to move to a strange part of the country, would you be willing to move?	1.62	0.51	<u>0.52</u>	0.69	<u>0.70</u>	0.10
*Q54. Would you be willing to entertain people because they were connected with your husband's work, even though you might not like them?	1.52	0.68	<u>0.71</u>	0.60	<u>0.64</u>	0.32
*Q55. Would you be willing to leave your friends?	1.60	0.70	<u>0.69</u>	0.80	0.40	<u>0.65</u>
*Q56. In order to get ahead, would you be willing to become more active in your community organizations and clubs not of your own choice?	1.39	0.67	<u>0.70</u>	0.59	<u>0.74</u>	0.16
*Q57. Would you be willing to leave your close relatives?	1.17	0.42	<u>0.47</u>	0.72	<u>0.62</u>	-0.09

TABLE VIII (Continued)

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally	
					I	II
*Q58. Would you be willing to postpone having another child?	-	0.17	-	0.45	-	-
Q160. Would you be willing to keep quiet about your religious views in order to get ahead?				0.61		
Q161. Would you be willing to have your husband take a chance on a job that he might be less certain of holding, if it had better opportunities?				0.43		
Q162. Would you be willing to move to a less pleasant neighborhood temporarily?				0.68		
Q163. Would you be willing to keep quiet about your political views in order to get ahead?				0.55		
**Q59. Would you be willing to keep quiet about your views in order to get ahead?	1.40	0.47	<u>0.43</u>	-	0.02	<u>0.74</u>
*Q60. Would you be willing to live temporarily in less desirable housing?	-	0.20	-	0.65	-	-
*Q61. If getting ahead meant that you would see less of your husband because he would spend more time at work, would you be willing to do this?	1.50	0.40	<u>0.32</u>	0.50	0.13	<u>0.77</u>
*Q62. And finally, if getting ahead meant you might have to send your children to another school not quite as good, would you be willing?	-	0.20	-	0.55	-	-
6. Aspiration for Children's College Education						
***Q63. Do you expect to send your children to college?	7.18	<u>0.58</u>	0.58			
***Q64. How do you expect this college education to be paid for? Specific steps already taken or in process?	1.50	<u>0.58</u>	0.58			
***Q65. Would you send your daughter to college even if it meant serious financial hardship?	2.43	<u>0.82</u>	0.82			
***Q66. Would you send your son to college even if it meant serious financial hardship?	1.77	<u>0.79</u>	0.79			

TABLE VIII (Continued)

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally	
					I	II
7. Marital Adjustment						
*Q67. How often do you and your husband have different opinions about the best way to raise or handle the children?	-	0.16	-	0.33		
Q122. When you get upset about having to take care of the house and the children, is your husband as sympathetic as you would like him to be?				0.47		
*Q68. In general, compared to most couples you know, how well do you and your husband get along with each other?	3.30	0.80	<u>0.80</u>	0.65		
*Q69. Have you ever wished you were not married?	3.00	0.54	<u>0.54</u>	0.63		
*Q70. Everything considered, how happy has your marriage been?	3.44	0.83	<u>0.83</u>	0.76		
8. Liking for Children						
*Q71. Compared to other things you like to do that are not mainly connected with children, how much do you like to read or talk to children?	3.02	0.57	<u>0.57</u>	0.69		
*Q72. Compared to other things you like to do, how much do you like looking at pictures of children in magazines or newspapers?	2.57	0.82	<u>0.82</u>	0.65		
*Q73. How much do you like showing children good places to go and new things to do?	3.00	0.84	<u>0.84</u>	0.69		
*Q74. How much do you like seeing movies or plays about children, or reading stories about them?	2.50	0.70	<u>0.70</u>	0.66		
*Q75. Compared to other chores, like housekeeping work and things like that, how much do you mind straightening up after children?	3.16	0.60	<u>0.60</u>	0.06		
*Q76. All in all, in comparison to your other interests, how interested are you in spending time with children?	3.18	0.60	<u>0.60</u>	0.69		

TABLE VIII (Continued)

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally	
					I	II
<u>9. Dominance Patterns</u>						
*Q77. In some families the father makes the main decisions about the children, in others he leaves it to the mother. When it is about the children, who has the most to say in your family, you or your husband?	1.77	0.64	<u>0.64</u>		<u>0.86</u>	-0.21
*Q78. Which of you has the most to say about other things not mainly connected with the children?	1.58	0.58	<u>0.58</u>		<u>0.65</u>	0.31
*Q79. Who has the most to say about friends you see most often?	1.83	0.78	<u>0.78</u>		<u>0.75</u>	0.30
*Q80. Who has the most to say about what you do together for recreation?	1.81	0.37	<u>0.37</u>		<u>0.62</u>	0.55
*Q81. Which of you has the most to say about how to spend the family income?	1.73	0.79	<u>0.79</u>		0.06	<u>0.93</u>
Q120. And finally, who has the most say about running the house?						
<u>10. Patterns of Help Available to Wives</u>						
*Q82. How often can you count on someone to take care of the children?	1.91	0.83	<u>0.83</u>	0.62		
*Q83. How often can you count on your husband to take care of the children?	2.23	0.75	<u>0.75</u>	0.38		
*Q84. How often can you count on someone other than your husband to help you around the house?	1.83	0.92	<u>0.92</u>	0.59		
*Q85. On the whole, do you feel satisfied with the amount of freedom you have away from the children?	2.15	0.81	<u>0.81</u>	0.73		

TABLE VIII (Continued)

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally	
					I	II
<u>Husbands</u>						
<u>1. Husband's Level of Status Satisfaction</u>						
**M9. I would be satisfied if a son of mine, when he reaches my age, is in the same kind of work that I am now in.	2.12	0.88	<u>0.88</u>	0.85		
**M10. I would be satisfied if my children receive the same amount of education as I have.	1.92	0.83	<u>0.83</u>	0.68		
**M11. I am pretty well satisfied with the chances for getting ahead in my present work.	2.43	0.76	<u>0.76</u>	0.74		
**M12. I would be satisfied if my children, when they reach my age, have the same income and live the same as I.	2.22	0.84	<u>0.84</u>	0.73		
<u>2. Commitment to Work</u>						
**M13. I would much rather relax around the house all day than go to work.	2.52	0.48	<u>0.52</u>	0.66	<u>0.55</u>	-0.05
**M14. My work is more satisfying to me than the time I spend around the house.	2.00	-0.36	<u>-0.37</u>	0.61	0.10	<u>0.69</u>
**M15. If I inherited so much money that I did not have to work, I would still continue to work at the something I am doing now.	-	0.21	-	0.68	-	-
**M16. More than almost anything else, it is work that makes life worthwhile.	1.52	-0.74	<u>-0.68</u>	0.37	<u>-0.58</u>	0.37
**M17. Some of my main interests and pleasures in life are connected with my work.	2.14	-0.33	<u>0.28</u>	0.79	-0.04	<u>-0.77</u>
**M18. I have sometimes regretted going into the kind of work I am now in.	-	-0.09	-	0.51	-	-
**M19. The work I do is one of the most satisfying parts of my life.	-	-0.26	-	0.86	-	-

TABLE VIII (Continued)

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally		
					I	II	III
**M20. I enjoy my spare time activities much more than my work.	1.84	0.53	<u>0.56</u>	0.79	<u>0.67</u>	0.13	
**M21. To me, my work is just a way of making money.	1.88	0.73	<u>0.78</u>	0.81	<u>0.81</u>	0.09	
<u>3. Feelings of Economic Security</u>							
**M22. I feel that my wife and I have had very good financial breaks since we have been married.	2.70	0.71	<u>0.71</u>	0.78	<u>0.74</u>	0.17	
**M23. It is extremely important to me to have a higher income.	-	-0.02	-	0.46	-	-	
**M24. I feel that my present financial situation is very good.	2.28	0.66	<u>0.66</u>	0.83	0.26	<u>0.81</u>	
**M25. On the whole, my financial future looks very good.	2.46	0.56	<u>0.56</u>	0.80	0.08	<u>0.89</u>	
**M26. There are many times when I have to deny myself and my family things we would like because of our income.	2.42	0.80	<u>0.80</u>	0.74	<u>0.74</u>	0.32	
**M27. I worry sometimes about the possibility of a large cut in income or being out of work for a while.	2.40	0.57	<u>0.57</u>	0.43	<u>0.68</u>	0.002	
**M28. In my present financial situation, I have to worry about bills or debts.	2.34	0.80	<u>0.80</u>	0.71	<u>0.82</u>	0.20	
<u>4. Drive to Get Ahead</u>							
*M29. For example, if getting ahead meant that you would have to go without any vacation for several years, would you be willing to do this?	2.12	0.67	<u>0.68</u>	0.55	<u>0.70</u>	0.08	-0.21
*M30. Would you be willing to leave your friends in order to get ahead?	1.46	0.72	<u>0.72</u>	0.70	<u>-0.76</u>	0.02	-0.14
*M31. If getting ahead meant that you would have to live in an undesirable neighborhood temporarily, would you be willing?	1.36	0.48	<u>0.49</u>	0.62	-0.09	0.22	<u>-0.77</u>
*M32. Would you be willing to give up your leisure time in order to get ahead?	1.44	0.62	<u>0.64</u>	0.56	<u>-0.50</u>	-0.16	-0.71
*M33. Would you be willing to postpone having another child in order to get ahead?	1.48	0.59	<u>0.59</u>	0.52	-0.17	0.05	<u>-0.61</u>

TABLE VIII (Continued)

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally		
					I	II	III
Q39. To get ahead, would you be willing to move your family to a strange part of the country?	-	-	-	0.66	-	-	-
*M35. Would you be willing to do less interesting or less enjoyable work, in order to get ahead?	1.36	0.69	0.68	0.50	<u>-0.73</u>	0.20	-0.22
*M34. If it meant not seeing your wife or children as much as you would like, would you be willing?	1.34	0.53	0.51	0.71	-0.14	0.09	-0.08
*M37. Would you be willing to take some risk to your health in order to get ahead?	1.12	0.52	0.54	0.55	<u>-0.60</u>	0.28	0.28
Q43. Would you be willing to keep quiet about your political views in order to get ahead?	-	-	-	0.62	-	-	-
*M38. Would you be willing to take a chance on a job that you might be less certain of holding, if it had better opportunities?	1.24	0.41	0.40	0.31	0.01	<u>0.80</u>	-0.17
*Q36. If getting ahead meant you might have to send your children to another school not quite as good, would you be willing?	1.40	0.80	0.81	0.64	<u>-0.63</u>	0.10	-0.24
Q46. And finally, if getting ahead meant that you would have to keep quiet about your religious views, would you be willing?	-	-	-	0.63	-	-	-
**M39. If getting ahead meant you might have to send your children to another school not quite as good, would you be willing?	1.04	0.41	0.40	-	-0.27	<u>0.77</u>	0.01
**M40. Finally, if getting ahead meant that you would have to keep quiet about your religious or political views, would you be willing?	-	0.23	-	-	-	-	-

TABLE VIII (Continued)

Westoff's Original Scale and Items	Final Mean	Original First Factor	Final First Factor	Westoff's First Factor	Final Factors Rotated Orthogonally	
					I	II
5. Importance of Getting Ahead						
**M41. I feel that the most important thing about work is the chance to get ahead.	1.64	0.64	<u>0.64</u>	0.58	<u>0.74</u>	0.04
**M42. I spend a lot of time thinking about how to improve my chances for getting ahead.	1.74	0.82	<u>0.82</u>	0.65	<u>0.69</u>	0.45
**M43. Getting money and material things out of life is very important to me.	1.42	0.49	<u>0.48</u>	0.62	<u>0.67</u>	-0.15
**M44. It is important to me to own material things, such as a home, car, or clothing, which are at least as good as those of my neighbors and friends.	2.04	0.41	<u>0.41</u>	0.52	0.01	<u>0.74</u>
**M45. I am very anxious to get much further ahead.	1.90	0.76	<u>0.75</u>	0.83	<u>0.56</u>	0.52
**M46. Getting ahead is one of the most important things in life to me.	1.72	0.72	<u>0.73</u>	0.83	<u>0.73</u>	0.21
**M47. It is quite important to me that my children marry persons of at least equal social standing.	-	0.12	-	0.35	-	-
**M48. The most important qualities of a real man are determination and ambition.	1.90	0.48	<u>0.48</u>	0.56	0.07	<u>0.76</u>

*Items used in the present study without any change at all.

**Items worded differently by the researcher.

***Question 16 was eliminated by Westoff because 93.2 percent of 961 women answered in one category--religion (extreme distribution).

****Not compared to Westoff because he used a different scale classification.

The Measures of Religiousness

A necessary point which needs to be stated is that the institutional requirements of the various religions were different. The questions asked to find out religious commitment needed to be clear (high validity) to the individual being interviewed. The author was familiar with these religious requirements and variations.

Two different though overlapping measures of religious values were used: (1) home religious orientation (combines information from two questions, one on the extent to which religion is included in the home activities of the family, and the other is the self-rating of wife on a scale of religious mindedness); (2) a measure of personal commitment to religious values. The wife was asked a series of questions that attempted to measure her perception of the importance of spiritual and religious values in comparison to secular values. The wife was asked to choose between religious values and other competing values such as politics, literary interests, and economic security.

Wives' Scales and Items

Religiousness Scale

Westoff's scale was used and all the items were included except the section dealing with formal practices outside the home. This was omitted since there are no significant differences in religiosity practiced at home or at the mosque. If the Moslem individuals are highly religious, they will perform their religious duties at home and at the mosque just the same, especially if time and place has permitted time. Items dealing

with personal commitment to religious values and religious practices at home (i.e., home religious orientation) were included.

Table VIII indicates that all items dealing with religious values seem to cluster together except item number Q35. Items dealing with home religious orientation clustered separately. Item Q35 was eliminated because of the low loadings on the original first factor. The final first factor unrotated accounted for 33 percent of the variation in the seven religious items, with all items having at least a 0.45 loading. Two dimensions emerged from these items. One of these dimensions was loaded by items Q30, Q31, Q32, Q36, and Q37. This seems to suggest the dimension of total commitment to religious values. Items Q33 and Q34 seem to suggest another dimension and that is total home religious orientation. All items except Q35 were totaled as the measure of total religiosity. Items Q33 and Q34 were added together to measure total home religious orientation. Items Q30, Q31, Q32, Q36, and Q37 were also added together as the measure of total commitment to religious values.

The study by Westoff et al. (1961) had two measures of religiosity. Items Q222, Q34, and Q35 were one measure using a different scale for classification and cannot be compared. The second measure they used was similar to the one used by this writer. Their second measure was factor analyzed and added together, except one question was eliminated since 93.2 percent of their sample responded in one category. The items in this investigator's religiousness scale were all factor analyzed and items were added together for a given measure. The researcher doubts that comparison with Westoff et al. is possible on the religious scale due to differences in items comprising it (Table VIII).

Achievement of Life Goals Scale

In this scale, all the items cluster together and only one factor emerged. Thus, nothing was eliminated. The first factor unrotated accounted for 45 percent of the variation in the four items, with all items having at least a 0.62 loading. Therefore, these items were added together as the measure of achievement of life goals. Westoff et al. retained all the items and used the same procedure in deriving this measure. First factor loadings are similar to Westoff et al. and this writer.

Satisfaction with Husband's Work Scale

With only one factor extracted, all the items had a very high loading. The first factor unrotated accounted for 49 percent of the variation in five items, with all items having at least a 0.54 loading. Therefore, these items were added together as a measure of satisfaction with husband's work. Westoff et al. retained all the items. Their first factor loadings are very similar to this investigator's final first factor loadings.

Feeling of Economic Security Scale

All items have high loadings. The first factors unrotated account for 52 percent of the variation in the six economic security items, with all items having at least a 0.57 loading. The items were totaled together to form a measure of feeling of economic security. Westoff et al.'s and this researcher's first factor loadings are similar on all items except item Q35 which Westoff et al. eliminated because of its low loading.

Drive to Get Ahead Scale

Again, all items, except items Q58, Q60, and Q62, have large loadings on the first factor. Items Q58, Q60, and Q62 are eliminated because of their very low loadings. The final first factors unrotated account for 33 percent of the variation in these items with all items having at least a 0.32 loading. Total drive to get ahead consisted of items Q53, Q54, Q55, Q56, Q57, Q59, and Q61. Two dimensions emerged from these items. One of these dimensions contains items Q53, Q54, Q56, and Q57. This suggests the dimension of sacrificing physical comfort to get ahead. Items Q55, Q59, and Q61 suggest another dimension of sacrificing emotional comfort to get ahead. First, all items except Q58, Q60, and Q62 were added together as a measure of total drive to get ahead. Then, items Q53, Q54, Q56, and Q57 were totaled together as the measure of amount of sacrificing physical comfort to get ahead. Items Q55, Q59, and Q61 were also added together as a measure of the amount of sacrificing emotional comfort in order to get ahead.

Westoff et al. retained all the items and obtained four clusters: Cluster I--Q53 (move to strange part of the country, Q55 (willing to leave friends), Q57 (willing to leave relatives); Cluster II--Q54 (willing to entertain people), and Q56 (become more active in organization); Cluster III--Q162 (move to less pleasant neighborhood) and Q60 (live in less desirable housing); Cluster IV--Q160 (keep quiet about religious views) and Q163 (keep quiet about political views). Items Q161, Q162, and Q163 were combined or worded differently by this researcher. Items in this study have clustered in a dramatically different way than in the study by Westoff et al.

Aspiration for Children's College

Education Scale

The first factor accounted for 49 percent of the variation to the for items, with all factors having high loadings. All items had at least a 0.58 loading. Therefore, all the items were added together as a measure of aspiration for children's college education. This will not be compared to Westoff et al. (1961) because of the different scale classifications which they used.

Marital Adjustment Scale

Item Q67 is eliminated because of the low loading. The rest of the items had large loadings. The final first factor loadings account for 33 percent of the variation in the three marital adjustment items, with all items having at least a 0.54 loading. All the items in this scale except item Q67 were added together as a measure of marital adjustment. Westoff eliminated items Q67 and Q122 because of low loadings; the rest were retained. Consequently, three items make up this measure, while all five items were used by Westoff et al.

