

STUDIES IN POPULATION, LABOUR FORCE AND MIGRATION
PROJECT REPORT NO. 2

NUPTIALITY PATTERNS IN PAKISTAN

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PREFACE

The need for 'endogenizing' demographic variables in development planning is now widely recognized. The planners have to spread their analytical net wider to capture in one 'go' both the demographic and socio-economic variables. This requires an explicit recognition of the two-way link between changes in fertility on the one hand and those in labour market, wages, income distribution, consumption, savings, investment and other variables on the other. The research work done so far in Pakistan has inadequately addressed itself to this two-way linkage between demographic and socio-economic phenomena. Researchers, constrained by limitations of both data and analytical framework, have tended to study the demographic phenomenon of fertility in isolation from such related matters as labour force participation, rural-urban migration and income and expenditure patterns. These studies have failed to analyse simultaneously the demographic, production and consumption decisions of households. For instance, high fertility rates are generally attributed to biological determinants alone which can be influenced by large supplies of such clinical devices as contraceptives. Such notions about the fertility behaviour of the households have given birth to ineffective government policies. That the many population planning adventures, taking mostly the form of crash programmes, undertaken so far have foundered should not surprise anyone. Fertility, like love that sustains it, is a many-splendoured thing. It must be seen in a broader socio-economic context.

The nature of the influences of economic forces, both direct and indirect, on fertility behaviour should therefore constitute a major area of concern for social scientists and policy makers. To make a start in

ACKNOWLEDGEMENTS

The authors acknowledge their greatest indebtedness to Prof. Syed Nawab Haider Naqvi, the Director of the Pakistan Institute of Development Economics, for his patronage and sustained encouragement to initiate this study. They are also highly thankful to Dr. Iqbal Alam, Chief of Research, Demography, for his helpful comments and suggestions to improve the draft of the paper and to Dr. M. Irfan, Project Manager and Chief of Research Economics, for his constant pursuance and encouragement in the completion of this study. Special thanks are also due to S.H.H.Naqvi, Chief of Publications Section, for his editorial help in the final version of the paper and to Javed Iqbal Shamsi for typing the entire manuscript.

this direction, the inter-linkages between such variables as fertility, labour force participation and migration and their effects on the household income and expenditure behaviour must be studied. Such a study should permit us to understand better the decision-making process of the household, which is the basic unit in both the demographic and economic analyses. Research studies of this genre have already been carried out in many other developing countries and have provided gainful insights into the determinants of household economic-demographic behaviour. However, in Pakistan the present exercise is the first of its kind.

In order to understand better the economic-demographic interface the project entitled "Studies in Population, Labour Force and Migration" has been undertaken by the Pakistan Institute of Development Economics in collaboration with the ILO and UNEPA. The project is a 'four-in-one' venture based on a national sample, the field-work for which was undertaken by the Statistics Division (formerly called Central Statistical Office, or CSO for short) covering 10,288 households. The survey generated a wealth of data on the household decision-making process concerning the behaviour of the connected foursome - viz. fertility, migration, labour force participation and income and expenditure. Every effort has been made to ensure reliability of the data. This study, which is being brought out in the form of a series of seven 'first' reports, would enhance our understanding of the behaviour of households with respect to the various ways in which they go about fulfilling their 'basic needs'. Even more important, it should lay the foundations of economic demography in Pakistan, opening up new areas of multi-disciplinary research that could not be perceived before. This study should also provide the researcher with a sufficient feel for the real world to permit formal economic-demographic modelling exercises. In this respect the present reports are truly pioneering both in intent and in purpose.

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NUPTIALITY PATTERNS IN PAKISTAN

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Introduction:

Although the study of the patterns of nuptiality has been a topic of great interest for social scientists, its demographic importance for intensive research has increased primarily because of its links with fertility. Changes in the age pattern of marriage and the proportion who never marry have played a significant role in explaining variations in levels of fertility in both developed and developing countries. In societies where marriage is universal, fertility is rarely controlled and child-bearing outside marriage is virtually non-existent, women's age at marriage has a direct bearing on the length of effective exposure period and hence on the levels of fertility. A number of studies have demonstrated the strong effect of women's age at marriage on fertility [6,12,14,15,16,22,29]. However, it is still controversial whether raising of the age at marriage is an effective strategy adopted by societies to achieve a decline in fertility in general and in population growth in particular.

There is an argument that a very early age at marriage (< 15 years) may lead to fecundity impairment and hence may result in lower levels of marital fertility than those that may result from a higher age at marriage. Coale and Tye (1961) have also warned that raising of a

very low age at marriage by a few years might have a positive effect on fertility since low early marriage fertility is an outcome of two main factors - adolescent sub-fecundity and delayed consummation of some of the marriages. But due to the ambiguous nature of the causal relationship between age at marriage and fertility, the question still remains about the determination of the 'threshold level' of age at marriage which may lead to a substantial decline in fertility. However, it has been observed that adolescent sub-fecundity is not apparent from age 18 onwards in many Asian countries including Pakistan [4].

In Pakistan where the average age at marriage is low and fertility is high, little empirical work has been done on the relationship between the two variables. Nevertheless, a number of studies have been undertaken on age at marriage in Pakistan. Using available census data on marital status by age, Sadiq (1965) estimated the Singulate Mean Age at Marriage (SMAM) at 23.5 years for males and 17.6 years for females in 1961. Based on the PGE 1964 data, Alam estimated the SMAM to be 24.7 for males and 19.1 for females [2]. Another estimate of the mean age at marriage through the use of net nuptiality tables came out to be 24.6 for males and 19.2 for females, based on the 1968 PGS data [11]. All these studies give an indication of a rise in age at marriage for both males and females in Pakistan.