Liking for Children Scale

All items have very large loadings. The first factor accounts for 49 percent of the variation, with all the items having at least a 0.57 loading. Therefore, all the items were added together as a measure of liking for children. Item Q75 was eliminated by Westoff et al.; otherwise they are the same.

Dominance Pattern Scale

All items have large loadings. The first factors account for 42 percent of the variation in these items, with all items having at least a 0.37 loading. All the items were added together as a measure of the dominance pattern. This scale was not compared to different scale classifications used by Westoff et al.

Pattern of Help Available to Wives Scale

All items have large loadings. The first factor accounts for 69 percent of the variation in the four items, with all of the items having at least a 0.75 loading. All the items were added together as a measure of the pattern of help (domestic help) available to wives.

Item Q83 was eliminated by Westoff et al. because of low loadings. Items loaded much higher on this researcher's final first factor than Westoff et al.'s.

Husbands' Scales and Items

Husband's Level of Status Satisfaction Scale

All the items have a high loading on the first factor. The first factor accounts for 69 percent of the variation in these items, with all items having at least a 0.76 loading. All the items, therefore, were added as a measure of the husband's level of status satisfaction. Both this researcher's and Westoff et al.'s factor loadings are very similar. All the items were retained by Westoff et al.

Husband's Commitment to Work Scale

All items have high loadings on the first factor except items M15, M18, and M19. Items M15, M18, and M19 were, therefore, eliminated. The final first factors unrotated account for 31 percent of the variation in these items, with all items having at least a 0.28 loading. Two dimensions emerged from these items. One of these dimensions was loaded by items M13, M16, M20, and M21. This suggests the dimension of work for money. The other dimension, M14 and M17, seems to suggest work for leisure. All the items, except items M15, M18, and M19, were added together as a measure of total husband's commitment to work. Items M13, M16, M20, and M21 were added together as a measure of work for money dimension. Items M14 and M17 were added together to measure the total commitment to work for money dimension. Westoff et al. eliminated item M16 because it loaded low. Their first factor loadings were very dissimilar. They retained all the items except for M16.

Husband's Feeling of Economic Security Scale

All the items on this scale loaded very high except item M23 which loaded very low. Item M23 is eliminated. The final first factors unrotated accounted for 48 percent of the variation in these items, with all items having at least a 0.56 loading. Two dimensions resulted from these items. One of these dimensions was loaded by items M22, M26, M27, and M28. This suggests the concern for daily economic security. The other dimension is loaded by items M24 and M25 which seems to indicate a general economic outlook. All items except item M23 were added together to measure total feeling of economic security. Items M22, M26, M27, and M28 were added together to measure concern over daily economic

security. Items M24 and M25 were added together to measure the general economic outlook of the husband. All the items were retained by Westoff et al. They were added as a measure of husband's feeling of economic security. Westoff et al.'s items loaded differently; generally they were higher in loading than the ones appearing in this study.

Husband's Drive to Get Ahead Scale

All items are loaded fairly high except item M40 which is loaded too low to be considered. Therefore, item M40 is eliminated. The final first factor accounts for 36 percent of the variation in these items, with all items having at least a 0.40 loading. This is a complicated scale; there are three underlying dimensions. Total drive to get ahead loaded by items M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, and M39. The first dimension loaded by items M29, M30, M35, M36, and M37. The second dimension loaded by items M38 and M39. The third dimension loaded by items M31, M32, and M33. All the items except M40 were added together as a measure of the husband's desire to get ahead. Items M29, M30, M35, M36, and M37 were added together as a measure of sacrifice of health, family, and friends. Items M38 and M39 were added together as a measure of sacrifice of school standards and permanent job. Items M31, M32, and M33 were added together as a measure of sacrifice of standard of living and leisure. Westoff et al.'s first factor loadings were very dissimilar in general than the loadings presented by items utilized for this research. Their items clustered differently than the clustering on this scale. This difference may be attributed to cultural differences and others between the Kuwaiti and the American samples.

Husband's Importance of Getting Ahead Scale

All the items in this scale loaded very high except item M47 which is eliminated because of its very low loading. The final first factors account for 40 percent of the variation in these items, with all having at least a 0.41 loading. Two dimensions emerged. One dimension is loaded by items M41, M42, M43, M45, and M46. This suggests the individual's emphasis upon the hard work to get ahead. The other dimension is loaded by items M44 and M48, which seems to suggest the emphasis upon material and real manness. All items except item M47 were added together as a measure of husband's importance of getting ahead. Items M41, M42, M43, M45, and M46 were totaled together as a measure of individual emphasis on hard work. Items M44 and M48 were added together as a measure of individual emphasis on material and manness. Item M47 was also eliminated by Westoff et al. because of the low loading. All other items were added together as a measure of importance of getting ahead.

Summary

Within this chapter has been a discussion of the objectives of the study, a description of the sample, a discussion of the sampling procedure, an explanation of the interview schedule used to collect the research data, the method of analysis, and the procedure used in the selection of the items for this research. The study is aimed at gathering information concerning the relationship between fertility and several independent sociological, motivational, and demographic variables. All the 10 social-psychological scales were used to examine family size preference as well as actual family size for the wives. All

five scales and the items composing them for the husbands are utilized for the same purposes. Furthermore, out of the 10 scales for the wives, only five were similar in terms of loadings to Westoff et al. Only one scale out of five for the husbands' scales displayed similar loadings to Westoff et al. All the rest were dissimilar. The following chapter discusses the findings.

CHAPTER V

RESEARCH FINDINGS

This chapter consists of several sections. The first section is an introduction. The second section includes a presentation of the findings and hypotheses evaluation. There is also an attempt which is made to analyze the model and the hypotheses generated from it; a subjective discourse is useful. Each individual is unique within him or herself. There are, however, common characteristics in their views on their own fertility preferences and family planning. There are obvious limitations to any analysis which takes sense impressions into account. However, the use of the subjective qualitative data can lead to a clearer, more complete picture. Various comments, reactions, and impressions are important in gaining some insight into the internal nature of fertility decision making and the impact of the social as well as the psychological milieu. The addition of this type of data is intended to present the kind of feelings and attitudes that were expressed by the respondents. The final section of this chapter is an overall summary of the research findings.

Introduction

All of the components of independent variables are located within three major areas: religion, socio-economic status, and family. Independent variables (aspects of socio-cultural or personal orientation)

relate directly to these three dimensions of social life. Table IX gives an idea of the conceptual structure with regard to items utilized in the interview schedule.

These three broad classes of independent variables will be utilized to seek an explanation of variations in the dependent variables such as additional family size, the ideal family size, and contraceptive use. Reading Table IX indicates an arbitrary classification for organizational convenience. Biological characteristics and governmental influences are excluded from this table, but their influence is there (see Chapter III). Table IX shows a brief characterization of the independent variables used in this research. There are several variables that can be placed differently. The justification is that an employed wife influences both categories--the economic and the family. An employed wife contributes to the family income; at the same time, according to Westoff et al. (1961), one is dealing with a phenomena not very much is known about or about how it operates (adjustment to the mother role). These variables presented in Table IX describe the major characteristics within which individuals must act. They are the conditions to which husbands and wives react, and to which they decide on one form of action or another. The social-psychological variables can greatly affect the outcome of this decision making process. Not only can these factors be viewed as impinging directly upon the fertility process, but also in terms of individual action, they are filtered through personalities of wife and husband. The following is a presentation of the findings as they were observed. The results of the research are presented in the form of tables with correlation coefficients for the different variables. A 0.05 level of significance was utilized.

TABLE IX
 CONCEPTUAL ORGANIZATION OF INDEPENDENT VARIABLES

Societal Area	Social Milieu	Personal Milieu
Religion	Religious family activities Religious education	Home religious orientation Commitment to religious values
Socio-Economic Status		
Economic Status	Occupational status: Present occupation and occupation prestige Wife's work history Occupational mobility Employment history	Achivement of life goals Feeling of economic security Relevance of finances in fertility decisions Job satisfaction Perception of opportunities Commitment to work values Status satisfaction Social class identification Importance of getting ahead Drive to get ahead Aspirations for children's education
	Education: Formal education of wife and husband	
Social Status	Housing: Type of house* Value of house Type of community lived in as child	
Family	Parents living Number of siblings Marriage duration Wife's work history Child spacing	Level of enjoyment of of children Adjustment to mother role Patterns of help available to mother Patterns of husband-wife dominance Marital adjustment

*The classification "type of house" refers to whether whether the place of residence is of a limited income, middle-class, upper-class dwelling, or an apartment.

Presentation of Findings and Evaluation
of Hypotheses

The following is a presentation of the results in tabular form. The first one is Table X. This presents the correlation coefficients calculated for the wives only. This table gives a summary of the independent variables such as: religiosity, achievement of life goals, satisfaction with husband's work, aspirations for children's college education, marital adjustment, liking for children, dominance pattern, the pattern of help available to wives, the place where the wife was born, satisfaction with the level of education achieved, planning ahead of time, and the use of contraceptives. These independent variables are correlated with number of children, additional children desired, and ideal number of children preferred.

Table XI shows variables that were examined for both husbands and wives (for example, the relationship between age, education, occupation, number of sisters, number of brothers, type of house, ownership of house, value of house, willingness to postpone having a child to get ahead, whether or not relatives reside with them, and the fertility variables--the number of children, the desire for additional children, and the ideal number of children).

Table XII presents variables examined for the husbands only (for example, the relationship between husband's level of status satisfaction, commitment to work, work for money and work for desire, the importance of getting ahead, emphasis on individual hard work, and emphasis on the material aspect of life and masculinity with the dependent variables--

TABLE X
CORRELATIONS BETWEEN FERTILITY AND SEVERAL INDEPENDENT
VARIABLES CONSIDERED FOR WIFE ONLY

	Number of Children Alive	Additional Children Desired	Ideal Number of Children
Total religiosity	0.26 α .07	-0.03	-0.06
Home religious orientation	0.39 α .007	-0.18	-0.12
Commitment to religious and traditional values	0.05	0.10	0.10
Achievement of life goals	0.14	-0.36 α .02	-0.21
Satisfaction with husband's work	0.17	0.17	0.10
Aspiration for children's college education	-0.01	-0.25	0.02
Marital adjustment	0.13	-0.28	0.01
Liking for children	0.13	0.05	-0.13
Dominance pattern	-0.12	-0.08	-0.07
Pattern of help available to wives	0.06	0.28	0.38 α .007
Place of birth (village or city)	-0.02	-0.32 .05	-0.38 α .007
Satisfaction with level of educational achievement	0.15	0.17	0.30 α .04
Planning ahead of time	0.10	0.19	0.03
Use of pills for contraceptives	0.24 α .10	0.45 α .004	-0.05

TABLE XI
CORRELATIONS BETWEEN FERTILITY AND SEVERAL INDEPENDENT
VARIABLES FOR BOTH HUSBAND AND WIFE

	Number of Children Alive	Additional Children Desired	Ideal Number of Children
<u>Age</u>			
Husband	0.77 α .0001	-0.40 α .01	0.05
Wife	0.78 α .0001	-0.48 α .001	0.21
<u>Education</u>			
Husband	-0.27 α .05	0.02	-0.08
Wife	-0.46 α .001	-0.10	-0.20
<u>Occupation</u>			
Husband	0.03	-0.14	0.06
Wife	-0.37 α .01	-0.30 α .06	-0.45
<u>Number of Sisters</u>			
Husband	-0.12	-0.18	-0.25 α .08
Wife	-0.08	-0.01	0.01
<u>Number of Brothers</u>			
Husband	0.02	-0.32 α .04	-0.26 α .07
Wife	0.43 α .003	-0.22	0.20
<u>Type of House</u>			
	-0.23	0.28 α .08	0.09
<u>Ownership of House</u>			
	-0.30 α .03	-0.45 α .004	-0.10
<u>Value of House</u>			
	0.14	0.31	0.04

TABLE XI (Continued)

	Number of Children Alive	Additional Children Desired	Ideal Number of Children
<u>Willing to Postpone Having a Child to Get Ahead</u>			
Husband	-0.17	-0.22	-0.18
Wife	-0.04	-0.25	-0.14
<u>Are There Relatives Residing With You</u>			
	-0.31 α .03	0.37 α .02	0.06
<u>Husband's Total Feeling of Economic Security</u>			
Emphasis on daily economic	-0.01	-0.05	0.01
Economic outlook	-0.09	-0.09	-0.21
<u>Wife's Total Feeling of Economic Security</u>			
	-0.07	0.08	-0.01
<u>Husband's Total Drive to Get Ahead</u>			
Sacrifice health, family, and friends to get ahead	0.05	-0.21	-0.18
Sacrifice school standards and permanent job	0.13	-0.27	-0.15
Sacrifice standard of living for desire to get ahead	0.01	-0.37	-0.27
<u>Wife's Total Drive to Get Ahead</u>			
Sacrifice relatives and ideological values	0.02	-0.03	-0.12
Sacrifice immediate family and friends	-0.04	0.27	0.02

number of children alive, additional children desired, and ideal number of children considered).

TABLE XII
CORRELATIONS BETWEEN FERTILITY AND SEVERAL INDEPENDENT
VARIABLES CONSIDERED FOR HUSBAND ONLY

	Number of Children Alive	Additional Children Desired	Ideal Number of Children
Husband's Level of Status Satisfaction	0.06	-0.17	-0.10
Commitment to Work	-0.16	0.13	-0.10
Work for money	-0.15	0.14	-0.16
Work for leisure	-0.06	0.03	0.05
Husband's Importance of Getting Ahead	0.03	-0.17	-0.37 α .008
Emphasis on individual hard work	0.07	-0.24	-0.43 α .001
Emphasis on material aspect of life and manliness	-0.06	0.06	-0.07

Religion

The hypothesis stated that: Highly religious and highly traditional individuals are likely to favor large families and are likely to have large families.

Three factors were examined: total religiosity, commitment to religious values, and home religious orientation. The findings with regard to these factors are discussed.

Total religiosity is found to associate in the expected direction, except for wanting additional children which is negative ($r = -0.03$). (See Table X.) All these associations, however, are very low and statistically insignificant. Home religious orientation, on the other hand, shows a significant positive association between the extent of religious practice at home and fertility ($r = 0.39$, $p < 0.05$). Additional children and ideal number of children are associated inversely with home religious orientation; however, not statistically significant ($r = -0.18$ and $r = -0.12$, respectively). (See Table X.) Commitment to religious values is found to associate in the expected positive direction, but there are no significant findings.

Generally, home religious orientation seems to be the one important variable that associated statistically significant in a way with fertility. It gives much stronger indication of religiosity than just commitment to traditional values. Tradition and religion in Islam is one and the same thing. However, in this sample the individual who tries to observe his religious duties at home is considered a religious person. Therefore, home religious orientation is considered a better measure of religiosity. The word commitment to religious values seems obscure; it can include many facets of life. Statically, the data seem to support the hypothesis which stated that total religiosity, as indicated with home religious orientation, is positively associated with family size.

In reality, what appears from the interviews with the wives who have large family size is the following: Those wives tended to be

family oriented. They also considered being a housewife and a mother as their full-time job or as in several cases where the wife had no other extra-familial job outside the house. It seems that high fertility is perpetuated by the familistic orientation rather than strictly religion. The common understanding to all Moslems is that with God's will, as well as the individual's will, the fertility decision is made. With this idea in mind, regardless if the individual is having many children or using contraceptives to prevent pregnancy, the underlying idea is the same-- God's will is revealed. Familism seems to be much more related to fertility and, if one could do this study over again, familistic phenomena would be the one variable that has to be treated with a great deal of attention. This phenomena seems to be a very significant intervening variable that accounts for the high fertility. Familism can be defined as the ties with the old traditional values which prevail: (1) the need for children to carry the father's name, and (2) to the mother, children are highly commended. they are a sign of her own personal validation and contribution to the family.

Wives who have no extra familial activities outside their household (employed outside the home) were the ones who took the mother role very seriously. One of the respondents seemed to express this idea which prevailed among several: "It sounds very great when people [meaning family and friends] say she is the mother of this one and the mother of that one, etc." There is a kind of life style that guarantees the basic familial prestige and the honor among other families in the community.

If birth control is considered by wives with large family size, the tendency is toward the use of natural contraceptives (e.g., using the numbering technique or other traditional techniques). They also

tended to have longer marriage duration and less education than the rest of the sample. It seems that wives are provided with a role which emphasizes her reproductive potential. This, in fact, becomes the major source of her social reward and recognition in the community. Religion is sometimes used to justify many children and also to justify having few children. Religion is also used to justify good fortune and success in life. This is the feeling that is conveyed by the people in this study. What the researcher is trying to show is the following: While there is a particular measure of religiosity that seems to have a statistically significant association with the number of children, one needs to explore other factors that may have some bearing on the fertility pattern among less educated wives. See Appendix D with regard to the Islamic view toward family planning.

The next section deals with the socio-economic variables and their association with fertility. The socio-economic factors seem to bear much more on the difference that appears in actual family size, the additional number of children desired, and the ideal number of children considered.

Socio-Economic Status

The hypothesis stated that: A high level of security in the area of social and economic status is associated positively with the desire for large families.

The dimension of socio-economic status has been emphasized in the studies of fertility differentials. The inverse relationship between measures of socio-economic status and fertility was frequently viewed

with alarm in the United States because of what it implied for long term decline and the quality of the population. There was a partial reversal in the pattern of fertility, with the greatest change among the highly educated and financially well-to-do segment of the United States.

Based on what has been found with regard to fertility differentials and socio-economic status, it is relevant to study this relationship. In general, it is expected to find individuals ranked high on the socio-economic scale to be associated with favorable desire for large family size. It is also expected to see individuals who ranked high on this scale to be successful planners in general and family planning in particular. Planning success and contraceptive use are expected to vary by social class. Ineffective planning is viewed as a characteristic of the lower socio-economic segment of the population. This indicates that a high level of security of socio-economic status is associated with the desire for a large number of children.

Economic Status

The hypothesis stated that a high level of income (based on subjective measures) security is associated positively with the desire for large family size.

The economic dimension of socio-economic status includes several other factors that contribute to it and in turn influence fertility (for example, the occupational situation as well as type of occupation for the husband and the wife). In addition to that, an indices of "feeling of economic security" was used. This indices has been intended for the evaluation of the couple's financial condition. Data on type of house the couple lived in (see Appendix B or C), whether the person owned or

rented, and the value of the house if owned contribute to both the economic status and the social status of the individuals. These measures used since data on the present income was collected.

Occupation. The hypothesis stated that a high level of occupational security is associated positively with the large family size.

All of the husbands in the sample were employed. Only 25 percent of the wives were unemployed; the rest of the wives had full-time jobs except for six percent who were students and two percent in private business (these were wives who were able to manage the time to go to school or to attend to their private business).

The data regarding wives indicates a significant negative association between occupation and number of children ($r = -0.37$, $p < 0.05$). (See Table XI.) The additional number of children desired was negatively associated; however, the association failed to achieve statistical significance. The same thing can be expressed with regard to ideal number of children considered by the couples. The husband's occupation, on the other hand, did associate in the same way as the wife's occupation. The number of children and the number of children they considered ideal was positively associated, but not in any statistically significant way ($r = 0.03$, $r = 0.06$, respectively). Although the desire for additional children is associated with the type occupation of the husband in the negative direction ($r = -0.14$), the association failed to be statistically significant.

What seemed to be happening is that the wife took the matter of having children very seriously, especially if she is contributing a great deal to the family income. Another point must be noted--many of

these wives do not have to work, their husbands are making enough money that they can stay home and have children if they want to. However, when asked the question of why did they need to work, the common response is that they worked hard in school to reach this position and they are not about to stay home just to have the child! One person in particular said, "I enjoy what I am doing. I like going out everyday in the morning and seeing my colleagues and friends and comparing notes with them." (She was referring to interior decorating as she was furnishing her newly built, lavishly furnished house.)

The husbands, on the other hand, seem to express an ambiguous feeling toward the subject of fertility. They seem to want the large family but are willing to postpone having the children until the "right time." What seems to be indicated here is the fact of having children being the primary responsibility of the wife and that she must work it out with all her other activities, and the husband is willing to accommodate her. This feature of relationship between husband and wife becomes much more prevalent as you move up the education as the occupational professional level. The data in this study failed to support the hypothesis. What appears is the opposite, it is those females who are ranked in highly secure occupations, and specifically highly specialized professions, who seem to be worried about the number of children they will have and whether or not they can provide adequately for them. As a result, they have smaller families. Findings in this research fail to support the hypothesis with regard to occupation for wives only.

Economic Security. The hypothesis stated that a high level of feeling economically secure is associated positively with having large family

size. "Feeling of economic security" is another dimension of economic status that was examined in this study. Since fertility is viewed in the research in a social-psychological frame of reference, the perceived needs depending on the couple's reference group are thought of as a reasonable measure of economic status. Typical questions ranged over topics such as confidence in being able to meet unexpected expenses to perception of financial future and inclination to worry about bills or debts. The questions included in the "feeling of economic security" scale were intended to measure or evaluate the couple's financial situation. The association between "feeling of economic security" and number of children for the wives is shown to be negative; the same thing is found with regard to ideal number of children, but it is significant ($r = -0.07$, $r = -0.01$, respectively, Table XI). A positive direction is shown for the wives in the case of wanting additional children; however, the finding is very low ($r = 0.08$). The association between the same scale and the subscales and the fertility variables have been inverse in direction except for one--the emphasis on daily economic and the number of children considered ideal by the husbands (Table XI). One association that seems to have a positive direction with some significance is between occupation and feeling of economic security (wives, $r = 0.22$; husbands, $r = 0.32$; $p < 0.05$); also, the daily economic subdimension for the husbands and occupation was significant ($r = 0.28$, $p < 0.05$). Husband's daily economic outlook and occupation are shown to be in the positive direction but not significant ($r = 0.18$).

The pattern indicated by the data shows that as you go up the ladder on the professional scale, one finds couples who feel economically secure in terms of occupation have very few children. One also finds that these

couples are efficient planners and successful users of contraceptive techniques. On the other hand, couples who ranked low in terms of occupation and economic security are the ones who are having the large families. Similar findings were shown in the literature. Westoff, for example, has found that high income couples tend to have fewer offspring than couples of low income. Although data presented in this study support the hypothesis with regard to economic security and number of children, there is an interesting finding with regard to the help available to wives which seems to associate in a statistically significant way with the number of children considered ideal ($r = 0.38$, $p < 0.05$). The following discussion deals with another important dimension of socio-economic status.

Social Status

The hypothesis stated that a high level of feeling socially secure is associated positively with having large family size. The social dimension includes the occupational prestige, the husband's level of status satisfaction. Other variables are examined because they have an overall impact on social status as well as income status. These variables are the extent to which the wife felt she had achieved her life goals, husband's degree of psychological commitment to work, and wife's level of satisfaction with her husband's job. These variables are not considered to belong to the social status dimension because (for example) the husband's high level of commitment is seen as an attitude toward work which values work as a main source of meaning in life. For the wife's level of satisfaction with the husband's job, it is defined in terms of her perception of the steadiness of his work, hours and working

conditions, chance to get ahead, and adequacy of income. Type of house seems to be negatively associated with number of children but not statistically significant. Ownership, on the other hand, is statistically significant with the number of children ($r = -0.3$, $p < 0.05$) also the desire for additional children ($r = -0.45$, $p < 0.05$, Table XI). A common response was that as one wife put it, "I want to prepare myself first. I mean to establish ourselves and pay some of our debts so that we can get what we want and provide an adequate life for our children."

Findings show that when the level of husband's status satisfaction is high, the number of children is found to be in the positive direction ($r = 0.06$). His needs for additional children are negative and what he considers an ideal number of children is low or negative (Table XII). The husband's high commitment to work is associated in the negative direction with number of children and ideal number of children even though his desires for wanting additional children may be present. Working for money is associated similarly. However, when the husband is working for leisure, still the number of children is inversely associated, whereas his desire for additional children and ideal number is shown to be in the positive direction, generally insignificant.

Husband's importance of getting ahead and the subfactors of emphasis on individual hard work and emphasis on material aspect of life and manliness generally associated negatively on most dependent variables (Table XII). The importance of getting ahead and emphasis on individual hard work are associated in a statistically significant way with the ideal number of children considered by the husbands ($r = -0.37$, $p < 0.05$; $r = -0.43$, $p < 0.05$, respectively).

Wife's level of achievement of life goals is shown to be inversely associated with the desire for additional children ($r = -0.36$, $p < 0.05$). Wife's satisfaction with husband's work is indicated to be in the positive direction although statistically insignificant findings.

Findings in this research support the hypothesis which stated: A high level of security in the area of socio-economic status is associated with desires for larger families.

Education. The hypothesis stated that education, particularly female education, is related in a negative manner to the level of fertility. The educational dimension is considered an antecedent factor to many factors such as occupation, social and economic status, also social mobility which will be discussed in the next section.

The average Kuwaiti family within the realm of this research study regarded education as being very important for both males and females and a common response was that

. . . the woman loses all her rights because of her ignorance, it is only by education that a woman is aware of her rights and also by education she makes others around her aware of her rights--have you ever seen somebody who tried to cheat a judge and get away with it? It is just the same with women who are knowledgeable.

The data show that education did negatively associate with the fertility variables. The association is statistically significant and is in the expected direction for the wives ($r = -0.46$, $p < 0.05$, see Table XI). The desire for additional children and the ideal number of children preferred is inversely related to education, although the association is very low (wife's $r = -0.10$, -0.20). With regard to husbands, the association of education to fertility variables is significant, although it is not as strong ($r = -0.27$, $p < 0.05$).

The data at large seem to confirm the hypothesis for the wives and the husbands alike. The weakness of the association with regard to husbands seems to tie up with the findings on occupation. Working wives seem to find it hard to care for the additional children they would like to have. The most common response which was given by wives as a justification for not having the extra child is that they did "not want a stranger [in most cases, a servant] bringing up the child." Three percent of the wives said they wanted one additional child to what they already have, 20 percent said they wanted two additional children (this included all childless wives). Most of the childless wives are married between one and five years, so they are considered at the beginning of the family building process. Most of the wives in the sample have indicated that they must have that first child after marriage. That seems to confirm their motherhood and seemed to satisfy the urge of being a parent and confirm their desire to have children. The next step is then making sure the child gets all the attention he needs and to raise him or her well. These ideas were more prevalent as the level of education and awareness is increased for the wives.

Social Mobility. The hypothesis stated that high aspirations for social mobility will be associated with family size desires. It is expected to see large family size as being incompatible with successful social mobility and, therefore, respondents for whom the latter is important are likely to show a preference for small families. The basic theoretical rationale for the inclusion of socio-economic status in the study of fertility is that different occupations, levels of education, and income imply different patterns of values and life interests,

which, in turn, possess varying degrees of compatibility with smaller or larger families. Many individuals at the same class level have been exposed to a similar environment all their lives, others have been upwardly mobile, and still others downwardly mobile. For some, mobility has been a result of marriage, and for others the product of their own efforts.

The basic hypothesis is expressed frequently in the literature: The socio-economic and psychological requirements for upward mobility are inconsistent with expenditures of time, energy, and money for children. For some persons, the "requirements" may be more exacting than for others. The economic costs of another child may not constitute a handicap toward a certain income level. Another complication is the fact that social mobility as measured in objective categories of income or occupational change may not sufficiently reflect level of aspiration. Perhaps it is that decisions about another child or the effectiveness of contraceptive practices are involved with the attitudinal or perceptual aspect of the level of aspiration of the wife and the husband. This is an aspect that may only be loosely connected to visible changes in circumstances.

Thus, wives and husbands who have moved up the scale rapidly may perceive their situation as not requiring much devotion to the process of moving upward as other couples who may not have moved so fast. And many individuals may be very ambitious and yet be in a job situation where they have either already reached their ceiling of advancement or in which the rewards are assured over the long-term range.

Examined here are only two aspects of social mobility: (1) the drive to get ahead for husbands and wives and (2) the aspiration to send children to college.

An aspect of social mobility is the "drive to get ahead." The hypothesis here indicated that individuals with high drive to get ahead will favor smaller number of children.

There is the importance attached to the perceived rewards of success and the level of drive to get ahead. The hypothesis that fertility is negatively associated with level of aspiration or ambition has been present in the literature for some time. One of the major orientations of the current study has been to test the validity of this hypothesis.

The respondent is presented with the question of the value or importance of getting ahead in life (work is emphasized for husbands) as well as with a list of 13 other values and the wife is asked whether she would be willing to sacrifice some of her values in order to get ahead. The list of items ranges over such values as having to leave friends, having to become more active in community organizations not of her own choice, having to keep quiet about religious views, having her husband in a job with more opportunity but not security, having her husband spend more time at work, and having to send her children to another school not quite as good. A direct question is also asked whether she would be willing to postpone having another child in order to get ahead. A similar index is asked for the husbands which is an eight-item index on the importance of getting ahead.

The logic of the question structure underlying these indices of "drive to get ahead" is that respondents who feel that these other considerations would be more important than "getting ahead" are revealing

lower levels of aspiration than those who would disregard them (Westoff, 1961). The hypotheses to be tested are that individuals who have a high drive to get ahead will want smaller families and will exhibit more successful levels of fertility control than couples whose aspirations are presumably lower. The correlations for wives and husbands, separately, are shown in Tables XI and XII. The association between husband's total drive to get ahead and his sacrifice of standard of living plus leisure time with the desire of additional children is found to be statistically significant in an inverse way ($r = -0.33$, $p < 0.05$; $r = -0.37$, $p < 0.05$, respectively, see Table XI). For the husband, the drive to get ahead and all the sub-dimensions all associated positively with regard to number of children. However, the first and third dependent variables (number of children they have and number of children they considered ideal) associated negatively for wives with regard to their desire to get ahead.

This factor seems to need more investigation and to deal with each individual's drive to get ahead. This factor influences the individuals depending on their social establishment in the community and also the gap between the husband's education and his wife's education. The more years of education for the wife, the more likely they are willing to sacrifice family and friends for the sake of her husband's or her own mobility. The hypothesis is not statistically confirmed.

Wife's aspiration to send children to college is another aspect of social mobility that was examined. The hypothesis stated that high level of aspiration is associated negatively with number of children. Many persons conceive social mobility in terms of the future status of

their children and perceive their own role to be that of maximizing opportunities for their children. Such an attitude may or may not derive from a frustration of the parents' ambitions or that feeling of deprivation which is expressed in the familiar phrase "giving my kids the breaks I never had as a kid." Whatever the background of the attitude, the avenue of mobility for the child is perceived clearly to be education. A college education is rapidly becoming a sine qua non of entry into professional and technical jobs. Thus, the parents' ambition for their children will tend to take the form of concern that their children be able to take advantage of higher education--a concern which may conflict with having additional children.

A fairly common reply encountered in the question of why no more children were desired for women who wanted to stop at two was that they felt they could not adequately meet the "costs of raising more than two or three children." More often than not, this type of reply revealed a concern for the child's need to grow independently and get his/her share of attention from both parents. This might be an acceptable way to rationalize to themselves for not wanting more children.

The association between the wife's aspirations to send children to college is shown to be negative on number of children and additional children desired and positive on ideal number of children, but not statistically significant. Very often the wife's ideal number of children exceeded the actual number she had and the repeated justification was that it is impossible to fulfill the children's needs to secure a better quality of life. Very often this is surprising, since education in Kuwait is provided free to all Kuwaiti citizens. The aspiration of some of the wives may be beyond what is available free in Kuwait. Also,

education can be costly if the family hires private tutors to assure the scholastic achievement of their children.

The findings in this study fail to statistically confirm the mobility hypothesis with regard to aspiration. It would seem like the negative association is present but the number is not large enough to produce a statistical significance.

Age

The hypothesis stated that females married at a young age will have the tendency to have a larger family than those married at an older age.

Once when visiting one of the respondents, a few of her friends dropped by in addition to a couple of her female aunts, agnatic aunts. Instead of the interview that day we just visited with everybody and to the researcher it was just perfect. The investigator was introduced to all of these five people and the two aunts. Some how we got to talking about the advantage of marriage at an older age (three of the friends were college students, the others were teachers). One of the aunts did not like how the discussion was progressing and said:

Young people today are very fragile, they worry about things that are not worth worrying about. . . . The problem is that women today are older when they get married and less patient with children. I guess they want the easy life, they too are pampered.

The traditional Muslim culture is characterized by a traditionally sanctioned institutional structure noted for its strong familism. The criterion of pride and familial prestige depends largely, if not exclusively, upon conformity to behavioral norms that are conceived as having to do with family honor. The older individuals in the family see the younger generation male, as well as the female, going to schools

and particularly the female as having much more freedom than what they had available to them. The freedom here is with respect to opportunities open to all Kuwaiti females today, which is education and employment and the confidence given to her by her family. It seems that family prestige is slowly being achieved through what the various family members acquire in terms of education and how well they become modernized in their homes and in their attitude toward their young children. Personal achievement is the mode of life.

The sample used is very small and cannot be tested to produce statistical significance; however, the three women who have completed their family size and no longer bear children were married at a very young age and have over nine children as compared to two other people in the same sample who were over the age of 30 and had only one child. This seems to be in line with the hypothesis, also based on the findings of the association of education and fertility. Age certainly has an impact upon fertility.

Family

The hypothesis stated that individuals with high marital satisfaction and high degree of liking children is related positively to the number of children.

Several questions are asked about the nature of help available to the wife (help from the husband, from other family members, and/or regular domestic help) with regard to the care of children and household chores. In addition to these questions, there were questions about the number of brothers and sisters of both husband and wife, plus questions about marital adjustment and the dominance pattern within the family.

The size of the family is partly determined by the social relations within the family. The attitude structure may affect the number of children desired and may affect the efficiency of planning and the use of contraceptives.

Marital Adjustment. Ultimate size of family and marital adjustment are associated. Certainly the rejection of the hypothesis of no association between fertility and marital adjustment has been sufficiently frequent to justify this assertion. It is also true that observed associations have all been of small magnitudes. Equally plausible reasons have been given for the expectation of negative or positive correlations. On the one hand, wives who are satisfied with their marriage are more willing to take on the responsibilities and duties that motherhood entails or, on the other hand, children (especially unplanned children), not only create new burdens but upset adult routines, deprive the wife of desired leisure time, and curtail economic and social opportunities.

The observed correlations in this research failed to support statistically the hypothesis of the direct causal link between adjustment to marriage and the number of children desired. There is an extremely small correlation ($r = 0.13$ for number of children) between the adjustment variables and the fertility variables; and a negative association exists with regard to additional children desired ($r = -0.28$). (See Table XI.)

Husbands'-Wives' Dominance Pattern. Family structure of relations vary a great deal. There are those who are characterized by egalitarian patterns of husband-wife decision-making which obscure the traditional

delineations of sex roles within the family. The working mother and the domesticated father are variations of parental roles that are not, at least theoretically, associated with the male dominant family type. The expectation that such crossing of traditional sex roles is to be found among families with equalitarian patterns of husband-wife decision-making and is based on the prior assumption that extensive communication between spouses is most likely to be found in the equalitarian household and is a prerequisite if role alternatives are to be successfully explored.

Through this medium of extensive communication, the equalitarian mode of decision-making is presumed to associate with a greater activity of extrafamilial type for wives, a greater involvement of husbands in domestic chores, greater success in fertility planning, and lower fertility desires. This follows from the assumption that the exploration of other role possibilities implies values competitive with high fertility.