Despite the fact that age at marriage has revealed an upward trend, its implications for a reduction in fertility level is still debated. Based on the 1961 census data, Ahmad (1969) estimated a maximum fertility decline of 12 percent between 1961 and 1971, with the

assumption of a sudden shift in age at marriage from 16 years to 20 years which seems to be an unrealistic assumption for a society like Pakistan [1]. Similarly, De Tray (1977) also pointed out a decline of 8 percent in completed fertility as a result of rise in the age at marriage from 15.2 to 19.2 years. He has also highlighted some of the problems associated with studying the relationship between age at marriage and fertility in Pakistan [8]. Recently, a slight decline registered in the fertility level in Pakistan has been attributed mainly to changes in nuptiality patterns [3].

Another important point worth discussing is that a shift from early to high age at marriage only occurs within a milieu of broad social and economic change involving changes in the role and status of women, education, family structure, employment structure, etc. These changes, in turn, are likely to have implications for fertility. Thus, a linkage between increased age at marriage and fertility should also be studied in this context rather than merely as a social strategy for reducing fertility.

Keeping in view the strong association of age at marriage with other variables, the objective of present report is to examine the pattern of nuptiality in Pakistan. Specifically, we have examined in depth:

- a. Levels and trends of nuptiality patterns over-time;
- b. Differentials in age at marriage by selected socio-economic variables; and
- c. Association of selected background characteristics with nuptiality patterns.

Data and Their Limitations

The present analysis will be conducted with data mainly from the Population, Labour Force and Migration (PLM) survey of Pakistan for the year 1979-80. This survey is based on a sample of 10098 ever-married women aged ≤ 50 years. A standard questionnaire of the Pakistan Fertility Survey (1975) was repeated for gathering information on fertility including questions related to marriage history and selected background characteristics of women.¹ Moreover, estimates based on the data from the Pakistan Fertility Survey of 1975 (collected as part of World Fertility Survey) and National Impact Survey of 1968-69 will be used in conjunction with the recent survey (PLM) to examine the changes occurring in marriage patterns over-time. Besides, data on the distribution of population according to marital status in different censuses will also be used to study the trends and tempo of change in age at marriage.

The measures used to explain the variations in marriage pattern are: a) Singulate mean age at marriage (SMAM); Proportion single by age, b) direct estimate of mean age at marriage (MAM); and percent married at age 21 or later. The SMAM technique is based on percent single by age and summarizes the experience of all persons enumerated at a given point in time in a hypothetical cohort.² This measure is widely used to show trends in age at marriage over-time.

1. For a detailed description the size and framework of sample, see Irfan, M. Research Report No. 118 PIDE 1982.
2. For a discussion of the singulate mean age at marriage and the method of its computation, see Hajnal (1953) and Shryock and Siegil. Methods and Materials of Demography. Vol. I. 1973 P. 295

It must be mentioned that the census and survey data in Pakistan suffer from age mis-reporting and under-/over-enumeration of population. Therefore, the estimates of age at marriage and proportion single by age are likely to be affected. However, it may be expected that with increased socio-economic changes in the country, age reporting might have become better for relatively younger and educated women. Moreover, the introduction of the Muslim Family Law Ordinance in 1961 (which made the registration of marriages compulsory along with their respective ages and other particulars) and the initiation of the registration scheme in 1972 might have created an awareness and realization among people about reporting of events. However, there is no evidence of an improvement in age data over-time in Pakistan. Without any empirical evidence, it would be difficult to say that age reporting has been relatively better for the younger cohorts of women than for the older one.

In the PLM survey of 1979-80, information on the timing of marriage was obtained through three main questions. The first question pertained to the month and year of marriage. Women who did not respond to this question were asked an alternative question about their duration of marriage. Also, information on the age at marriage was sought independently from all women. It is possible that information on the three questions was combined and the missing piece was adjusted during the editing procedure which could bias either of the estimates, thus making it difficult to separate individual errors. For the purpose of analysing this situation, a few of the original questionnaires were randomly examined and it was found that age at marriage and duration of marriage were reported by all women directly while the year of marriage was computed

or adjusted accordingly. This, therefore, implies that inconsistencies in the estimates by age cohorts are mainly due to reporting or response error in the data.

Besides that, the data suffer from all limitations of a cross-sectional survey confined to information on ever-married women of the ages 10-49 years which shall be discussed in the subsequent analysis.

Changes in the Age Pattern of Marriage:

A noticeable change in the nuptiality patterns of women in Pakistan has occurred during the last three decades. To analyse this change, it would be useful to examine the past trends in the age at marriage and see the variations in proportions single in different age cohorts over-time.

Using the well-known technique developed by Hajnal, the singulate mean age at marriage (SMAM) can be calculated from the marital-status distribution of population as given in different censuses and surveys. Table 1 presents the SMAM of males and females since 1951 from different data sources. It must be mentioned here that besides the problems already mentioned, the data in different censuses and surveys are not entirely comparable due to variations in age reporting, coverage, and methodology of data collection.

The estimates given in Table 1 show a rising trend in female age at marriage from about 18 years in 1951 to almost 21 years in 1981. For the decades preceding 1951, SMAM was estimated by Sadiq for the Muslim populations of those provinces of India now constituting Pakistan. According to those estimates, SMAM of females increased from 15.8 in 1921 to

Table: 1

SINGULATE MEAN AGE AT MARRIAGE IN PAKISTAN 1951-1981

Year	Source	Male	Female	Difference (Male-Female)
1951	CENSUS	23.4	17.9	5.5
1961	CENSUS	24.5	17.6	6.9
1964	PGE	25.4	19.4	6.0
1968-71	PGS	25.8	19.5	6.3
1972	CENSUS	26.2	20.0	6.2
1975	PFS	25.4	19.8	5.6
1976	PGS	26.0	20.0	6.0
1979 ³	PLM	25.6	20.2	5.4
1981	CENSUS	25.4	20.8	4.6

Sources 17, 18, 19, 20, 217

³ Female SMAM for urban and rural areas in the PLM survey is 21.4 and 19.6 years, respectively. For Punjab 20.5, Sind 19.6, NWFP 20.2 and Baluchistan 18.7 years.

16.4 in 1941, indicating only 0.6 year increase in two decades /237. However, this trend accelerated in subsequent decades when the SMAM increased to 17.9 in 1951, a sudden increase of 1.5 years within a decade. One of the reasons explaining this rise was the civil and political disturbances and displacement of families just after the partition of the sub-continent in 1947 which had a delaying impact on age at marriage /137. Following 1951, the SMAM rose to 20 years in 1972 and to 20.8 in 1981, indicating an upward shift of almost 3 years within two decades. Males, on the other hand, also showed an increase in the SMAM, but the tempo of change has been slightly different from that for females. The SMAM for the males increased by one year between 1951 and 1961 whereas that for females showed a slight decline. This could be due to under-estimation of female population or mis-reporting of their age in 1961. But in the next decade, 1961-72, increase in age at marriage was much higher for females (2.4 years) than for males (1.7 years). This sudden increase in female age at marriage within a decade could partly be explained in terms of the rising level of socio-economic development in the country during the Sixties which may have had a delaying impact on the age at marriage. Since 1972, the age at marriage of males and females has been floating around 26 years and 20 years, respectively. Since the overall change in the age at marriage of females is greater than that of males, the gap between their age at marriage has also narrowed from 5.5 years in 1961 to 4.6 years in 1981 (see Table I).

Another important indicator of changes in patterns of nuptiality is the proportion single in different age cohorts. Such information has been given in Table 2 for both males and females for the 1951 - 1981 period. A direct examination of Table 2 confirms the statement that nuptiality pattern in Pakistan is characterized by universal but delayed marriage at relatively younger ages. At ages beyond 25 years, the population single do not show wide variations over all the years under study. About 92 percent of women are eventually married by age 29 and nearly 96 percent by age 34 in 1981. The most notable observation in Table 2 is substantial shift in the proportion of single women in the 15-19 age group where it increased from 46.6 percent in 1961 to 65.6 percent in 1972, and 70 percent in 1981. In the age group of 20-24 years, this proportion almost doubled as it increased from 12 percent in 1961 to 24.4 percent in 1981. An upward shift in the proportion of single women in younger age groups supports the notion of a nuptiality transition in Pakistan. Although the proportion of single males also increased markedly in the younger age groups, the over-all pattern still indicate traditional nuptiality behaviour among men. As may be seen, only 10.6 percent of 30-34 years old males and 3.1 percent in 40-44 years of age remained single in 1979. However, the changes occurring over-time suggest that a persistent increase in the proportion single in younger age groups of both males and females may lead to a further rise in the age at marriage in Pakistan.

Table: 2

PROPORTION SINGLE BY SEX AND AGE: PAKISTAN 1951-1981

Age	<u>1951 Census</u>		<u>1961 Census</u>		<u>1972 Census</u>		<u>1975(PFS)</u>		<u>1979(PLM)</u>		<u>1981 Census</u>	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15-19	68.0	45.7	83.6	46.6	92.6	65.6	94	62.0	95.0	72.2	92.5	68.9
20-24	42.0	17.7	52.9	12.0	67.8	21.3	67	22.0	65.9	23.3	64.0	24.4
25-29	22.8	6.4	27.9	5.1	36.0	7.2	32	8.6	31.4	6.5	32.8	7.9
30-34	18.4	3.9	14.1	3.0	17.4	3.6	15	3.5	10.6	2.3	15.8	3.7
35-39	7.8	3.4	8.8	2.7	0.9	2.1	6	2.1	6.2	1.8	8.1	1.8
40-44	6.2	3.2	6.4	2.0	0.6	1.5	4	1.5	3.1	1.2	6.3	1.7
45-49	4.5	1.6	5.2	1.9	4.3	0.9	3	1.0	2.0	0.7	3.9	1.1

Source: /17,18,21/

Using data from cross sectional surveys, where information on the age at marriage of women is recorded through individual interviewing, changes in the age pattern of first marriage may also be studied by examining the trends in age at which certain proportions of successive birth cohorts are married. But the main problem with these data is that the nuptiality experience of only a few cohorts would be complete which limits the possibility of a direct comparison of mean age at marriage for different age cohorts since the mean would be higher for cohorts of older age at the time of the survey. One way to eliminate this bias is to compare the age at marriage of those who marry before age 25, for cohorts aged 25 years and above at the time of the survey. Table 3 presents the percentage distribution of women married before age 25 and their mean age at marriage for cohorts aged 25 and over for 1975 and 1979. The proportions married at specified ages clearly indicate a trend toward delayed marriage for relatively younger women. The proportion of all women/before the age of 15 years has substantially declined from 29.0 percent in 1975 (PFS) to 12.4 percent in 1979-80 (PLM Survey), while the proportional marrying between the ages 20 and 21 years has risen from 9.0 percent to 18.3 percent, reflecting an upward shift in age patterns of marriage.

However, the trends in age at marriage emerging from Table 3 are not as revealing as they were in case of proportions single in different age groups. One may say that the selection of the sample of ever-married women within a cross-section has masked the trend that was observed in the census data. As may be seen, no clear pattern of variations in the mean age at marriage is evident in the PLM survey where the means for all

Table: 3

PERCENTAGE DISTRIBUTION AND MEAN AGE AT MARRIAGE OF WOMEN MARRIED BEFORE AGE
25 YEARS AND HAVING CURRENT AGE OF 25 YEARS OR MORE: 1975 and 1979

Age Group	AGE AT FIRST MARRIAGE										Percent of the		Mean age at Marriage*	
	<15		15-17		18-19		20-21		22-24					
	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM
25-29	23.2	10.5	38.0	41.5	19.1	22.9	10.9	17.5	8.7	7.6	26.3	25.9	17.0	17.5
30-34	26.5	12.2	41.2	40.7	15.1	19.5	10.7	18.6	6.5	8.9	23.3	22.2	16.6	17.4
35-39	31.1	10.1	39.8	44.1	17.1	19.6	7.0	18.4	5.0	7.8	17.9	18.9	16.2	17.4
40-44	40.7	12.3	38.5	40.6	12.2	17.9	3.3	19.2	5.3	10.0	17.9	16.7	15.7	17.4
45-49	29.0	18.4	45.5	43.9	12.2	14.6	9.8	18.1	3.5	5.0	14.6	16.3	16.2	16.7
Total	29.0	12.4	40.0	42.0	16.0	19.4	9.0	18.3	6.0	7.9	100.0	100.0	16.4	17.3