The theme that is developed here is related to the theory that causally relates male-dominant family systems to high fertility. The authority of the male, the low status of the female, the separation of the male from involvement with child-bearing routines, the importance to the male of demonstrating virility in terms of numbers of male offspring as well as the assumed economic value of male children, are the elements of the patriarchal system that are thought to be the causal social antecedents of high fertility. The absence of fertility planning and the rigidity of marital roles are also characteristic of such societies. The association between dominance patterns and wife's occupation is in a negative direction ($r = -0.01$) which means that the more highly ranked occupation, professionally, the tendency is toward

inequality rather than the equality in the authority pattern. The association between the dominance pattern and husband's occupation is very significant ($r = 0.28$, $p < 0.05$). This refers to equalitarian authority pattern, is associated with high occupations, and also with income and education which is implied in this study. Another very significant finding indicated a positive association between the pattern of help and husband's occupation ($r = 0.47$, $p < 0.05$). These findings seem to be in support of sociological theory with this regard.

The equalitarian household, in contrast to the patriarchal household, has as its basis of control a sharing of decision-making between husbands and wives in many important areas of family structure (Mather, 1935; Wilkening, 1958). Authority in the patriarch is institutionalized and, by definition, is largely vested in the authority of the male.

Findings seem to support the hypothesis which refers to higher degree of equality in the structure of authority patterns among husbands and wives as their educational and occupational level is high. There is a greater degree of communication.

The traditional family is nuclear with many children. The main reason for the change from traditional extended family is that young families are much more mobile with regard to their jobs in the city or in other areas. The family is patriarchal; however, the tendency is more equalitarian among the upper classes and the educated. Children are especially welcomed in the family. Many mothers wean their children at the age of two years. Marriage age among the limited income families ranges between 13 or 14 to about 18 years. In middle- and upper-income families, the age at marriage ranges between 20 and 26 years.

The next comments are from different respondents which indicate that the differences in the life styles are resulting from socio-economic factors and education seems to have a great impact. The question that was posed was inquiring about the use of contraceptives, what kind and why the decision was made to use one over the other, and also what are the reasons for using the contraceptive in the first place.

If birth control is used, it is only because I want to have time to rear my young child. Don't get the idea that I use it because I don't want the child--you can look at it this way, it is that I use the pill because I love my children, and I want to give them all of it possible.

This is a response which was received from a woman whose life was around her family, no other job or school to worry about. The contrast is much wider especially if the woman is a student or employed. Having the plans are much more precise, with a greater degree of accuracy in the efficiency of contraceptive use. One lady expressed brilliantly:

I will use the loop under any condition because its probability of success is only 70% and knowing how my luck always runs the contrast is much especially if the wife has spent long years of difficult education and who is employed as an engineer. She has much more difficult and precise plans about how many children she would like to have and when to have them.

One lady engineer expressed this very accurately when asked why she used the pill when other techniques were available:

I will not ever use for example the loop because I inquired about that--its success probability is only about 70%, and knowing how my luck runs, I know that I will end up one of those unfortunate 30%. Now you know that it is much more safer.

Abortion is against the religion. The researcher was told that unless pregnancy poses a major threat to the mother's life, abortion is not performed. The cause of abortion differs among the people. A woman

is thought to have an abortion if she lifts a heavy weight, or affected by a supernatural power like the will of God, or the evil eye. Spirits cause abortion as well as sterility, death of the children, or the delay of childbirth for several years. One lady the researcher asked very cautiously about any induced abortion became a little suspicious and gave a long discussion about the immorality of induced abortion, it was "Haram" (morally wrong). This was also indicated by Sebai's (1974) findings in Saudia Arabia.

The reply as to the cause of abortion from a person of higher socio-economic status was that the will of God was still there but they still needed medical attention.

Summary

This chapter has attempted to discuss the major findings in the present research. The evaluation of the hypotheses for this research indicated that all predicted relationships between the variables were supported except for few.

In the test of the first hypothesis, the relationship between religion and fertility is confirmed statistically. It shows a general tendency for positive direction with those who have home religious orientation. The test of the socio-economic hypothesis is confirmed statistically. The test of the education hypothesis is negatively related to fertility and, therefore, was confirmed. The hypothesis was confirmed statistically. The family variables seem to be related, however, to fertility variables. The dominance pattern seems to produce statistical significance between occupational prestige and the authority

between husbands and wives but not fertility. See Table XIII for a summary of hypotheses.

TABLE XIII

RESULTS OF HYPOTHESES, SUB-HYPOTHESES, AND THEIR ASSOCIATION TO FERTILITY

	H ₁	H ₂		H ₄		H ₃		Rigidity of Roles Within Families as Perceived by Wives*
	Wife's Religiosity	Wife's Socio- Economic Status	Husband's Socio- Economic Status	Wife's Aspiration for Social Mobility	Husband's Aspiration for Social Mobility	Wife's Education	Husband's Education	
Total religiosity	+++							
Home religious orientation	+++							
Commitment	+++							
Wife's occupation		—						
Husband's occupation			+++					
Wife's economic security		+++						
Husband's economic security			+++					
Type of house		+++						
Ownership of house		— +						
Value of house		+++						
Importance of getting ahead			++ -					
Education		- ++	- ++			- ++	- ++	
Total drive to get ahead				+++	+ -			
Husband's sacrifice of health, family and friends					+ -			
Husband's sacrifice of school standards and permanent job					+ -			
Husband's sacrifice of living standards					+ -			
Wife's marital adjustment								+++
Wife's liking of children								+++
Dominance pattern perceived by wives								+++
Pattern of help avail- able to wives								+++

*Number of children, additional children desired, and number of children considered ideal respectively shown by - or + sign; + refers to acceptance of hypothesis, - refers to rejection of hypothesis.

CHAPTER VI

SUMMARY AND CONCLUSION

Literature dealing with social-psychological factors and their influences upon fertility have been provided in the past four decades. The literature has indicated that some individuals tend to delay marriage and/or postpone having children to achieve their career goals. This research attempted to identify the impact of social milieu as well as personal factors with regard to fertility.

In addition, the utility model presented in Chapter III is a framework in which it is used to conceptualize the range of alternatives and the competing variables for individual females. Also, the model gives a conceptual framework of the various factors that affect fertility in the sense provided by Davis and Blake (1956).

Research Procedure

In order to test the theoretical model, data were collected through an interview schedule which was conducted with a sample of 50 Kuwaiti couples. The sample was selected on a "snow ball" basis (i.e., a number of people agreed to be interviewed, then they were asked to guide the researcher to other couples they knew who in turn supplied the names of others). The purpose of the interview was to collect data relating to a variety of social and psychological factors utilizing scales from Westoff et al. (1961) to examine fertility preferences and the extent of family

planning. This data were collected by inquiring about the following: (1) the number of children the wives already have, (2) how many more children they would like to have, (3) what is the number of children they consider ideal. Westoff's socio-psychological scales were used with the intention of finding out how these factors interact with fertility variables discussed above and whether there is similarities in the pattern formed in the Kuwaiti sample and patterns found by Westoff and others in the literature review. The attempt here was directed toward exploring the various explanations with regard to the fertility decision-making process.

The data were examined by utilizing factor analysis and Pearson's correlation to establish statistical association. Qualitative analysis was also introduced in addition to quantitative application.

Hypotheses

There are six main hypotheses that were examined in Chapter III. Some of these hypotheses are compound ones (i.e., they consist of several ideas put into one). The presentation of these hypotheses here is the same as they were examined and they are also presented in the same order as shown in Chapter V.

Generally speaking, a quick look at the tabular results of the hypotheses indicates several important issues (Table XIII). One of the issues which is apparent is that it shows a gap between actual fertility and preferences with regard to husband's aspiration for social mobility. Had the unit of analysis been the couple, this might have been different results. Also, if husbands were compared to their wives, this might

have shed some light on the effects of the gap in terms of educational level and occupational skills.

Another issue that is quite apparent is the difference in the association of occupation with all the fertility factors. Employed wives tend to favor fewer children, whereas husbands tend to think the other way around. This ties up nicely with the traditional thought which maintains that fertility is usually in most cases the woman's responsibility. If the wife is extra ambitious with respect to activities outside the home, she must manage it within the framework provided to her traditional sex role. The following is a short discussion of each hypothesis:

H₁: Highly religious and highly traditional individuals are likely to favor large families and are likely to have large families.

(Accepted.)

H₂: A high level of security in the area of socio-economic status is associated with the desire for larger families. The direction of the association is positive.

a. Economic status (includes subjective measures) which consists of:

1. Husband's occupation. (Accepted.)
2. Wife's occupation. (Rejected.)
3. Husband's "feeling of economic security," emphasis on both daily economic and outlook. (Accepted.)
4. Wife's "feeling of economic security." (Accepted.)
5. Type of house. (Accepted.)
6. Ownership of house. (Rejected.)
7. Value of house. (Accepted.)

- b. Social status--includes education, occupational prestige, husband's level of status satisfaction, the extent to which the wife felt she had achieved her life goals, husband's degree of psychological commitment to work, and wife's level of satisfaction with her husband's job. The hypothesis is accepted for the wives and the husband, except the husband's importance of getting ahead and emphasis on individual work. Both of these factors are statistically significant with regard to the number of children the husbands considered ideal. Therefore, the hypothesis is rejected for both of these factors with regard to ideal number of children.

H₃: Education, particularly female education, is related in a negative manner to the level of fertility. (Accepted.)

H₄: High aspirations for social mobility will be associated with smaller family-size desires. The author expected to see large families as being incompatible with successful social mobility and, therefore, respondents for whom the latter is important are likely to show a preference for small families. This hypothesis includes a test of a set of items relating to the husbands' and wife's "drive to get ahead." The test included the following:

- a. Husband's total drive to get ahead. This hypothesis is accepted for all fertility factors.
- b. Husband's sacrifice of health, family, and friends--accepted with regard to number of children alive.
- c. Husband's sacrifice of school standards and permanent job--accepted with regard to number of children alive.

- d. Husband's sacrifice of standards--accepted with regard to number of children alive.

With regard to the wives, the hypothesis is accepted for total drive to get ahead, sacrifice of relatives, ideological values, sacrifice of family and friends.

H₅: Females married at a young age will have the tendency to have a larger family than those married at an older age. This hypothesis can neither be accepted nor rejected because it needs much further examination. Data available were not enough for statistical analysis. However, indications appear to show that there are some associations with the age factor.

H₆: The rigidity of roles within a family are associated with fertility. The pattern of that association is positive. This hypothesis was tested by utilizing the following:

- a. The wife's marital adjustment. The hypothesis is found to associate positively and is accepted.
- b. Wife's liking of children. The tendency is also toward a positive relationship. (Accepted.)
- c. Dominance pattern within the family as perceived by the wife. The association tended to be negative in all fertility variables; however, also of no statistical significance. The hypothesis, therefore, is accepted.
- d. The pattern of help (from the husband or provided by domestic help) available to wives. The tendency here is positive with very high significant positive relationship between pattern of help available to wives and the ideal number of children they considered. Therefore, the hypothesis here is accepted.

Findings

Findings in this study suggest that religiosity (Hypothesis 1), tested by home religious orientation of wives, does associate with large number of children. The statistical findings in this research seem to give support to the religion hypothesis. However, based on interviews, wives who tended to have a large number of children were also the ones who scored very low in terms of formal educational level. They also tended to be strictly housewives and mothers (i.e., restricted to familial activities only). The sample examined all devout Moslems and what seems to be a differentiating factor with respect to fertility is socio-economic factors and education (i.e., formal education).

Westoff (1961) and his research colleagues have found a direct association with regard to fertility and number of children desired among Catholics in the United States. Religious education, they suggest, exerts a strong influence both on the number of children desired as well as the success of fertility planning among the Catholics. Catholics educated in secular schools and colleges behave more like Protestants in their fertility behavior than they do like Catholics with religious education. More recent findings, however, show that the Protestant-Catholic fertility gap is lessening as Catholics become more similar to Protestants (Traina, 1974; Westoff and Jones, 1977). This may also mean that Catholics in the United States are coming closer in terms of socio-economic status to Protestants.

With respect to the second hypothesis, it is suggested that individual husbands who feel secure in terms of socio-economic status seem to favor a large number of children. Sometimes, however, they may feel indifferent or in a compromising position when the wife is pursuing a

career outside the house. Wives, on the other hand, differed with respect to differences of education and occupational prestige and skill. Generally speaking, employed wives are found to be much more efficient in terms of general planning and fertility planning. Also, they are more concerned with trying to insure a compatible life style for themselves and their family.

Slight associations between socio-economic status and measures of fertility were reported by Westoff et al. (1961). They interpreted small, unsystematic economic differences as further evidence of the narrowing of the traditional differences (i.e., the increased fertility of higher economic status and the declining fertility of lower classes). Similar findings were reported by Freedman (1963), Whelpton and Kiser (1943, 1944, 1945, 1946, 1947, 1948), and Campbell (1967).

The third hypothesis (education) is found to be negatively associated with fertility for the husbands and much more stronger negative associations for the wives. Westoff et al. (1961) found a low positive correlation with regard to fertility planning success only for the Protestants and Jews and inverse relationship for the Catholics. Family size preference for the Westoff et al. findings were positive for Jews and Catholics. This finding prompted Westoff and his research colleagues to conduct an analysis of church related education. Their analysis showed that Catholics with the highest education and the most education in religious schools exhibit the least tendency to plan fertility and express desires for an average of more than five children. These relationships were examined for the Catholics whose education was secular; the same types of associations exist as they do among non-Catholics (Westoff et al., 1961). The findings in this study with respect to educational

influence on fertility are also supported by many other Middle Eastern researcher's findings (Yaukey, 1961; Protho, 1974; Behar, 1975; Hill, 1978; Mynitti, 1978).

The fourth hypothesis (high aspirations for social mobility) is found to have a negative association with respect to fertility, especially if they have to sacrifice the children's school standards and the general living standards. A consistently negative association between mobility and fertility was reported by Westoff et al. (1961).

Hypothesis 5 (age at marriage) seems to indicate that females married young have a larger number of children. This hypothesis cannot be examined due to the fact that the number of females who can be considered as ones who completed their family size is extremely small. Therefore, this hypothesis was not statistically tested. The findings in the literature indicate that age at marriage has a very important influence with regard to fertility (Davis and Blake, 1955, 1956; Petersen, 1960; Westoff et al., 1961; Rindfuss and Bumpass, 1980).

With respect to hypothesis 6, the rigidity of roles, as it is examined by wife's marital adjustment and her perceived pattern of dominance, are found to associate positively with the large family size. Other familial factors that are tested include "liking for children" and "the pattern of help available to wives." Wives who indicated a high degree of enjoyment being around or with children are found to associate favorably with large family size, as well as large number of children they considered ideal. Other research findings have failed to uncover substantive important correlations between fertility variables and the nature of social relationships within the family. Social and personal orientations of wives and husbands toward their marriage and children does

affect fertility. However, the measured variables were found to have minor association (Westoff et al., 1961).

Conclusions

Many noted authors have written about the Arabs (Dickson, 1959; Goode, 1963; Berger, 1964; Kirk, 1967). Scholars have been largely concerned with the reflective ideas of the philosophers, theologians, and moralists and very little with what went on in the minds of the individuals. To use such writings alone as a means of understanding the influence of religion on various sectors of life would be invalid, since the teachings of the theologians finally filter through to the level of the individual after much "diffraction and diffusion." El-Hamamsey (1972) contends that the concepts of "little traditions" and "great traditions" which Redfield (1958) uses to describe the relationship between peasant children and that of the larger society of which it is a subordinate part is useful in describing the relationship between Islamic theology and the ordinary individual's belief systems. According to Redfield:

In a civilization there is a great tradition of the reflective few, and there is a little tradition of the largely unreflective many. The great tradition is cultivated in schools or temples; the little tradition works itself out and keeps itself going in the lives of the unlettered in their village communities. The tradition of the philosopher, theologian, and literary man is a tradition consciously cultivated and handed down; that of the little people is for the most part taken for granted and not submitted to much scrutiny or considered refinement and improvement (p. 70).

In accordance with this concept, then, the relationship between Moslem's religious beliefs and population planning needs to be studied, not only through an analysis of Islamic theology and doctrine, but also through an investigation of the living religion and "the little tradition," particularly those aspects of it that relate to the procreational behavior of individuals and families.

El-Hamamsy indicates that Islam must be viewed (as any religious system must be viewed) as a religion that interacts with, affects, and is affected by the conditions and circumstances of the life of a group. A "fatalistic," family-oriented person who prays and fasts and has absolute faith in God as the creator and provider of all things is a Moslem. So is an ambitious professional urbanite who also prays and fasts and has absolute faith in God. They may have very different world views and different interpretations of Islamic belief, but they both conceive themselves among the faithful.

What a specific Moslem society consciously or unconsciously selects to emphasize and interpret from the various possible strands of Islamic doctrine and thought depends largely on the life circumstances of the societal members. The selected strands, once incorporated into the total fabric of belief, will reinforce and give powerful sanction to individual behavior patterns compatible with them (El-Hamamsy, 1970).

The primary sources upon which any interpretation of Islamic law is based are Koran and the Hadith, or prophetic tradition. When no definite directive exists in either the Koran or Hadith, Islamic jurists have had recourse to Ijtihad, which is the exercise of the faculty of reason for the formulating of an opinion. Clearly, the use of Ijtihad opens the way for a number of interpretations. Madkour (1965) made a thorough survey of Islamic pronouncements on the subject of family planning and the practices of birth and arrives at the following conclusion:

There has been no Koranic text or definitive statement in the Hadith that constitutes proof or evidence (on which to base a precise opinion). There have been only individual reports which were somewhat contradictory and the scholars have come out with different opinions (p. 26).

He affirms that the majority of the Moslem jurists have declared the use of contraceptives to be lawful, and only a few scholars have come out

against it. All four orthodox schools of Islamic law have allowed the practice of coitus interruptus, the method of contraception known to them. For example, the Maliki and Hambali schools have stated that the consent of the wife is a basic condition for such practice. More recently, the muftis of different nations have made official pronouncements (or "fatwas") on the subject of birth control. The fatwas express differing opinions; some are unqualified in their support of family planning, others are conditionally so. One main condition by most is the need for consent of the wife. Another condition advanced by the Mufti of Malaysia is that contraception merely for the sake of preserving the beauty of the figure, or as a means of escape from the responsibility of bringing up children, is unanimously judged to be "haram" or forbidden. Most Muftis oppose sterilization, but those who discuss abortion state that it is permissible up to four months of pregnancy, on the grounds that the fetus is not a human being with a soul until then. The Egyptian fatwa declared that abortion is allowed only if the life of the mother is in danger.