Sources: /21 and PLM survey data

*Unadjusted: It may be noted that the estimates of mean age at marriage in this and all subsequent tables have not been adjusted by 0.5 years and hence are tentative. Since information on age at marriage of women was recorded in completed years in both the surveys, the estimates of the means need to be adjusted by 0.5 year to account for variations during a calendar year.

age groups are almost identical (17.4) except for the oldest cohort of women (45-49) who have married 0.8 year earlier, on average (16.7) than the younger women. On the other hand, the PFS estimates have shown a more consistent trend although the difference in age at marriage of the younger (25-29) and older women (40-49) is of a similar magnitude as that of PLM survey. Reasons for lack of variations in age at marriage in different age cohorts in PLM is surprising and estimates could partly be explained in terms of mis-statement of the age at marriage by older women.

Information on female age at first marriage by year of marriage also makes it possible to examine trends in marriage patterns over-time. Table 4 presents the mean age at marriage of currently married women as well as the percentage of women married at ages 15 or earlier and 21 or later by marriage cohorts from the three surveys, NIS, PFS, and PLM respectively.⁴ While comparing the estimates of mean age at marriage for all women among the three surveys,⁵ there is an increase of one and half year from 1968-69 (16.0 years) to 1979-80 (17.5). But it must be noted that these estimates do not represent the current age at marriage as they pertain to the behaviour of currently married women between the age of 10 and 49 years within a cross-section. The estimates are thus subject to downward biases due to truncation, especially when age at marriage is rising. Therefore, to infer changes in age at marriage from these data, one must assume that nuptiality has remained unchanged. Moreover, the

4. Since the NIS pertained to the sample of currently married women, this sample has been chosen in Table 4 to make the data comparable among the three surveys.

5. The questions asked on age at marriage in the three surveys were of the nature that make the data highly comparable. For details of the questions see /NIS and PFS/.

Table: 4

PATTERN OF MARRIAGE OF CURRENTLY MARRIED WOMEN BY YEAR OF MARRIAGE
IN PAKISTAN: NIS (1968-69) PFS (1975) AND PLM (1979-80)

Year of Marriage	Mean Age At Marriage			Percent Married at Age ≤ 15			Percent Married at ≥ 21			Percentage of the sample		
	NIS	PFS	PLM*	NIS	PFS	PLM	NIS	PFS	PLM	NIS	PFS	PLM
Before 1950	15.2	15.0	14.8	49.7	52.7	71.9	3.1	1.2	0.1	28.3	16.7	6.5
1950-54	15.4	15.7	16.4	44.3	44.1	43.9	4.4	5.9	3.2	14.8	9.2	9.3
1955-59	15.7	16.0	17.4	39.5	40.8	33.9	10.1	7.2	12.0	19.7	14.4	12.7
1960-64	16.8	16.6	17.5	32.8	31.1	32.9	12.1	8.0	13.8	19.3	16.3	16.6
1965-69	17.1	17.1	17.8	29.1	28.7	27.5	-	13.1	15.9	17.9	19.1	17.6
1970-74	-	17.5	17.9	-	23.6	23.7	-	15.4	15.8	-	4.3	19.4
1975-79	-	-	18.2	-	-	15.9	-	-	17.7	-	-	18.9
All Women	16.0	16.5	17.5	38.5	33.3	30.7	6.2	9.3	13.2	100.0	100.0	100.0

Sources: [20], [21], PLM Survey 1979/.

Note: It must be noted here that due to built in sampling selectivity the estimates of mean age at marriage will be under estimated, both for younger and older cohorts.

*: The lower estimates for the earlier marriage cohorts (<1950) in the PLM survey are an under-estimate of age at marriage mainly due to the selection criteria of married women in the sample.

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estimates of the earliest marriage cohorts (1950's) may also be affected due to the truncation of women currently at ages 45-49, because women who got married at age 20 or later prior to 1950 by definition are excluded from the sample. Since only a small proportion of women might have delayed their marriages beyond age 20 in late 40's or early 50's, the results are not likely to be much affected.

Keeping all these limitations in view, however, a rising trend in age at marriage is evident from the period estimates of NIS, PFS and PLM survey (Figure 2). According to the PLM survey estimates, there is a gain of about two years in mean age at marriage of women, rising from 16.4 in 1950-54 to 17.8 years in 1965-69 and 18.2 years for women married during 1975-79 (Table 4). This increase is supported by a substantial decline in the proportion of women marrying at age 15 or earlier where it fell from 43.9 percent in 1950-54 to only 15.9 percent in 1975-79. Similarly, the tendency to delay marriage up to the age of 21 or later has also increased as this percentage rose from 3.2 during 1950-54 to 17.7 during 1970-75 in the PLM survey. Among the three surveys, the proportion married at early ages (15 years or less) has showed a continuous decline from 38.5 percent in 1968-69 (NIS) to 35.5 in 1975 (PFS) and 30.7 percent in 1979 (PLM). Similarly the percentage marrying at age 21 or later has more than doubled rising from 6.2 in 1968-69 to 13.2 in 1979-80, reflecting a trend towards delayed marriage within a decade or so.