A study of the opinion given by the Grand Mufti of Jordan, reported in the population council's collection of materials relating to Muslem attitude and family planning, is revealing in that it shows the kind of reasoning and the indirect evidence used to reach a conclusion favorable to family planning. The fatwa emphasizes that the general viewpoint of Islamic law is that the law must accommodate itself to nature and human conditions. The argument for family planning starts with the postulate that one of the natural things inherent in human beings is marriage, the purpose of which is procreation and perpetuation of the species. The fatwa presents the supporting evidence from the Koran in the following terms: God says, "God, too, has given you wives from among yourselves and has given you sons and grandsons from your wives, and supplied you with

good things" (Al-Qalgili, 1967, p. 3). Marriage has been one of the Islamic religious ways and procreation one of its desirable aims. Even the law giver views multiplicity with favor for it implies power, influence and vulnerability. This is why in one of the traditions of the prophet, marriage with an affectionate prolific woman is urged. The tradition says: "Marry the affectionate prolific woman, for I shall be proud of you among the nations" (Al-Qalgili, 1967, p. 3).

But the Grand Mufti argues further, God made marriage conditional upon the ability of the man to provide adequately for the children. "And let those who do not find a match," says the Koran, "live in continence until God makes them free from want out of his bounty" (Al-Qalgili, 1967, p. 3). He goes on to quote the Hadith: "O young men, whoever of you is capable financially let him marry, and whoever is not capable let him fast, for fasting dispels desire" (p. 3). Then the Mufti concludes:

The definite influence is that 'restriction of procreation' is legal a fortiori, because to stop procreation altogether is more than to limit it. It is a cause for much wonder that those who urge celibacy should at the same time hesitate to allow family planning (Al-Qalgili, 1967, p. 3).

The Mufti also refers to the traditions that contain references to the practice of coitus interruptus during the lifetime of the prophet, which he knew of and did not prohibit. One of the incidents most often referred to from the tradition, in support of birth control, is the following:

A man said to the prophet: 'I hate a young wife, I hate that she be pregnant, and I want what men want; but it is claimed that coitus interruptus is a minor infanticide.' The prophet replied: 'No, if God wishes to create the child, you will not be able to divert Him from that' (Al-Qalgili, 1967, p. 4).

Although this last statement seems to be a reaffirmation of the supremacy of God's will, it is interpreted to mean that a human being should not entertain the fear that by using coitus interruptus he would be

thwarting God's will. If coitus interruptus prevents the birth of a child to be born, it is only because God also wills it so, and if God wishes a child to be born it will be born. The Grand Mufti concludes with the statement: "Accordingly we hereby give our judgement with confidence in favor of family planning" (Al-Qalgili, 1967, p. 5).

Since Moslem theologians have pronounced it lawful, with or without conditions, for a Moslem to practice birth control, what impact are these pronouncements expected to have? First of all, a fatwa, or a respected Moslem opinion, naturally has much influence among the more reflective and pious Moslem's; that is, among those who need to reconcile their behavior more consciously with what is acceptable to Islam. Even though a Moslem does not have to accept the opinion of the Mufti and is entitled to his own interpretation of the true belief, an official fatwa does give special weight and authority to the particular point of view it endorses. When a fatwa seems to express a liberal interpretation of a question, it usually means that educated public is already aligned with this interpretation. For a national family planning program, the issuance of a fatwa giving religious support and sanction to birth control is very important. A government or a private group would have real difficulty in a Moslem country if they decided to establish a family planning program in direct opposition to a fatwa categorically condemning the use of contraception.

Social scientists are increasingly aware that their contributions to understanding of fertility and family planning in developing countries during the past 15 years have been much too limited. Hauser (1973), for example, indicated that

. . . there as yet have been no fertility studies or programmes designed to restrict fertility . . . which have

employed a comprehensive sociological approach. On the contrary, most fertility investigations of family planning programmes in general, while they have made use of some elements of sociological theory and methods, have lacked an holistic attack either on problems of research or problems of family planning (p. 306).

Rather than concentrating almost all attention on knowledge, attitudes, and behavior in regard to fertility, the family context (in which decisions are made) is closely considered. The institutional family is in the midst of currents of social change and is faced with new problems to solve and with new options for problem-solving. It is among these families that traditional fertility patterns are changing. Because behavioral change is a complex affair, it is impossible to pick out any one variable (such as fertility) for sociological study or, in the case of family planning, for behavioral modifications. One must clearly bear in mind the interrelated changes in numerous aspects of behavior that accompany change in an area such as fertility behavior. It is only through a holistic approach to social change that one can play the role in both elucidating the determinants and effects of change. This section attempts to discuss one factor accompanied by social change which contributes a great deal to behavioral modification--formal education.

Change and the Educational Institution

The education of members in the society is very crucial. In the research, education is considered the one factor antecedent to all other factors--the basis is the socio-economic status variable. Education, especially in developing countries, is a contributing factor toward change or the modification of attitudes toward many aspects of life. One major change which presently is in process in developing countries, such as Kuwait, is the education of the mass population. This

phenomena was experienced by developed countries such as in the United States in the early part of the century. The traditional family is similar for the developed and developing countries in many respects. For example, the traditional family was a product of village life, a subsistence economy and a provincial outlook. Marriage was subjected to rigid community or familial controls. Families selected marriage partners for their offspring on the basis of economic concerns and in the interest of strict social control over individual behavior. Romance was considered relatively unimportant, children were valued, and privacy for intimate relations was virtually impossible due to extended structural type of family (Shorter, 1977).

The advent of industrialization required societal members to take upon itself the education of the masses. Soon jobs attracted many young people to the cities or to urban centers. Two major changes faced the large traditional family. The first major change has happened in the realm of education. In a modernizing society, education has been moved from family responsibility to society's responsibility. This one particular change is major because the transfer of formal education of children from family society. One of the most fundamental functions of education by the family was solidarity. In other words, children were taught to be loyal. The family was the focus of the whole education. In addition to that was learning how to read and write in order to be able to practice as well as to be knowledgeable of one's own religion. It is this type of socialization that contributes considerably to the gap in terms of fertility between traditional family and a modern family. Instead, the modern family of today is charged with the responsibility of procreation and primary socialization. Then, at the age of three or six, children

are sent to public school where they can learn various skills in preparation for an independent life in an industrial, highly complex modern society. Durkheim (1956) has pointed out that the humans are born selfish, egotistic, and asocial. Now, instead of the family, the society takes upon itself the responsibility of socializing its newcomers to be loyal citizens of the state and dutiful to things beyond themselves. Taking for granted that each society has central, agreed-upon values and beliefs, Durkheim (1961) argued that the chief function of schools is moral education. A child who has internalized societal (rather than family) values has a powerful system of self control--an internal police force. In traditional societies and traditional families, Durkheim argued that the family performed the function of instilling this moral conscience. With the rise of urbanized industry, the building of the moral fiber is done by the society. Therefore, the individual (male and female) feels more obligations and loyalty toward the betterment of his society. This is created by the efficient planning of one's own life in terms of need to achieve the ultimate goals of their ambition whatever they may be.

In a developing society, we find the change much more apparent for the females than males. Females, after all, are the ones who dramatically encounter the societal change by entering the field traditionally considered only for males. The formal education of the female, unlike traditional family education, opens the door for many alternative extra and non-familial roles. These changes lead to the establishment of the form of family authority structure in which power and decision-making are shared equally between spouses--egalitarian authority structure. This type of authority structure may be syncretic, in which all decision

making is shared, or autonomic, in which each spouse has separate spheres of decision making. The new type of socialization of the young (formal education rather than traditional family education) is a major factor contributing to fertility differences.

The second major change has been in the realm of family economy. The modernizing society provides jobs for everybody. Therefore, members of society become more specialized and no longer depend on the family. This leads to the segmentation of extended family structure and smaller nuclear family units become the prevalent pattern. This change leads to weighing the decision made by husband and wife toward many things (including having children) in terms of family resources (costs and benefits for wife and husband). Although the concept of resources need not refer only to income and wealth, there are also the scarce resources of time, energy, and ability to assess logically varying ends and realizing a solution through the implementation of the most appropriate means. People run out of these resources at some point in time. What is empirically interesting is the threshold on each and its implications for the choice people make.

In one of his well known essays, Parsons (1959) analyzed the classroom and argued that the two major functions of the school are socialization and occupational selection. Since schools reward children on the basis of achievement, he argued, they are uniquely suited to the task of sifting and sorting individuals according to the physical and intellectual demands of different occupations. Once again, one observes that in a modernizing society the major socializing agent is being transformed slowly from the family to the society. Therefore, achievement rather than ascription is emphasized by the individual and demanded by the

society. In addition to all the manifested functions (such as cultural transmission, social integration, social control, training and development of workers, and screening and allocation), the educational system consists of several hours of child care. This function has important implications for the family life as more women seek economic independence through full-time employment.

Another latent function of the education and the system of modernizing society is that it raises the marriage age. The schools not only are students of both sexes socialized into their respective gender, but the students are also given a prolonged opportunity to think and choose a marriage partner. Indirectly, this prolonged period affects the female's fertility; it allows her to develop certain ambitions and certain attitudes toward family size preferences. She now identifies herself with other roles in addition to her biological role. In order to fulfill all her extrafamilial ambitions with her original role, she finds it necessary to reduce the number of children she might have in the future.

In conclusion, fertility decision making is filtered through many social-psychological factors, economic factors, societal, governmental, and biological factors. The process of decision making becomes much more crystallized as the individual's education and awareness are increased. This research reveals how important is modern formal education, particularly technical education. One interesting result, based on interviews with wives, is the enlarged definition of self concept toward family and their participation in society.

This study shows that the various sociological and psychological factors seem to have different associations with regard to women, particularly career women, than with men. Women who are strictly

housewives are more accommodating to their husband's desires of whatever number of children. The tendency, therefore, is toward less planning with respect to the number of children. As education of the housewife increases, although the ideal number of children may be around four or six, more control is managed over the actual number of children. These wives may indicate the desire for additional children; however, the right time must be achieved in order to afford an adequate life for their children. If the wives are childless, the justification for not having children is usually that they are waiting until they establish themselves and/or meet their housing needs which seem to be an important issue to several of the wives. Wives who are strictly housewives and mothers, specifically ones who have little or no education, on the other hand, feel much more content with the number of children they have. The reason given if they were to consider the use of contraceptives (traditional or man-made synthetic contraceptives) is the fact that they are over-loaded already and they must resort to some type of fertility control in order to manage their life a little better.

Formal education and involvement in extra familial activities outside the house for females seem to be highly associated with consequent type of fertility decision making based on interviews. It is apparent how wives can gain relatively greater access to individualistic benefits without necessarily being able to involve husbands. The impasse can be resolved, consciously or unconsciously, through having fewer utilities of some sort (children) which then allows wives to have more utilities of another sort (greater time which provides occupational access). This type of resolution also seems to be moving toward a greater equalitarianism with regard to such a family.

Limitations and Problems

In this theoretical and empirical effort, there is a set of limitations which were recognized at the outset of this study. The limitation of time, the nature of subject matter pursued, plus the conservative attitude observed in an Arab society like Kuwait. One of the limitations of this study is the "snowball" sampling procedure which is utilized. This procedure may have excluded certain groups of individuals. It may have also exaggerated certain biases. Another limitation which is fully recognized is the small size of the sample and the statistical significance which becomes impossible unless this level is raised to say 0.10 rather than 0.05. Doing that may change certain conclusions.

Another limitation has to do with the decision of having unequal measurement conducted to wives and husbands. This decision was based on the fact that material dealing with knowledge, attitudes, and the practice of family planning are sensitive subjects for people in a conservative society such as Kuwait. Generally, wives were shy about discussing these subjects. The researcher was aware of the impropriety of discussing these sensitive areas with the husband (particularly when the researcher happens to be a female). The use of comparable measurement would certainly have been much more useful in terms of comparing wives' and husband's responses to the same set of questions, and may have given the researcher some idea about how they perceive their various familial and non-familial roles. However, the comparability of measurement might be possible in the future with more preparation and sufficient funds to hire a male interviewer in order to achieve comparability.

Another recognized limitation is the use of a structured questionnaire. The inability to manipulate independent variables with regard to causal analysis created a limitation. One cannot progressively investigate one aspect after another of the independent variable to get a closer look at the real causes; also, the statistical device utilized--bivariate analysis such as correlation coefficients. The limitation here is that it can only show association between independent and dependent variables not necessarily a cause and effect. Another limitation needed to be mentioned is the fact that the unit of analysis used in this research is the person, not the couple. Had the unit of analysis been the couple, different results might have been achieved. There is a great confidence in the responses given by wives, although sometimes the researcher was perceived as one who was knowledgeable about the various contraceptive practices; namely, what they are, how to obtain birth control information, and which contraceptives work better or have higher probability of success. Sometimes part of an interview session consisted of providing information to respondents as well as indicating the importance of conferring with their family physician. The need was made to let the respondents know that the researcher is really interested in the information and how much it was important for the achievement of this research. Generally speaking, people were cooperative in answering the question needed. If in doubt about certain responses, checking and rechecking was conducted when it was possible. This was done with respect to one respondent and the feeling was that information obtained was fairly accurate.

It was mentioned earlier that qualitative data was being utilized. This may have presented a problem with external validity. However, this

can be argued on the basis of amount of the in depth information present. The researcher's knowledge of the Arab culture, the Kuwaiti environment, as well as the Arabic language, and very good understanding of the Kuwaiti dialect and accent helped a great deal in communication. There is no one method that is free of all errors, but what one tries to do is eliminate, as much as possible, methodological bias without affecting the quality of the data and conclusions drawn.

Suggestions and Recommendations for Future Research

The countries in the Arab Near East are currently in the process of demographic transition from high to low or moderate mortality and fertility. As in other places in the world, demographic change appears to be related to socio-economic development. In addition, the variables traditionally associated with the development of differential fertility and decline are important factors in determining population dynamics in the Arab Near East. Furthermore, there is some evidence that the demographic transition may be moving at a fast pace in this area of the world in comparison with the time it took to complete the transition in present developed nations (Allman, 1978; Allman and Matheson, 1975).

The demographic changes in the region have attracted some demographers, statisticians, planners, and policy-makers. However, there is a need for the social scientists to be involved in conducting sociological research. Few studies were conducted dealing with family patterns and the woman's status in the family framework (Goode, 1963; Vallin, 1973; Behar, 1975; Duza and Baldwin, 1977; Hill, 1978, Prothro and Diab, 1974; Khurid, 1970; Mernissi, 1975; Myntti, 1978; VanDusen, 1976).

One of the major shortcomings of research on family patterns and family planning is the lack of awareness or knowledge of social changes in the socio-economic structure. There is a need for much more refined cross-cultural sociological research. One point that needs to be noted is an over-emphasis on values, norms, and belief systems. This approach needs to include more attention to empirical indicators of the impact of new social institutions, the participation of people in the area in new roles, and problems faced in the development of new behavior patterns and their impact to others.

Consideration in developing research on the family, women, and population dynamics is very important. In addition to that, there is a need to look at problems which are the real concern of people in the region. For example, the study of youth and students in the region who are uneducated, dropouts, and the rural farm youngster would aid in understanding family problems. Micro studies, such as urban slums, suburban communities, and working class and middle class urban communities, particularly in provincial centers of change, are much needed.

The most important suggestion centers around the need for a longitudinal design where the respondents are interviewed after marriage and repeatedly over a number of years. Such a procedure has its own complications as a result of divorce and remarriage, death, or subsequent refusal to be interviewed. One would then be better able to determine the actual degree of significance of the role of the social-psychological factors in determining the movement of wives in and out of the labor force, birth intentions, contraceptive efficiency, etc. There is also the need to focus on the variable of change and how it interacts with present norms. The ability to analyze changes would be especially

relevant with individuals from working-class family who has traditional orientation as to specific sex roles. Generally speaking, whatever the class background, such a study would provide the unique opportunity to research the dynamics of communication process between husband and wife and the process of bargaining between them. This can lead to much more valid and reliable sociological information with regard to the interest in seeking to understand behaviors that are strongly linked to family size as shown in the model in Chapter III. This is one of the benefits from having a utility model which allows one to see the scope of possible factors that may have an important link with regard to family size. More investigations need to be implemented with regard to the husband's rewards when he relinquishes his traditional prerogatives in the interest of the wife who is seeking her own rewards.

Another important question for future research would be in the area of socialization. How do employed parents behave with their children, how old do their children have to be before the parents begin to treat them according to their sex roles, do employed parents segregate based on sex or do they treat their children (both sexes) equally. This type of data is extremely important for it will in turn affect the children's future behavior toward family planning and size.

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APPENDIXES

APPENDIX A

HISTORICAL AND GEOGRAPHICAL NOTE

Location

The state of Kuwait lies on the northwest coast of the Arabian Gulf, between latitudes 28°-30°, and longitudes 46°-48° east. It is bounded on the west and north by Iraq, on the east by the Arabian Gulf, and on the south by Saudi Arabia.

The nation of Kuwait is 18,860 square kilometers including several islands. The largest, Bubiyan, is in the northwest part of the Arabian Gulf and is uninhabited. To the north of Bubiyan is the small island of Warbah. At the mouth of the Bay of Kuwait is the ancient island of Failaka, an inhabited island, about 30 kilometers to the northeast of Kuwait. Close to Failaka, are the islands of Muskan and Oha. Three small inhabited islands lie further south, Kubbar, Qaro, and Um Al-Maradem. In the bay itself, more than one island is found.

Kuwait has a great influence on the Arabian Gulf; this is mainly due to its excellent coastal location. The geographical location of the Gulf itself, made it the gateway to the civilizations of Mesopotamia and Syria and route to India and the Far East. Hence, it became the cultural link between many different civilizations. Kuwait's strategic position gave it a dominant influence on the route way leading to those civilizations and trading centers. In addition, Kuwait had a cultural tradition of its own. The excavations carried on in Failaka indicated the existence of civilization founded in these regions more than 4,000 years ago.