Table: 5

PATTERN OF MARRIAGE OF CURRENTLY MARRIED WOMEN BY YEAR OF MARRIAGE IN
PAKISTAN FOR URBAN RURAL AREAS 1979-80

Year of Marriage	Mean Age at Marriage		Percentage Married at Age 15 or earlier		Percent Married at Age 21 or later		Percent of the Sample	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
1950-54	16.3	16.5	44.3	43.3	2.5	3.4	9.9	9.1
1955-59	17.2	17.5	34.3	33.4	10.6	12.5	12.9	12.7
1960-64	17.4	17.6	30.5	35.3	13.3	13.9	15.3	15.6
1965-69	17.8	17.8	26.3	27.8	17.7	15.3	16.5	17.9
1970-74	18.5	17.7	15.0	26.7	19.3	14.6	19.0	19.6
1975-79	18.9	18.0	11.5	17.4	26.9	14.6	18.3	19.1
-16- All Women	17.6	17.5	28.6	32.5	15.2	12.5	100.0	100.0

Source: /PLM Survey 1979/

For the purpose of examining the trend in age at marriage in more detail, a further breakdown of the PLM survey data by urban and rural residence has ^{been} / given in Table 5. No significant urban-rural differentials in patterns of marriage have emerged except for the marriage cohorts of 1970-74 and 1975-79, where urban women got married about one year later than their rural counterparts. In the marriage cohorts prior to 1970, rural women married slightly later than the corresponding urban women. This unexpected trend implies that relatively older women mostly from rural areas have exaggerated the reporting of their marriage age, a finding already noted from Table 3.

Differentials in Marriage Patterns:

After observing the past trends and changing tempo of female age at marriage from the census and survey data, this section deals with the identification of association of background factors with the differentials in marriage patterns in Pakistan. For this purpose, data from the individual surveys of both PFS and LM have been analysed. The main focus is on examining and explaining variations in the nuptiality experience of ever-married women in their first marriage only, with different socio-economic and demographic characteristics. These include place and region of residence, educational attainment, work participation, pattern of work etc. Moreover, differentials in marriage patterns of females by their husbands' socio-economic characteristics such as education and occupation will also be studied.

Urban-Rural Residence:

The effect of urban residence on the timing of marriage is evident from few studies where urban women generally have a higher age at marriage than rural women [22,24,25]. This section analyses the urban-rural differentials in females age at marriage in Pakistan. Besides the information on current place of residence, one question in the survey was asked about "childhood type of place of residence prior to marriage". Presumably, this was the period of adolescent socialization and education which could have influenced the respondent regarding local norms about adult behaviour. It can therefore, be expected that women who grew up in big towns and cities were more likely to delay marriage than those who grew up in rural areas. Data from the two surveys support this notion when we look at Table 6 showing the mean age at marriage of females by place of residence and year of marriage for PFS and PLM survey.

The table does not reveal substantial urban-rural differentials in age at marriage except for the cohorts marrying during 1970-79. However, it is apparent that life-time urban residence has the greatest effect on the timing of female marriage both in PFS and PLM survey. Urban women who were married more recently (1975-79) had age at marriage around 19 as compared to 18 for rural residents and 18.5 for rural migrants. In 1979, an overall increase in the age at marriage for urban women has been 2.6 years as compared to 2 years for rural women during the last three decades. In 1975, such an increase was 2 years in the case of urban women and 1.4 years for rural women.

Table: 6

MEAN AGE AT MARRIAGE BY PLACE OF RESIDENCE AND YEAR OF MARRIAGE EVER-MARRIED
WOMEN, 1975* AND 1979

Year of Marriage	CURRENT RESIDENCE				MIGRATION STATUS				DIFFERENCE IN AGE AT MARRIAGE BY			
	Urban		Rural		Life Time Urban Residents		Rural to Urban Migrants		Current Residence		Migration Status	
	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM
1950-54	16.1	16.3	15.7	16.5	15.8	16.2	16.0	16.6	+0.4	-0.2	-0.2	-0.4
1955-59	15.7	17.2	16.2	17.5	16.2	17.2	15.7	17.1	-0.5	-0.3	+0.5	+0.1
1960-64	16.7	17.4	16.5	17.6	17.0	17.6	16.3	16.9	+0.2	-0.2	+0.7	+0.7
1965-69	17.6	17.8	17.0	17.8	17.9	18.0	16.7	17.4	+0.6	+0.0	+1.2	+0.6
1970-74	18.1	18.5	17.1	17.7	18.4	18.6	17.4	18.2	+1.0	+0.8	+1.0	+0.4
1975-79	-	18.9	-	18.0	-	19.0	-	18.5	-	+0.9	-	+0.5
All Women	16.8	17.6	16.3	17.5	17.0	17.7	16.2	17.3	+0.5	+0.4	+0.8	+0.4

Source: [21 and PLM Survey 1979]

* The PFS (1975) estimates pertain to the sample of currently married women.

A further analysis of urban-rural differentials in the age at marriage is done at the individual level by current age. Table 7 presents such differentials by age where younger urban women (25-29) were married 0.6 years later than younger rural women in PFS and 0.7 year later in PLM survey. In the age cohort of 40-49, urban-rural differentials were negligible both in PFS and PLM (Table 7). The differences in age at marriage by migration status are more conspicuous in PFS than in PLM. In ages 25-29 years, life-time urban residents married 1.5 years later than rural in-migrants in PFS and 0.7 year later in PLM. In older age cohort, such differences were of a lesser magnitude. These findings thus suggest that a change in the values regarding the timing of girls' marriage seems to have been taking place both in urban and rural areas, but such a departure is more pronounced for life-time urban residents.

Region of Residence:

Pakistan has four main administrative provinces namely the Punjab, Sind, NWFP and Baluchistan comprising about 58, 21, 17 and 4 percent of the country's total population, respectively /187/. Due to variations in the development level and cultural background of these regions, it is expected that the nuptiality patterns would also differ. This statement is confirmed when we look at the estimates of mean age at marriage by region of residence in Table 7 which indicate somewhat different marriage patterns among the four provinces of Pakistan. The province of Punjab, enjoying a better level of socio-economic development, showed the highest mean age at marriage, followed by Sind, NWFP and Baluchistan in 1979.