Furthermore, Kuwait's position on the Gulf made it a trading center for goods imported from the Orient (India, Indo-China, Indonesia, and Cylon) on their way westward, passing through the Indian Ocean, the

Arabian Gulf, the Euphrates, Syria, and the Mediterranean to Europe. This is why the population, like all inhabitants of the Gulf, is famous for seafaring. They are reputed to have directed Vasco de Gama, in the fifteenth century, to the sea route leading through the Indian Ocean.

This position resulted in the improvement of navigation and building of large sailing ships to explore the oceans. The Portuguese benefitted a great deal from the Kuwaiti's experience and that of the Gulf inhabitants.

Relief and Climate

The surface of Kuwait consists mainly of flat, sandy plains with some low hills. It slopes gradually from the west to the east. These plains are covered chiefly with pebbles, gravel, and sand formed by the action of the wind. The wind plays a major role in forming the surface topology, giving it a general aspect of similarity in its plains and light waves of sand. In many places, especially to the south, one finds dome shaped hills suitable for oil accumulations. They are emphasized as small islands protruding from a sea of sand. Generally, they are formed of sandstone and other sedimentary rocks, as is the case in the regions of Warah and Burgan.

Among the significant landmarks, is Mount Qudai to the north of Kuwait Bay. It consists mainly of hills of sedimentary rocks extending to the northwest of the village of Jahra. Running almost parallel to these are the hills of Liah. In between are the hills of Kerah Al-Marua, full of pebbles and gravel of various sizes and colors. In the west lies the desert area of Dibdiba, where the plant "Hamd" is abundant. This plant is very good for camel grazing during the summer. Many

valleys and shallow depressions are found in Kuwait. The most important valley is the Batin Valley, and to its east lie ranges of hills dissected by dry valley. The region is known as Esh-Shegaya.

The climatological area of Kuwait is considered a transitory region between the desert climate and that of the Mediterranean. This climate is characterized by two main seasons: a long hot, dry summer and a short, warm winter with a limited amount of rain. The wind blows all the year around from set directions according to the season. The temperature may rise up to 50°C in the summer, and in the winter it may drop to 0°C at night and 15°C during the day. The average rate of humidity during the summer is 27 percent. This occurs when the country is subject to dry north and northwest winds. The humidity sometimes reaches 95 to 100 percent when the southeast winds are blowing. The average rate of humidity in winter is 70 percent.

One must note that a high humidity when accompanied by a high temperature causes the air to be heavy and stifling, which results in a great deal of perspiration and may lead to a lot of discomfort.

Historical Notes

Ancient History

Kuwait lies on the northwestern side of the Arabian Gulf, an outlet to Ancient Mesopotamia which has been, and still is, an important sea route connecting the ancient civilizations of the Near East in Iraq, Syria, Turkey, and Egypt with those of the southeastern part of Asia in India and China. An ancient civilization must, therefore, have existed in Kuwait, and this was indeed confirmed by the excavations made by the

Danish archeological expeditions which were begun in 1958 on the island of Failaka. In 1964, the Museums Department of the Ministry of Education published a report summarizing these excavations and featuring some 93 of the relics found on Failaka.

Some historians claim that the Gulf was the passage through which the Summerians penetrated to the lower part of Mesopotamia, where they established their civilization around 2500 B.C., but there tended to be a continuous migration overland from the interior of the Arabian Peninsula to the north along the Gulf Coast. Hence, it was thought that the first phoenicians settled on its shores before leaving for those on the Mediterranean. They founded the civilization of Dilmun, whose center was the island of Bahrain and the island of Failaka. The numerous ruins found in the excavated areas of those islands support this claim, since the inscriptions and works of art are different from those of the Summerians, albiet related in style.

Alexander the Great is said to have sent his fleet through the Gulf in 326 B.C. to explore the sea route between the Indus Valley and that of the Tigris and Euphrates. This resulted in a Greek settlement on Failaka to which a memorial stone inscribed with thanksgiving prayer to Zeus, together with remains of many pillars and statues.

Kuwait and Its Place in the Medieval Period

With the advent of prophet Mohammed, Islam became widespread among the Arabs and dominant in the Arabians peninsula. In the Lunar year 12 (633 A.D.), the Caliphate Abu Bakr Al-Sedeek had his first encounter with the Persians on the Gulf Coast at Kadhema "That As-Salassel," which resulted in their retreat. The Gulf route was used by the Caliphate Omar

Ibn Alkhatib to conquer Persia. During the Omayyad this part of the world was very important for they made it the most important trade route. Trade flourished even further in this area during the Abbassid rule, especially after the founding of Baghdad. The Arab tribes have traveled to the northwestern part of the Gulf all through the Islamic era and it appears that the area of Kadhema was continuously mentioned in poetry. Furthermore, it was frequently referred to in "Yakout's Me'jam Al-Buldan." Those Arab tribes used to settle in this region during the winter and spring seasons for it was on the route to the south of Iraq.

Kuwait and Its Modern History

Authorities refer to the region of Kuwait in general since Kuwait City came into existence 300 years ago. The Coast of Kuwait, known as Qurain during the Portuguese days, was probably given this name by the Portuguese as it is assumed that they had reached the Island of Failaka and built a fortress on the island located in the Bay, opposite the present Port of Shuwaikh.

The word Kuwait is a diminutive of Kut, which is a common, well-known word in Iraq, Najd, and some other Arabic countries. It denotes a residence built on a height, such as a citadel or a fortress. It was named after a small fortress which, it is assumed, has been built by Mohammed Ibn Uria-er, the chief of Bani Khalid, to be used as a store house for food, ammunitions, and other supplies. One cannot definitely ascertain the data of its establishment through lack of historical evidence, but some historians state that modern Kuwait was built during the mid-seventeenth century, around the above mentioned Kut. It started as a small village inhabited by nomads, fisherman, and some tribes

related to Bani Urai-er, and did not become famous until some important houses such as the Al-Sabah, Al-Khalifah, Al-Jalahimah, and Al Ma'awidah migrated from Najd and settled there.

The first two built stone houses were Al-Sabah's, who resided in Kuwait. In short, Kuwait was not owned by people different from those who built it, and probably it was known by its present name "Kuwait" only in the mid-seventeenth century, since it was ruled by Al-Sabah.

The Sabah House

The Sabah House is of the Unaizah tribe, which was among the largest and most important of Najd's. The Arab geographer, Al-Hamadani, stated in one of his scripts that the tribe has existed in Najd since the tenth century A.D.

The Unaizah tribes consisted of main branches and sub-branches. One such sub-branch is the Jamilah, which spread its influence over the Aflaj in Najd. It was from the Jamilah that tribes of Atoub, Al-Sabah, and Al-Khalifa descended.

Historians indicate that the Al-Sabah and Al-Khalifa migrated from Najd about 1710 A.D. because of tribal wars and severe famine. After the Al-Sabah settled in Kuwait, its population grew and was able to cooperate with others to shun a common enemy, Bani Khalid, who dominated the eastern coast of the Arabian Peninsula.

The first European to visit the area was a Danish tourist, Carsten Niebuhr, who visited Kuwait in 1765. He stated that Kuwait was a prosperous commercial city.

In 1776, many people from Basra, a region in the southern part of Iraq, migrated to Kuwait to escape the Persians who had conquered Basra

that year. During the Persian occupation of Basra (1776-1779), the city's trade with Baghdad, Aleppo, Izmir, and Astana was transferred to Kuwait, thus strengthening its commercial ties with the Arabian ports, and increasing its prosperity. Kuwait was visited by many western explorers, such as the English travelers Stokler and William Palgrave, who described it as the most active port on the Gulf.

Pearling was very important for Kuwait, as this was the main income for the people before oil was discovered. Many businesses were established such as trade, hardware, jewelry, building, and construction. The most important among these businesses was shipbuilding. Wood was imported from India and used for various types and sizes of sailing boats, the most famous of which are those used for pearling, passengers, cargo, and seafaring. With the discovery of oil, Kuwait began its modern development.

In 1899, Kuwait signed a treaty with England due to Turkish designs over that part of the world. The treaty established Kuwait as a protectorate of England (i.e., the main purpose was to protect Kuwait from any foreign designs over Kuwait without any interventions in Kuwait's authority at home or its sovereignty.

The treaty was annulled on June 19, 1961, and Kuwait acquired full independence. On July 16, 1961, Kuwait became an active member of the Arab nations' family. On May 14, 1963, Kuwait joined the United Nations. It also joined numerous international organizations emanating from the U.N., such as: World Health Organization, Food and Agriculture Organization, UNESCO, International Labor Organization, and the World Bank.

APPENDIX B

INTERVIEW SCHEDULES

Wives' Interview Schedule

Answers to these questions are kept confidential except for research purposes.

1. Age:
 - (1) Husband _____
 - (2) Wife _____
2. Religion:

Sect _____
3. Nationality _____
4. Name of the area of residence _____
5. Number of brothers _____
6. Number of sisters _____
7. What is your educational level?
 - _____ (1) No education
 - _____ (2) Read and write (no formal education)
 - _____ (3) Elementary and junior high school

Number of years completed _____
 - _____ (4) High school

Number of years completed _____
 - _____ (5) Institute higher than high school but less than university

Number of years completed _____
 - _____ (6) University

Number of years completed _____
 - _____ (7) Higher education

Diplomas _____

Masters _____

Ph.D. _____
8. What is your occupation? _____
9. Are you content with the level of education you achieved?
 - _____ (1) Yes
 - _____ (2) I want a higher degree
 - _____ (3) I need some type of training
 - _____ (4) I want more education but do not have the time
 - _____ (5) I want more education but do not have the money
 - _____ (6) If you have another reason, please state clearly
10. How many children do you have?
 - _____ (1) Total
 - _____ (2) Boys
 - _____ (3) Girls

11. In general, do you make plans in advance or do you act on the spur of the moment? _____
12. If you do not have children now, how many would you like to have?
____ (1) Total
____ (2) Boys
____ (3) Girls
13. If you have children now, how many more would you like to have?
____ (1) Total
____ (2) Boys
____ (3) Girls
14. In your opinion, what is the ideal number of children? _____
15. How many years have you been married? _____
16. What type of residence do you live in?
____ (1) Single-family house--upper class
____ (2) Separate floor in a single-family house
____ (3) Apartment
____ (4) A room in an apartment house or a single family house
____ (5) Limited-income housing
____ (6) Middle-income housing
____ (7) Temporary wooden structures
____ (8) Tent
17. Do you own the place of residence?
____ (1) Yes
____ (2) No
18. If you own the place of residence, how much did you invest in your house (approximate price)? _____
19. If you rent, how much rent do you pay per month? _____
20. Where were you born?
____ (1) In the country
____ (2) In a small town
____ (3) In the city
21. Do you believe that children are reason to prevent divorce?
____ (1) Yes
____ (2) No
22. Did you ever think that you had enough children?
____ (1) Yes
____ (2) No
23. Did you do anything to prevent pregnancy?
____ (1) Yes
____ (2) No

24. When you thought about doing something to prevent pregnancy, after which pregnancy? _____ What technique did you use? _____
25. If you did not do anything to prevent pregnancy, please explain why not. _____
26. Was there anyone who made you think that you already had enough children?
 _____ (1) Yes
 _____ (2) No
27. If answer to the previous question is "yes" specify relation to you _____. What is his/her age? _____
 What is his/her occupation? _____
28. Do you have any relatives living with you?
 _____ (1) Yes
 _____ (2) No
29. If yes, specify the number and the relation to you, age, and occupation. _____

Religiousness

30. If you have the opportunity, which would you rather teach?
 _____ (1) English language
 _____ (2) Arabic language
 _____ (3) Religion
31. Would you like to be a missionary?
 _____ (1) Yes
 _____ (2) No
32. Whom would you rather have been?
 _____ (1) Playwright
 _____ (2) Social and religious writer
33. How religious-minded would you say you are?
 _____ (1) Very
 _____ (2) More than average
 _____ (3) Average
 _____ (4) Less than average
 _____ (5) Not at all

34. To what extent is religion included in the home activities of your family? For example, family prayers, reading the Quran or other religious materials, saying grace at meals, and so forth.
- (1) A great deal
 - (2) More than average
 - (3) Average
 - (4) A little
 - (5) Not at all
35. Have you ever gone to see a religious person for advice or help on family or personal matters since you've been married?
- (1) Yes
 - (2) No
 - (3) Don't know
36. Which spouse would you prefer?
- (1) Deeply religious
 - (2) Good provider
37. Would you prefer to read a story:
- (1) Religious
 - (2) Social
 - (3) Non-fiction
 - (4) Romantic
 - (5) Police
 - (6) Other type

Achievement of Life Goals

38. We all have our own picture of the kind of life we would really like to lead and the things we would really like to do in life. Whatever your picture, how much do you feel that you are reaching it?
- (1) Very much
 - (2) Much
 - (3) Little
 - (4) Very little
39. What do you think the chances are of living the kind of life you'd like to have?
- (1) Very good
 - (2) Good
 - (3) Fair
 - (4) Not too good
 - (5) Don't know

40. Some people feel they can make pretty definite plans for their lives for the next few years, while others feel they are not in a position to plan ahead. How about you? Do you feel you're able to plan ahead or not?
- (1) Yes, able to plan ahead
 (2) Depends
 (3) No, unable to plan ahead
41. Do you feel you now know and can look forward to the kind of life you will have 10 years from now?
- (1) Yes
 (2) Depends
 (3) No
 (4) Don't know

Satisfaction with Husband's Work

42. In general, how well satisfied are you with your husband's present job or work?
- (1) Completely satisfied
 (2) Very satisfied
 (3) Fairly satisfied
 (4) Dissatisfied
43. More wives are more satisfied with somethings about their husband's job than they are with others. How satisfied are you, for example, with the steadiness of his work?
- (1) Completely satisfied
 (2) Very satisfied
 (3) Fairly satisfied
 (4) Dissatisfied
44. How do you feel about his hours and working conditions?
- (1) Completely satisfied
 (2) Very satisfied
 (3) Fairly satisfied
 (4) Dissatisfied
45. How do you feel about his chances to get ahead in his work?
- (1) Completely satisfied
 (2) Very satisfied
 (3) Fairly satisfied
 (4) Dissatisfied
46. Finally, how satisfied are you with your husband's income?
- (1) Completely satisfied
 (2) Very satisfied
 (3) Fairly satisfied
 (4) Dissatisfied

Feeling of Economic Security

47. All in all, what kind of breaks do you feel you and your husband are having financially?
- ___ (1) Very good
 ___ (2) Good
 ___ (3) Fair
 ___ (4) Not too good
48. Are there times when you feel you have to deny yourself many of the extras you want because of your income?
- ___ (1) Yes
 ___ (2) No
49. Suppose you ran into an unexpected heavy expense. Do you feel that your income and savings are enough to handle it?
- ___ (1) Yes
 ___ (2) Depends
 ___ (3) No
50. In general, how would you describe your present financial situation?
- ___ (1) Very good
 ___ (2) Good
 ___ (3) Fair
 ___ (4) Not too good
51. Are you ever faced with the possibility of your husband getting a large cut in income or being out of work for several months?
- ___ (1) Yes
 ___ (2) Probably
 ___ (3) No
52. On the whole, what would you say your financial future looks like?
- ___ (1) Very good
 ___ (2) Good
 ___ (3) Fair
 ___ (4) Not too good

Drive to Get Ahead

People feel differently about the importance of getting ahead in life. Some people would give up a lot in order to get ahead, while other people would feel that other things are more important and would not be willing to give them up. Please try to answer each of these questions either "yes" or "no."