Table: 7

MEAN AGE AT MARRIAGE BY CURRENT AGE AND PERCENT MARRIED AT AGE 21 OR LATER BY SELECTED
SOCIO-ECONOMIC CHARACTERISTICS: EVER MARRIED WOMEN 1975(PFS) AND 1979(PLM)

Variables	Current Age				All Ages		Percentage Married at Age 21 or Later		Percent of Sample		Difference in Mean Age at marriage between Age 40-49&25-29	
	25-29		40-49									
	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM
All Women	17.1	17.6	16.1	17.6	16.5	17.5	9.8	13.2	100.0	100.00	+1.0	0.1
<u>Current Residence</u>												
Urban	17.5	18.1	16.1	17.3	16.7	17.6	11.7	15.2	26.6	26.1	+1.4	+0.8
Rural	16.9	17.4	16.1	17.5	16.4	17.5	8.5	12.5	73.4	73.9	+0.8	-0.1
<u>Migration Status:</u>												
Life-time Urban	18.0	18.1	16.9	17.3	17.0	17.7	13.6	-	17.3	19.4	+1.1	0.8
Rural	16.5	17.4	15.7	17.7	16.2	17.3	8.0	-	8.6	6.6	+0.8	0.3
<u>Region of Residence</u>												
Punjab	17.5	17.8	17.3	17.7	16.8	17.7	10.6	14.8	67.2	61.1	+0.2	+0.1
Sind	16.1	17.4	16.0	17.0	16.6	17.0	9.2	11.2	21.8	26.4	+0.1	+0.4
NWFP	16.6	17.2	16.1	18.3	11.2	17.4	10.0	10.0	+0.5	9.0		-1.1
Baluchistan		17.0		18.2		16.9		7.3		3.4		-1.2
<u>Education</u>												
No Schooling	16.7	17.5	16.0	17.5	16.2	17.3	7.9	12.1	89.0	88.8	+0.7	0.0
1-5 years	18.0	18.2	17.2	17.7	17.5	17.4	13.9	13.2	6.9	5.3	+0.8	+0.5
6+	20.9	19.6	17.7	18.9	19.4	19.0	32.3	31.5	4.1	5.9	+2.2	+0.7
<u>Pattern of Work</u>												
Never Worked	17.2	17.6	16.2	17.6	16.6	17.5	10.0	13.1	79.7	87.2	+1.0	0.0
Only before Marriage	18.9	19.2	19.1	18.1	17.9	18.5	18.3	24.0	2.4	0.0	-0.3	+1.1
Only after Marriage	15.8	17.4	15.5	17.4	16.0	17.2	8.1	9.4	10.7	7.1	+0.3	0.0
Before and after Marriage	17.0	17.7	16.5	17.7	16.6	18.0	10.3	19.1	7.2	4.8	+0.5	0.0

Note: All PFS estimates are for currently married women

Source: [21, PLM Survey 1979].

About 15 percent of the total women delayed marriage up to age 21 or later in Punjab as compared to 11.2 percent in Sind, 10 percent in NWFP and 7.3 percent in Baluchistan in the PLM survey. However, no conspicuous differences in the marriage behaviour of the younger and older women are evident in the four regions both in PFS and PLM. In fact, the unexpected higher estimates of age at marriage for the older cohort of women (40-49) in the province of NWFP and Baluchistan in 1979 need further investigation, especially due to the fact that the two provinces are relatively on a lower scale of socio-economic development and are more traditional. One possible reason for explaining this unexpected trend could be the overstatement of age by older women or response error in the data which has already been noted previously for the older cohort of women in rural areas. But on the whole it may be said that a transition in nuptiality seems to have taken place in the more developed regions of the country (Punjab and Sind) where relatively larger proportion of females are literate or living in urban areas.

Educational Attainment:

Formal education is known to have a direct and positive effect on the postponement of marriage 17, 26, 27, 28, 30, 31. Educational attainment upto higher levels tends to enhance the socio-economic aspirations of women which may affect the waiting time involved in finding the suitable mate, if women want to get married to men at least as well-educated as themselves. In Pakistani society where a very small proportion of women are educated, and girls' marriages are primarily arranged by their parents, the effects of education on the age at marriage may not be equally strong for different levels of education. To test this hypothesis, estimates of mean age at

marriage by levels of education and age are presented in Table 7 for PFS and PLM survey.

Of all the variables in this table, years of education has by far the strongest effect on female age at marriage. The differentials in age at marriage by education levels have persisted in the same expected direction, but the difference in mean age at marriage between younger and older women is more conspicuous in PFS than in the PLM survey.

Based on the PLM survey estimates, 11.2 percent of women in the sample have been exposed to formal schooling, out of which only 5.9 percent have completed above primary education as compared to 4.1 percent in the PFS. But the small proportion of women who had attended school showed the highest delay in their timing of marriage. The mean age at marriage of women with more than primary education is about 3 years higher than those with no education in the PFS and about 2 years higher in the PLM survey. The difference in mean age at marriage between women with no schooling and those with a few years of primary education is of modest magnitude, but completing of above-primary education delays marriage up to 19.6 years, on average, for younger women (25-29) and 18.9 for older women (40-49) in 1979 (PLM). Such difference had been even greater in 1975 (PFS) where women in younger age cohort had age at marriage around 21 as compared to 18.7 for older age cohort for six or more years of schooling. These results suggest that younger women with no schooling or below primary education showed very little change in their timing of marriage as compared to older women within similar levels of education. Thus, it may be concluded that completion of above-primary education is significantly important in delaying female marriage.

Another way to express these differences is to consider the percentage who marry at age 21 or later. About 32 percent of women with six or more years of schooling delayed their marriage until after age 21 as compared to 12.1 percent with no schooling and 13.2 with 1-5 classes passed. Similar trends were found in the PFS data where 32.2 percent postponed married until after age 21 with above primary education as compared to only 7.9 percent with no schooling and 13.9 with a few years of primary education.

A further disaggregation of the PLM survey sample by urban-rural areas reveals that the small percentage of women who have formal schooling exposure are mostly from urban areas. Based on PFS data, Karim (1980) has shown that the life-time urban residents have had better opportunities to attend school and had a distinct higher mean age at marriage than their rural counterparts. To substantiate it further by the PLM survey data, Table 8 reveals urban-rural differentials in mean age at marriage by levels of education and age for ever-married women.