53. For example, if getting ahead meant that you had to move to a strange part of the country, would you be willing to move?
- ___ (1) Yes
 ___ (2) No
 ___ (3) Don't know

54. Would you be willing to entertain people because they were connected with your husband's work, even though you might not like them?
____ (1) Yes
____ (2) No
____ (3) Don't know
55. Would you be willing to leave your friends?
____ (1) Yes
____ (2) No
____ (3) Don't know
56. In order to get ahead, would you be willing to become more active in community organizations and clubs not of your own choice?
____ (1) Yes
____ (2) No
____ (3) Don't know
57. Would you be willing to leave your close relatives?
____ (1) Yes
____ (2) No
____ (3) Don't know
58. Would you be willing to postpone having another child?
____ (1) Yes
____ (2) No
____ (3) Don't know
59. Would you be willing to keep quiet about your views in order to get ahead?
____ (1) Yes
____ (2) No
____ (3) Don't know
60. Would you be willing to live temporarily in less desirable housing?
____ (1) Yes
____ (2) No
____ (3) Don't know
61. If getting ahead meant that you would see less of your husband because he would spend more time at work, would you be willing to do this?
____ (1) Yes
____ (2) No
____ (3) Don't know
62. Finally, if getting ahead meant you might have to send your children to another school not quite as good, would you be willing?
____ (1) Yes
____ (2) No
____ (3) Don't know

Aspiration for Children's College Education

63. Do you expect to send your children to college?
 (1) Yes
 (2) Depends on children
 (3) Hope to; like to
 (4) Expect or like to sons but not daughters
 (5) If can afford; depends on finances
 (6) Don't know; haven't thought about it
 (7) No
64. How do you expect this college education to be paid for? Specific steps already taken or in process (includes investment and educational annuity programs).
 (1) Specific steps planned but not yet taken
 (2) Specific provision in existence but without explicit indication of educational purposes (includes savings, insurance, income)
 (3) Hopes; vague plans
 (4) Don't know; haven't thought about it
65. Would you send a daughter of yours to college even if it meant serious financial hardship?
 (1) Yes
 (2) Depends or don't know
 (3) No
66. Would you send a son of yours to college even if it meant serious financial hardship?
 (1) Yes
 (2) Depends or don't know
 (3) No

Marital Adjustment

67. How often do you and your husband have different opinions about the best way to raise or handle the children?
 (1) Often
 (2) Sometimes
 (3) Once in a while
 (4) Hardly ever (never)
68. In general, compared to most couples you know, how well do you and your husband get along with each other?
 (1) Much better
 (2) Somewhat better
 (3) About the same
 (4) Not as well as most

69. Have you ever wished you were not married?
____ (1) Fairly often
____ (2) Occasionally
____ (3) Once or twice
____ (4) Never
70. Everything considered, how happy is your marriage?
____ (1) Extremely happy
____ (2) Happier than average
____ (3) Average
____ (4) Not too happy

Liking for Children

71. Compared to other things you like to do that are not mainly connected with children, how much do you like to read or talk to children?
____ (1) Less than most
____ (2) About the same as most
____ (3) Somewhat more than most
____ (4) Much more than most
72. Again, compared to other things you like to do, how much do you like looking at pictures of children in magazines or newspapers?
____ (1) Less than most
____ (2) About the same as most
____ (3) Somewhat more than most
____ (4) Much more than most
73. How much do you like showing children new places to go and new things to do?
____ (1) Less than most
____ (2) About the same as most
____ (3) Somewhat more than most
____ (4) Much more than most
74. How much do you like seeing movies or plays about children, or reading stories about them?
____ (1) Less than most
____ (2) About the same as most
____ (3) Somewhat more than most
____ (4) Much more than most
75. Compared to other chores, like housekeeping work and things like that, how much do you mind straightening up after children?
____ (1) Less than most
____ (2) About the same as most
____ (3) Somewhat more than most
____ (4) Much more than most

76. All in all, in comparison to your other interests, how interested are you in spending time with children?
- (1) Less than most
 - (2) About the same as most
 - (3) Somewhat more than most
 - (4) Much more than most

Dominance Patterns

77. In some families the father makes the main decisions about the children, in others he leaves it to the mother. When it's about the children, who has the most say in your family, you or your husband?
- (1) I have most say
 - (2) Both 50/50
 - (3) Husband has most say
 - (4) Don't know
78. Which of you has the most say about other things not mainly connected with the children?
- (1) I have most say
 - (2) Both 50/50
 - (3) Husband has most say
 - (4) Don't know
79. Who has the most say about friends you see most often?
- (1) I have most say
 - (2) Both 50/50
 - (3) Husband has most say
 - (4) Don't know
80. Who has the most say about what you do together for recreation?
- (1) I have most say
 - (2) Both 50/50
 - (3) Husband has most say
 - (4) Don't know
81. Which of you has the most say about how to spend the family income?
- (1) I have most say
 - (2) Both 50/50
 - (3) Husband has most say
 - (4) Don't know

Patterns of Help Available to Wives

82. How often can you count on someone to take care of the children?
____ (1) Almost anytime
____ (2) Usually
____ (3) Only some of the time
____ (4) Hardly ever
83. How often can you count on your husband to take care of the children?
____ (1) Almost anytime
____ (2) Usually
____ (3) Only some of the time
____ (4) Hardly ever
84. How often can you count on someone other than your husband to help around the house?
____ (1) Almost anytime
____ (2) Usually
____ (3) Only some of the time
____ (4) Hardly ever
85. On the whole, do you feel satisfied with the amount of freedom you have away from the children?
____ (1) Almost anytime
____ (2) Usually
____ (3) Only some of the time
____ (4) Hardly ever

Husbands' Interview Schedule

Answers to these questions are kept confidential except for research purposes.

1. Age:
 - (1) Wife _____
 - (2) Husband _____
2. Religion:

Sect _____
3. Nationality _____
4. Name of the area of residence _____
5. Number of brothers _____
6. Number of sisters _____
7. What is your educational level?
 - _____ (1) No education
 - _____ (2) Read and write (no formal education)
 - _____ (3) Elementary and junior high school

Number of years completed _____
 - _____ (4) High school

Number of years completed _____
 - _____ (5) Institute higher than high school but less than university

Number of years completed _____
 - _____ (6) University

Number of years completed _____
 - _____ (7) Higher education

Diplomas _____

Masters _____

Ph.D. _____
8. What is your occupation? _____

Husband's Level of Status Satisfaction

9. I would be satisfied if a son of mine, when he reaches my age, is in the kind of work that I am now in.
 - _____ (1) No
 - _____ (2) Somewhat
 - _____ (3) Yes

10. I would be satisfied if my children receive the same amount of education as I have.
____ (1) No
____ (2) Somewhat
____ (3) Yes
11. I am pretty well satisfied with the chances for getting ahead in my present work.
____ (1) No
____ (2) Somewhat
____ (3) Yes
12. I would be satisfied if my children, when they reach my age, have the same income and live the same way as I.
____ (1) No
____ (2) Somewhat
____ (3) Yes

Commitment to Work

13. I would much rather relax around the house all day than go to work.
____ (1) No
____ (2) Somewhat
____ (3) Yes
14. My work is more satisfying to me than the time I spend around the house.
____ (1) No
____ (2) Somewhat
____ (3) Yes
15. If I inherited so much money that I didn't have to work, I would still work at the same thing I am doing now.
____ (1) No
____ (2) Somewhat
____ (3) Yes
16. More than almost anything else, it is work that makes life worthwhile.
____ (1) No
____ (2) Somewhat
____ (3) Yes
17. Some of my main interests and pleasures in life are connected with my work.
____ (1) No
____ (2) Somewhat
____ (3) Yes

18. I have sometimes regretted going into the kind of work I am now in.
____ (1) No
____ (2) Somewhat
____ (3) Yes
19. The work I do is one of the most satisfying part of my life.
____ (1) No
____ (2) Somewhat
____ (3) Yes
20. I enjoy my spare-time activities much more than my work.
____ (1) No
____ (2) Somewhat
____ (3) Yes
21. To my, my work is just a way of making money.
____ (1) No
____ (2) Somewhat
____ (3) Yes

Feelings of Economic Security

22. I feel that my wife and I have had very good financial breaks since we have been married.
____ (1) No
____ (2) Somewhat
____ (3) Yes
23. It is extremely important to me to have a higher income.
____ (1) No
____ (2) Somewhat
____ (3) Yes
24. I feel that my present financial situation is very good.
____ (1) No
____ (2) Somewhat
____ (3) Yes
25. On the whole, my financial future looks very good.
____ (1) No
____ (2) Perhaps
____ (3) Yes
26. There are times when I have to deny myself and my family things we would like because of our income.
____ (1) No
____ (2) Sometimes
____ (3) Yes

27. I worry about the possibility of a large cut in income or being out of work for a while.
- (1) No
 (2) Sometimes
 (3) Yes
28. In my present financial situation, I have to worry about bills or debts.
- (1) No
 (2) Somewhat
 (3) Yes

Drive to Get Ahead

Men feel differently about the importance of getting ahead in work and in life generally. Some men would give up a lot in order to get ahead while other men would feel that other things are more important and would not be willing to give them up.

29. For example, if getting ahead meant that you would have to go without any vacation for several years, would you be willing to do this?
- (1) No
 (2) Perhaps
 (3) Yes
30. Would you be willing to leave your friends in order to get ahead?
- (1) No.
 (2) Yes
31. If getting ahead meant that you would have to live in an undesirable neighborhood temporarily, would you be willing?
- (1) No
 (2) Yes
32. Would you be willing to give up your leisure time in order to get ahead?
- (1) No
 (2) Yes
33. To get ahead, would you be willing to move your family to a strange part of the country?
- (1) No
 (2) Yes
34. Would you be willing to postpone having another child in order to get ahead?
- (1) No
 (2) Yes

35. Would you be willing to do less interesting or less enjoyable work in order to get ahead?
____ (1) No
____ (2) Yes
36. If it meant not seeing your wife and children as much as you would like, would you be willing?
____ (1) No
____ (2) Yes
37. Would you be willing to take some risk to your health in order to get ahead?
____ (1) No
____ (2) Yes
38. Would you be willing to take a chance on a job that you might be less certain of holding, if it had better opportunities?
____ (1) No
____ (2) Yes
39. If getting ahead meant you might have to send your children to another school not quite as good, would you be willing?
____ (1) No
____ (2) Yes
40. And finally, if getting ahead meant that you would have to keep quiet about your religious views, would you be willing?
____ (1) No
____ (2) Yes

Importance of Getting Ahead

41. I feel that the most important thing about work is the chance it offers to get ahead.
____ (1) No
____ (2) Yes
42. I spend a lot of time thinking about how to improve my chances for getting ahead.
____ (1) No
____ (2) Yes
43. Getting money and material things out of life is very important.
____ (1) No
____ (2) Yes

44. It is important to me to own material things, such as a home, car, or clothing, which are at least as good as those of my neighbors and friends.
____ (1) No
____ (2) Somewhat
____ (3) Yes
45. I am very anxious to get much further ahead.
____ (1) No
____ (2) Yes
46. Getting ahead is one of the most important things in life to me.
____ (1) No
____ (2) Yes
47. It is quite important to me that my children marry persons of at least equal social standing.
____ (1) No
____ (2) Yes
48. The most important qualities of a real man are determination and ambition.
____ (1) No
____ (2) Yes

APPENDIX C

INTERVIEW SCHEDULES IN ARABIC

Wives' Interview Schedule

-1-

نساء

بيانات هذه الاستمارة سرية ولا تستعمل الا
لاغراض البحث العلمى.

1- السن

(1) الزوجة

(2) الزوج

2- الديانة

3- الجنسية

4- اسم منطقة السكن

5- عدد الاخوة الذكور

6- عدد الاخوات الاناث

ضعى علامة x فى المربع المناسب من فضلك.

7- مرحلة التعليم التى وصلت اليها

(1) لا يوجد

(2) اقرأ وأكتب

(3) ابتدائى ومتوسط x عدد سنوات الدراسة

فيهما.

-٢-

(٤) مؤهل (ثانوى بأنواعه) + عدد السنوات _____ .

(٥) مؤهل (أعلى من ثانوى وأقل من جامعة) + عدد السنوات _____

(٦) مؤهل عالى (جامعة ومعاهد عليا) + عدد السنوات _____

(٧) درجات علمية (دبلومات ماجستير دكتوراه) + عدد السنوات _____

مرحلة التعليم التى وصل اليها زوجك

(١) لا يوجد

(٢) يقرأ ويكتب

(٣) ابتدائى ومتوسط + عدد سنوات الدراسة فيهما _____

(٤) مؤهل (ثانوى بأنواعه) + عدد السنوات _____

(٥) مؤهل (أعلى من ثانوى وأقل من جامعة) + عدد السنوات _____

(٦) مؤهل عالى (جامعة ومعاهد عليا) + عدد السنوات _____

(٧) درجات علمية (دبلومات ماجستير دكتوراه) + عدد السنوات _____

٨- هل أنت فاعلة بما وصلت اليه من تعليم ؟

(١) نعم

(٢) أريد شهادة أعلى

- (٣) أريد التدريب
- (٤) محتاجة ولكن لا يوجد وقت
- (٥) محتاجة ولكن لا يوجد نقود
- (٦) سبب آخر (وضح من فضلك)

٩- عدد أطفالك _____

(١) البنين _____

(٢) البنات _____

١٠- نوع العمل (وضح بالضغط) _____

١١- عموماً هل تخططين لأعمالك مسبقاً أم تتصرفين على حسب الظروف

_____ ؟

١٢- إذا كان لا يوجد عندك أطفال فكم طفلاً تودين أن يكون عندك

في المستقبل ؟ بنين _____ بنات _____

١٣- إذا كان عندك أطفال الآن :

(أ) كم عدد الأطفال الموجودين حالياً لديك ؟

بنين _____ بنات _____

(ب) كم طفلاً تريد زيادة ؟

بنين _____ بنات _____

-٤-

١٤- ما هو عدد الأطفال المثالي في نظرك؟

١٥- ما عدد سنوات الزواج : _____

١٦- هل تسكنين في :

- (١) وحدة سكنية مستقلة (فيلا) غير سكن ذوى الدخل المحدود والمتوسط
- (٢) دور مستقل تام الانفصال في فيلا
- (٣) شقة سكنية ضمن عمارة متعددة الشقق
- (٤) سكن في غرفة أو أكثر ملحقة بفيلا أو عمارة
- (٥) سكن ذوى الدخل المحدود
- (٦) سكن ذوى الدخل المتوسط
- (٧) سكن مؤقت من الشنكو أو الأخشاب
- (٨) سكن في بيت من الشعر (خيمه أو خيام)

١٧- هل تملكون مسكنكم

- (١) نعم
- (٢) لا

١٨- كم ثمنه؟

-5-

١٩- اذا كنتم تسكنون للايجار فكم تدفعون ايجارا شهريا؟

٢٠- أين ولدت؟

- (١) في القرية
- (٢) في مدينة صغيرة
- (٣) في مدينة كبيرة أو ضاحية مدينة كبيرة

٢١- هل تعتبرين وجود الأطفال سببا يمنع الطلاق؟

- (١) نعم
- (٢) لا

٢٢- هل فكرت مرة أن عدد أطفالك كاف؟

- (١) نعم
- (٢) لا

٢٣- هل فعلت أي شيء لمنع الحمل؟

- (١) نعم
- (٢) لا

٢٤- حينما فكرت في عمل شيء لمنع ما هو

رقم الحمل _____ وماذا فعلت؟ _____

٢٥- اذا كنت لم تفعلين أي شيء لمنع الحمل فلماذا؟

- ٦ -

٢٦- اذا كنت فكرت فى عمل أى شىء لمنع الحمل فهل هناك
أحد أثر عليك من ناحية أن عدد أطفالك كاف؟

- (١) نعم
 (٢) لا

٢٧- (اذا كان اجابة السؤال رقم ٢٦ نعم) وضحى - ما
هى علاقتك بهذا الشخص؟

ما هو سن هذا الشخص؟
ما هى مهنة هذا الشخص؟

٢٨- هل يوجد أى أحد من عائلتك أو من عائلة زوجك يسكن معكم؟

- (١) نعم
 (٢) لا

٢٩- (اذا كان اجابة السؤال رقم ٢٨ نعم) وضحى -
عدددهم _____

درجة قرابة كل منهم (١) _____
(٢) _____ (٣) _____
(٤) _____ (٥) _____

سن كل منهم (١) _____ (٢) _____
(٣) _____ (٤) _____ (٥) _____

مهنة أو وظيفة كل منهم (١) _____
(٢) _____

- ٧ -

- _____ (٣)
 _____ (٤)
 _____ (٥)

٣٠- إذا اتاحت لك الفرصة ماذا ترغبين أن تدرسين؟

- (١) لغة انجليزية
 (٢) لغة عربية
 (٣) شريعة وتربية دينية

٣١- هل تودين بأن تبشرى بالدين ونشره في أى مكان؟

- (١) نعم
 (٢) لا

٣٢- ماذا تفضلين أن تكونى؟

- (١) كاتبة مشهورة
 (٢) كاتبة اجتماعية أو دينية

٣٣- ماذ تعتبرين نفسك من الناحية الدينية؟

- (١) متدينة جدا
 (٢) أكثر من المتوسط
 (٣) متوسطة
 (٤) أقل من المتوسط
 (٥) غير متدينة بالمرّة

- ٨ -

٣٤- ما مقدار النشاط الدينى فى العائلة؟

(مثل الصلاة وقراءة القرآن والكتب الدينية وتلاوة
الفتاححة قبل الطعام _____ الخ)

- (١) كثير جدا
 (٢) أكثر من المتوسط
 (٣) متوسط
 (٤) قليل
 (٥) لا يوجد نشاط دينى بالمره

٣٥- هل سألت عالما دينيا عن أى مشكلة شخصية من يوم زواجك؟

- (١) نعم
 (٢) لا
 (٣) لا أتذكر

٣٦- هل يعجبك زوج

- (١) متدين ذودخل صغير
 (٢) ذو مرتب كبير غير متدين

٣٧- هل يعجبك قراءة قصة

- (١) دينية
 (٢) اجتماعية
 (٣) واقعية
 (٤) رومانتيكية خيالية
 (٥) بوليسية
 (٦) أنواع أخرى

- ٩ -

٣٨- كل منا يوجد عنده تصور للحياة التي يفضلها ويريد أن يعيشها فما مقدار ما أنجزت أو وصلت اليه من هذا التصور.

- | | |
|--------------------------|--------------|
| <input type="checkbox"/> | (١) كثير جدا |
| <input type="checkbox"/> | (٢) كثير |
| <input type="checkbox"/> | (٣) قليل |
| <input type="checkbox"/> | (٤) قليل جدا |
| <input type="checkbox"/> | (٥) لا شيء |

٣٩- ما هو الاحتمال بأن تحققى نوع الحياة التي تريدينها؟

- | | |
|--------------------------|--------------|
| <input type="checkbox"/> | (١) كبير جدا |
| <input type="checkbox"/> | (٢) كبير |
| <input type="checkbox"/> | (٣) معتدل |
| <input type="checkbox"/> | (٤) غير كبير |
| <input type="checkbox"/> | (٥) لا أعرف |

٤٠- بعض الناس لديهم المقدرة على التخطيط لمستقبل حياتهم، وبعض الناس لا يوجد عندهم هذه المقدرة . كيف تشعرين نحو نفسك ؟ هل تقدرين على هذا التخطيط؟

- | | |
|--------------------------|---------------------------|
| <input type="checkbox"/> | (١) نعم أقدر |
| <input type="checkbox"/> | (٢) لا أقدر على التخطيط |
| <input type="checkbox"/> | (٣) أحتاج الى مساعدة غيرى |

- ١٠ -

٤١- هل يمكنك تخيل كيف تكون حياتك بعد عشر سنوات من الآن؟

- (١) نعم أقدر على ذلك .
- (٢) لا أقدر على التخيل .

٤٢- عموماً، هل أنت راضية عن عمل زوجك فى الوقت الحاضر؟

- (١) راضية رضاء كاملاً .
- (٢) رضاء متوسط .
- (٣) غير راضية بالمرّة .

٤٣- كثير من الزوجات يكن راضيات ببعض الأشياء فى سلوك أزواجهن فى العمل ويكون البعض الآخر غير راضى فهل أنت راضية مثلاً على مواظبة زوجك فى شغله ؟

- (١) راضية رضاء كاملاً .
- (٢) راضية جداً .
- (٣) رضاء متوسطاً .
- (٤) غير راضية بالمرّة .

٤٤- ما رأيك فى ساعات عمل زوجك وأحوال شغله ؟

- (١) راضية رضاء كاملاً .
- (٢) راضية جداً .
- (٣) رضاء متوسطاً .
- (٤) غير راضية بالمرّة .

-١١-

٤٥- ما رأيك في تقدم زوجك في عمله؟

- (١) راضية رضاء كاملا
- (٢) راضية جدا .
- (٣) رضاء متوسطا
- (٤) غير راضية بالمره

٤٦- هل أنت راضية بالمرتب الذى يحصل عليه زوجك شهريا؟

- (١) راضية رضاء كاملا .
- (٢) راضية جدا .
- (٣) رضاء متوسطا .
- (٤) غير راضية بالمره

٤٧- ما هى حالة زوجك المالية؟

- (١) جيدة جدا .
- (٢) جيدة .
- (٣) متوسطه
- (٤) غير جيده بالمره .

٤٨- هل يوجد أوقات تضطرين فيها لحرمان نفسك من بعض الأشياء بسبب الحالة المالية؟

- (١) نعم
- (٢) لا
- (٣) نوعا ما

-١٢-

٤٩- هل تعتقد أن المرتب مع مدخراتك يكفي في حالة حدوث ظروف صعبة و اضطرارية لا قدر الله .

- (١) نعم
- (٢) نوعا ما
- (٣) لا

٥٠- عامة ، كيف تعتبرين حالتكم المالية ؟

- (١) جيدة جدا
- (٢) جيدة
- (٣) متوسطة
- (٤) غير جيدة بالمرّة

٥١- هل من الممكن أن يفصل زوجك من الشغل أو العمل ؟

- (١) موءكد
- (٢) يحتمل
- (٣) لا يحتمل

٥٢- كيف تقدرين حالتكم المالية في المستقبل؟

- (١) جيدة جدا .
- (٢) جيدة .
- (٣) متوسطة .
- (٤) غير جيدة بالمرّة .

-١٣-

يختلف الناس في نظرتهم الى أهمية التقدم والنجاح في العمل. فهناك من يضحى بالكثير سعياً للتقدم كهدف في الحياة، في حين لا يعتمد البعض الآخر بأن هناك ما يستحق أى تضحية.

جاوبى على الأسئلة القادمة بصراحة وعلى قدر امكانك

من فضلك.

٥٣- لو كان التقدم والنجاح في العمل يعنى الانتقال الى مكان غريب، هل ترضين بالنقل؟

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٥٤- هل ترضين الاحتفال بالناس الذى يعمل معهم زوجك اذا كان هذا يودى الى المساعدة على تقدمه ونجاحه؟

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٥٥- هل ترضين بالبعد عن أصحابك الأعراء اذا كان هذا يودى الى المساعدة على تقدم زوجك ونجاحه في العمل؟

-١٤-

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٥٦- للحصول على التقدم ، هل تقبلين بأن تشركي في منظمات رافة أو اصلاح اجتماعي حتى على فرض عدم رغبتك في ذلك؟

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٥٧- هل ترضين بأن تتركي أقربائك للوصول الى أهدافك العالية بالنسبة الى العمل؟

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٥٨- هل ترضين أن توء جلي الانجاب لكي يحصل زوجك على التقدم في العمل أولاً؟

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٥٩- هل ترضين بالامتناع عن ابداء رأيك الصواب في نظرك اذا كان هذا الامتناع يعجل من تقدم زوجك في العمل.

- ١٥ -

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٦٠- هل ترضين بأن تنقلى الى سكن أقل من مستواك مؤقتا لمصلحه
عمل زوجك؟

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٦١- اذا كان تقدم ونجاح زوجك يوءدى الى قضاءه وقتا كبيرا بعيدا
عنكم، هل ترضين بذلك؟

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٦٢- اذا كان هذا التقدم والنجاح يستدعى بأن ترسلى أطفالك
الى مدرسة أقل من مستواهم، هل ترضين بذلك؟

- (١) نعم
 (٢) لا
 (٣) لا أعرف

٦٣- هل تتوقعين ارسال اولادك الى الجامعة؟

- (١) نعم

- ١٦ -

- (٢) هذا يعتمد على الأولاد.
 (٣) أتمنى ذلك
 (٤) أتوقع أن أرسل البنين وليس البنات.
 (٥) يعتمد ذلك على توفر المصاريف
 (٦) لا أعرف أو لم أفكر في ذلك
 (٧) لا
 (٨) اذا كانت هناك اجابة أخرى فوضيها من
 فضلك

٦٤- كيف تدفعين تكاليف أولادك الجامعية أذكرى الخطوات الذى
 اتخزتها من هذه الناحية ؟

- (١) خططنا بالضبط ولكن لم نتخذ أى اجراءات بعد
 (٢) نتوقع أن أرباحنا من الاستثمارات المختلفة تصرف
 على التعليم الجامعى
 (٣) يوجد خطط غير واضحة
 (٤) لا أعرف ولم أفكر فى ذلك بعد

٦٥- هل ترضين ارسال ابنك الى الجامعة حتى ولو كان هذا يتسبب فى
 تعسر الحالة المالية؟

- (١) نعم
 (٢) لا
 (٣) يحتمل أو لا أعرف

- ١٧ -

٦٦- هل ترضين بإرسال ابنك الى الجامعة حتى لو كان هذا يتسبب في
تعسر الحالة المالية ؟

- (١) نعم
 (٢) لا
 (٣) يحتمل أو لا أعرف

٦٧- هل تختلفين أنت وزوجك على تربية أبنائكم؟

- (١) كثيرا
 (٢) قليلا
 (٣) نادرا
 (٤) لا تختلف

٦٨- بالمقارنة بعائلات أخرى - كيف تربي نفسك متفاهمة مع زوجك

- (١) احسن كثيرا من الآخرين
 (٢) أحيانا أحسن
 (٣) مثل الآخرين
 (٤) أقل تفاهمة من الآخرين

٦٩- كم تودين لو كنت غير متزوجة

- (١) كثيرا
 (٢) أحيانا
 (٣) فكرت في ذلك مرة أو مرتين
 (٤) أبدا بالمرة

-١٨-

٧٠- مع أخذ جميع الاعتبارات كيف تترين سعادتك في حياتكم الزوجية ؟

- (١) سعيدة جدا
 (٢) سعيدة فوق المتوسط
 (٣) سعادة متوسطة
 (٤) غير سعيدة بالمرّة

٧١- بالمقارنة بغيرك - كيف تعجبك القراءة والكلام مع أطفالك؟

- (١) أكثر بكثير من الآخرين
 (٢) أكثر بقليل من الآخرين
 (٣) مثل الآخرين
 (٤) أقل من أي أحد آخر

٧٢- بالمقارنة بأشياء أخرى - كيف تحبين النظر الى صور أطفال في مجلات أو جرائد؟

- (١) أكثر بكثير من الآخرين
 (٢) أكثر بقليل من الآخرين
 (٣) مثل الآخرين
 (٤) أقل من الآخرين

٧٣- الى أي حد تحبين أخذ أطفالك الى أماكن جديدة وأشياء جديدة لكن يفعلوها؟

- (١) أكثر بكثير من الآخرين
 (٢) أكثر بقليل من الآخرين

- ١٩ -

- (٣) مثل الآخرين
- (٤) أقل من الآخرين

٧٤- الى أي حد تحبين مشاهدة الأفلام والتمثيليات أو قراءة قصص عن الأطفال

- (١) أكثر بكثير من الآخرين
- (٢) أكثر بقليل من الآخرين
- (٣) مثل الآخرين
- (٤) أقل من الآخرين

٧٥- الى أي حد تحبين تتبع التنظيف والترتيب وراء أطفالك؟

- (١) أكثر بكثير من الآخرين
- (٢) أكثر بقليل من الآخرين
- (٣) مثل الآخرين
- (٤) أقل من الآخرين

٧٦- الى أي حد تهتمين بقضاء وقت مع أطفالك؟

- (١) أكثر بكثير من الآخرين
- (٢) أكثر بقليل من الآخرين
- (٣) مثل الآخرين
- (٤) أقل من الآخرين

-٢٠-

٧٧- فى بعض العائلات الأب له الكلمة الأخيرة فى تربية الأطفال
والبعض الآخر يترك الأب التربية الى الأم. فمن عنده الكلمة
الأخيرة فى عائلتكم؟

- (١) الزوجه
 (٢) الزوج والزوجه
 (٣) الزوج
 (٤) لا يوجد تحديد

٧٨- من عنده القرار النهائى فى الأشياء الأخرى غير تربية الأطفال؟

- (١) الزوجه
 (٢) الزوج والزوجه
 (٣) الزوج
 (٤) غير محدد

٧٩- من عنده القرار النهائى فى اختيار الأصدقاء؟

- (١) الزوجه
 (٢) الزوج والزوجه
 (٣) الزوج
 (٤) غير واضح

٨٠- من عنده القرار النهائى فى قضاء وقت الفراغ؟

- (١) الزوجه
 (٢) الزوج والزوجه

-٢١-

- (٣) الزوج
 (٤) غير واضح

٨١- من عنده القرار النهائي فى صرف النقود ؟

- (١) الزوجه
 (٢) الزوج والزوجه
 (٣) الزوج
 (٤) غير واضح

٨٢- الى أى حد تعتمدين على الآخرين فى تربية الاطفال؟

- (١) نادرا
 (٢) فى بعض الاحيان
 (٣) عادة
 (٤) تقريبا فى كل وقت

٨٣- الى أى حد تعتمدين على زوجك فى تربية الاطفال؟

- (١) نادرا
 (٢) فى بعض الاحيان
 (٣) عادة
 (٤) تقريبا فى كل وقت

٨٤- الى أى حد تعتمدين على أحد آ خر غير زوجك فى اصلاحات المنزل ؟

- (١) نادرا

-٢٢-

- (٢) فى بعض الاحيان
- (٣) عادة
- (٤) تقريبا فى كل وقت

٨٥- الى اى حد أنت راضية عن شعورك بالحرية عندما تكونين بعيدة
عن الاطفال؟

- (١) نادرا
- (٢) فى بعض الاحيان
- (٣) عادة
- (٤) تقريبا فى كل وقت

Husbands' Interview Schedule
(1)

رجـال

بيانات هذه الاستمارة سريـة ولا تستعمل الا
لاغراض البحث العلمـي.

-
- ١- السن _____
 - ٢- الديانة _____ المذهب _____
 - ٣- الجنسية _____
 - ٤- اسم منطقة السكن _____
 - ٥- عدد الاخوة الذكور _____
 - ٦- عدد الاخوات الاناث _____

ضع علامة x في المربع المناسب من فضلك

٧- مرحلة التعليم التي وصلت اليها

- (١) لا يوجد
- (٢) أقرأ وأكتب
- (٣) ابتدائي ومتوسط + عدد السنوات _____
- (٤) موء هل ثانوى بأنواعه + عدد السنوات _____
- (٥) موء هل أعلى من ثانوى وأقل من جامعة + عدد
السنوات _____
- (٦) موء هل على (جامعة ومعاهد عليا) + عدد
السنوات _____

(٢)

(٧) درجات علمية (دبلومات ماجستير دكتوراه) + عدد السنوات _____

٨- المهنة أو الوظيفة _____

٩- هل تكون راضيا لو عمل ولدك وهو فى مثل سنك العمل الذى تقوم به الآن ؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

١٠- هل تكون راضيا لو حصل أولادك على نفس القدر الذى حصلت عليه من تعليم ؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

١١- هل أنت راضى جدا بالفرص الموجودة أمامك فى عملك الحالى ؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

- ٣ -

١٢- هل تكون راضيا لو حصل ولدك أو أولادك وهم فى مثل سنك على نفس الدخل الذى تحصل عليه الآن وأن يعيشوا فى نفس المستوى الذى تعيشه الآن؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

١٣- هل تفضل كثيرا أن تجلس فى البيت للاستجمام طول اليوم بدل العمل؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

١٤- هل ترى الوقت الذى تقضيه فى عملك يرضيك أكثر من الوقت الذى تقضيه فى البيت؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

١٥- هل تستمر فى عملك الحالى حتى لو حدث وورثت ارثا كبيرا؟

- (١) نعم
 (٢) نوعا ما

-٤-

(٣) لا

١٦- هل تعتبر العمل هو الشيء الذى يعطى للحياة معنى ورونقا
أكثر من أى شيء آخر؟

(١) نعم
 (٢) نوعا ما
 (٣) لا

١٧- هل ترتبط بعض اهتماماتك فى الحياة مع عملك ؟

(١) نعم
 (٢) نوعا ما
 (٣) لا

١٨- هل أحسست فى بعض الأحيان بالندم على اتجاهك الى العمل
الذى تقوم به الآن؟

(١) نعم
 (٢) نوعا ما
 (٣) لا

١٩- هل العمل الذى تعمله من أكثر الأشياء التى ترضيك فى حياتك؟

(١) نعم
 (٢) نوعا ما
 (٣) لا

(٥)

٢٠- هل تسرك الأشياء التي تفعلها في وقت الفراغ أكثر من العمل؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

٢١- هل ترى العمل الذي تعمله هو طريقة للحصول على النقود فقط؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

٢٢- هل تشعر بالراحة مع زوجتك من الناحية المالية منذ تزوجتما؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

٢٣- هل ترى أهمية كبيرة في أن يكون مرتبك مرتفعاً؟

- (١) نعم
 (٢) نوعا ما
 (٣) لا

٢٤- هل تشعر بأن حالتك المالية الآن جيدة جداً؟

(٦)

- (١) نعم
 (٢) نوعاً ما
 (٣) لا

٢٥- هل تشعر بأن حالتك المالية ستكون جيدة جداً؟

- (١) نعم
 (٢) ربما
 (٣) لا

٢٦- هل يوجد أوقات كثيرة تحرم نفسك فيها وعائلتك بسبب قلة المرتب؟

- (١) نعم
 (٢) أحياناً
 (٣) لا

٢٧- هل تشعر بقلق من ناحية أن ينقص المرتب أو تتعرض للبطالة؟

- (١) نعم
 (٢) أحياناً
 (٣) لا

٢٨- في الوقت الحالي هل تشعر بعدم استمرار وقلق كثير من ناحية كثرة الأقساط والديون؟

- (١) نعم
 (٢) نوعاً ما
 (٣) لا

(٧)

يختلف الرجال في شعورهم نحو أهمية التقدم والنجاح في العمل والحياة عموماً، بعض الرجال يضحون بالكثير لكي يصلون الى هذا الهدف والبعض الآخر يشعر بأن هناك أشياء أخرى في الحياة غير العمل والتقدم فيه تستحق التضحية.

٢٩- مثلاً، اذا كان التقدم والنجاح يستدعي بأن لا تأخذ أجازات لعدة سنوات فهل تفعل؟

- (١) نعم
 (٢) ربما
 (٣) لا

٣٠- هل تنصرف عن اهتماماتك الاجتماعية لتتفرغ لعملك وتتقدم فيه؟

- (١) نعم
 (٢) لا

٣١- هل توافق على السكن موء قتا في منطقة أقل من مستواك في سبيل تقدمك في العمل؟

- (١) نعم
 (٢) لا

(٨)

٣٢- هل تضحى بوقت استجمامك فى سبيل التقدم فى العمل ؟

- (١) نعم
- (٢) لا

٣٣- هل تنقل عائلتك الى مكان غريب من البلد فى سبيل التقدم فى العمل؟

- (١) نعم
- (٢) لا

٣٤- هل توءل انجاب أطفال أو زيادة عددهم فى سبيل التقدم فى العمل ؟

- (١) نعم
- (٢) لا

٣٥- هل ترضى بأن تقلل من مزاولة الأشياء الى تعجبك وتزاوول ما لا يعجبك فى سبيل التقدم فى عملك ؟

- (١) نعم
- (٢) لا

٣٦- هل ترضى اذا استدعى الأمر بأن لا ترى زوجتك وأولادك موء قتا فى سبيل التقدم فى عملك؟

- (١) نعم
- (٢) لا

-٩-

٣٧- هل تجازف بصمتك اذا استدعى الامر في سبيل التقدم في عملك ؟

- نعم (١)
 لا (٢)

٣٨- هل تجازف بعمل أنت مستقر فيه وتلتحق بعمل أقل لوجود فرص كثيرة به ؟

- نعم (١)
 لا (٢)

٣٩- اذا كان التقدم في العمل يستدعي ارسال اولادك الى مدرسة أقل من مستواهم فهل تفعل ذلك ؟

- نعم (١)
 لا (٢)

٤٠- اذا كان التقدم والنجاح في العمل يستدعي عدم الحديث في الدين أو السياسة فهل تفعل ذلك؟

- نعم (١)
 لا (٢)

٤١- هل تشعر بان أهم شيء في العمل هو الفرص الموجودة به للتقدم؟

- نعم (١)
 لا (٢)

(١٠)

٤٢- هل تقضى وقتا طويلا تفكر فى طرق مبتكرة للتقدم فى العمل؟

(١) نعم

(٢) لا

٤٣- هل ترى الناحية المادية هى أهم شىء فى حياتك؟

(١) نعم

(٢) لا

٤٤- هل ترى من المهم جدا بالنسبة لك أن تمتلك أشياء فى نفس الجودة والمستوى الذى لدى أصحابك وجيرانك (مثل سيارة، منزل، ملابس..... الخ)

(١) نعم

(٢) نوعا ما

(٣) لا

٤٥- هل أنت حريص جدا على أن تتقدم الى الامام فى عملك؟

(١) نعم

(٢) لا

٤٦- هل ترى التقدم فى العمل هو أهم شىء فى حياتك؟

(١) نعم

(٢) لا

-١١-

٤٧- هل ترى مهما جدا لك أن يتزوج أولادك من نفس مستواهم؟

(١) نعم

(٢) لا

٤٨- هل ترى أن صفات الرجل هي الصمود والطموح؟

(١) نعم

(٢) لا

VITA

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