Table: 8
MEAN AGE AT MARRIAGE BY LEVELS OF EDUCATION AND AGE IN URBAN-RURAL
AREAS OF PAKISTAN: 1979

Level of Education	25-29		40-49		All Ages		Percent of Sample		Difference in age at marriage between Ages 45-49 & 25-29	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
No										
Schooling	17.6	17.4	17.0	17.7	17.2	17.4	72.3	95.1	+0.6	-0.3
1-5	18.3	18.1	17.0	18.9	17.8	17.9	10.2	3.3	+1.3	-0.8
6+	19.7	19.0	18.9	19.3	19.6	19.5	17.5	1.6	+0.8	-0.3
Total	18.1	17.5	17.2	17.7	17.6	17.5	100.0	100.0	+0.9	-0.2

Source: /PLM Survey 1979/.

As may be seen, no substantial urban-rural differentials in age at marriage emerge by levels of education. However, it appears that the effect of years of schooling is more conspicuous in case of younger women both in urban and rural areas. In the age cohort 25-29 years, urban women with 6 and above years of schooling married about 2 years later than those with no schooling and 1.4 year later than those with 1-5 years of schooling. In case of rural women, such differences were of a magnitude of 1.7 years and 0.9 years, respectively. But the puzzling situation arises in the case of older women (40-49) living in rural areas who had distinct higher age at marriage than the corresponding urban women. One explanation for this unexpected trend could be that the delaying impact of formal education was much greater for those few rural women who had attained a few years of primary education. But this explanation is nullified when we look at the estimates of rural women with no schooling who have shown 0.7 year higher age at marriage than the corresponding urban women. Hence, the possible reason attributable to this situation would be the age exaggeration by older rural women as already discussed. However, the problem needs further probing and investigation.

On the whole, these data suggest that the impact of educational attainment on age at marriage is growing for younger generation both in urban and rural areas. However, it may be expected that as education becomes widespread, its impact would further grow in urban areas where opportunities to pursue education are greater and participation of women in education is on an increase in recent years.

Work Participation:

Increased female participation in the labour force, another aspect of social and economic development, is often found to be responsible for changes in demographic behaviour. Although the causal relationship between female work experience and age at marriage is both conceptually and empirically ambiguous, the impact of the type of economic activity on age at marriage is clear in a few Asian societies where a strong positive correlation between the percentage engaged in non-agricultural activities and singulate mean age at marriage is confirmed [24, 25].

Theoretically, work experience can affect the timing of the marriage of young women for two reasons. Parents whose daughters are economically active may not be so eager to marry them off. Moreover, young working women themselves may like to maintain their economic independence for sometime before settling down to traditional roles, and work provides them the necessary resources to remain single. Thus, female work participation before marriage may be expected to serve as an important factor in marriage postponement.

In Pakistan, few women are gainfully employed in traditional as well as modern sectors of the economy. Employment of women outside home, particularly before marriage is not much encouraged due to socio-cultural reasons. According to the PLM survey of 1979, 89.5 percent of the total urban and 86.4 percent of total rural women reported to have never worked. Out of the total, a very small proportion worked only before marriage (0.9) as compared to 7.1 percent of those who joined the labour force only after marriage.

Differentials in the marriage behaviour of women by pattern of work are presented in Table 9 by marriage cohorts while such differentials by current age are shown in Table 7 for 1975 and 1979. As expected, the small proportion of women with premarital work experience had the highest mean age at marriage as compared to those who never worked or worked only after marriage in all the marriage cohorts.

Table: 9

MEAN AGE AT MARRIAGE BY PATTERN OF WORK AND YEAR OF MARRIAGE
1975 AND 1979

Year of Marriage	MEAN AGE AT MARRIAGE									
	Never Worked		Worked only Before Marriage		Only After Marriage		Before and After Marriage		All Women	
	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM	PFS	PLM
1960	15.6	16.3	16.3	17.1	15.1	16.3	15.5	16.0	15.6	16.2
1960-64	16.5	17.5	17.8	18.2	16.2	17.2	17.0	17.7	16.6	17.5
1965-69	17.2	17.3	18.4	17.8	16.6	17.0	16.6	18.8	17.1	17.8
1970-74	17.4	17.8	18.8	19.1	16.1	18.1	17.5	19.5	17.5	17.9
1975-79	-	18.1	-	19.7	-	18.9	-	18.6	-	18.2

Source: [21 and PLM Survey 1979].

As observed from Table 9, women in the marriage cohort of 1970-74, who worked before marriage, married about one and half year later than those who never worked both in PFS and PLM and 2.7 years later than those who worked after marriage in PFS and one year later in PLM survey. Such differences were even sharper for the marriage cohort of 1975-79.

The differentials in marriage behaviour of women by pattern of work and age emerging from Table 7 indicate that a difference of 1.3 years in PFS and one year in PLM in mean age of marriage separates those who had worked

before marriage from those who never worked, and a difference of 1.9 years in PFS and 1.3 years in PLM from those who worked only after marriage for all ages. The estimates of mean age at marriage do not show much variation between the younger and older women except for those who worked before marriage. In 1979, women who worked before marriage had a difference of 1.1 years between the younger and older women. Moreover, a delay in the age at marriage of women working before marriage is also apparent from the percentage marrying at age 21 or later. For instance, 24 percent of those women postponed marriage until after age 21 as compared to 13.1 percent for women who never worked and 9.4 percent for those who worked after marriage in 1979 (PLM). It may be noted, however, that due to a very small percentage of women with premarital work experience, the estimated effect of employment on the timing of marriage could be biased upwardly and can not be generalized.

Husband's Education and Occupation:

Another variable of interest to see the differentials in marriage behaviour of women is that of husband's education and occupation. Since the sample of the study is restricted to ever-married women, it is not possible to determine the association between husband's education/occupation and female age at marriage. However, it may be hypothesized that women whose husbands are more educated or are in white collar jobs would tend to have the highest age at marriage because educated and professional men would prefer to get married to educated or working women. Table 10 presents age at first marriage by husband's level of education and current age of women for 1979.

Table-10

MEAN AGE AT MARRIAGE BY HUSBAND'S LEVEL OF EDUCATION AND CURRENT AGE OF WOMEN 1979

Husband's Level of Education	Current Age									Percent Married at age 21 or later			Percent of Sample		
	Total	25-29		40-49			All Ages			Total	Urban	Rural	Total	Urban	Rural
		Urban	Rural	Total	Urban	Rural	Total	Urban	Rural						
No Schooling	17.5	17.3	17.5	17.6	17.0	17.8	17.4	17.1	17.4	12.7	11.6	12.9	60.3	39.5	69.2
1-5	17.4	17.5	17.4	17.2	16.4	17.6	17.2	16.8	17.4	10.6	9.4	11.0	13.1	12.8	12.7
6+	18.1	18.6	17.6	17.7	17.8	17.6	17.9	18.2	17.6	15.9	19.6	12.5	26.6	47.7	18.0
Total	17.7	18.1	17.4	17.6	17.2	17.7	17.5	17.6	17.5	13.3	15.1	12.6	100.0	100.0	100.0

Source: PLN Survey.

It may be noted from the table that 39.5 percent of urban women have illiterate husbands as compared to about 70 percent in rural areas. On the other hand, 47.7 percent of women have husbands with above primary education in urban areas as compared to only 10 percent in rural areas. As expected, women whose husband's have above primary education show the highest mean age at marriage. Nevertheless, no significant differentials in age at marriage by husband's level of education are evident except for urban areas. In the age group of 25-29 years, urban women whose husbands above have/primary education marry about one year later than those with no schooling or a few years of primary education. In the older age cohort (40-49), such difference has been 0.8 years for those with illiterate husbands and 1.4 years with primary levels of education.

The percentage distribution of the sample by husband's occupation is given in Table 11 which shows that in urban areas a majority was engaged in production and transport followed by sales workers. In rural areas, agriculture was the main occupation of husbands followed by production and transport. There are significant urban-rural differentials in age at marriage by occupation categories. But when we look at the difference in age at marriage between younger and older age cohorts, a rising trend is clearly obvious only in urban areas almost in all occupations. As hypothesized, women whose husbands were engaged in white-collar jobs (professionals, technical, administrative and managerial) had the highest mean age at marriage (19 years or more) particularly in the case of younger women in both urban and rural areas.

Table 11

MEAN AGE AT FIRST MARRIAGE BY HUSBANDS' OCCUPATION AND AGE: EVER-MARRIED WOMEN 1979

Husband's Occupation	25-29			40-49			All Ages			Percent married at age 21 or later			Percent of sample			Difference between age 40-49 & 25-29		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Professional	21.4	19.0	23.0	-	-	-	18.4	19.0	18.3	24.4	-	29.3	-	-	-	-	-	-
Technical and Related Workers	18.8	19.7	18.0	17.9	18.1	17.8	18.4	19.1	17.8	23.3	30.3	17.4	3.4	5.9	2.5	+0.9	1.6	+0.2
Administrative and Managerial	19.5	20.0	18.8	17.4	17.3	18.0	18.6	18.8	17.9	23.1	27.2	10.4	0.9	2.5	0.3	+2.1	+2.7	+0.8
Clerical	18.3	18.5	18.1	17.1	17.2	16.8	17.8	18.0	17.5	14.8	18.8	8.3	3.2	7.6	1.7	+1.2	+1.3	+1.3
Sales workers	17.8	17.9	17.5	17.5	17.4	17.7	17.6	17.6	17.5	14.5	15.1	13.8	10.4	20.7	6.8	+0.8	+ .5	-0.2
Service workers	17.3	17.3	17.3	17.5	17.2	17.8	17.3	17.2	17.4	10.5	10.9	10.1	4.8	8.3	3.5	-0.2	+ .1	-0.5
Agriculture and Animal Husbandry	17.4	18.1	17.3	17.7	16.9	17.7	17.4	17.2	17.4	12.6	8.9	12.7	42.8	5.1	56.1	-0.3	+1.2	-0.4
Production and Transport	17.6	17.9	17.4	17.7	17.1	18.1	17.4	17.4	17.5	12.6	13.9	12.0	32.7	48.3	27.1	-0.1	+ .8	-0.7
Total	17.6	18.1	17.4	17.6	17.2	17.8	17.5	17.6	17.5	13.2	15.2	12.5	98.1	98.5	98.0	-0.1	+0.9	-0.4

In the case of other occupations such as sales workers, agriculture, production and transport, women were married relatively earlier, around 18 years on average, while women married to service workers had the lowest age at marriage.

Similar trends emerge when we look at the proportion married at age 21 or later where larger proportions of women have delayed their marriage until after this age in case of professional, technical and managerial occupations.

Summary and Conclusion:

The importance of the study of nuptiality patterns has recently increased primarily because of its impact on fertility. Recent research has revealed that delayed marriage has been one of the responses to socio-economic development and a major cause of fertility decline in many developing countries.

The present report, based on a number of data sources, in particular the PLM survey of 1979-80, is focussed on studying the variations in the nuptiality patterns in Pakistan. Besides studying the changes in the female age at first marriage overtime, the analysis is extended to examine the association of certain socio-economic variables with patterns of female marriage. These include exposure to urban living, educational attainment, work experience and region of residence.

To examine the trends in age at marriage overtime, data on the marital status distribution of population as provided in different censuses and surveys (household level) have been utilized. For studying the differentials in age at marriage by selected background variables, individual level data from the PFS and PLM survey have been used. The measures used to explain the variations in marriage patterns are singulate mean age at marriage (SMAM), proportion single by age, direct estimates of mean age at marriage and percent married by age 21 or later.

The results of the present analysis have pointed out a nuptiality transition in Pakistan. A clear upward trend in Singulate Mean Age at Marriage (SMAM) is noticed between the 1921 and 1981 censuses, with a sudden rise in 1951 and then in 1972. The SMAM rose from 15.8 in 1921 to 17.9 in 1951, 20.0 in 1972 and 20.8 in 1981. This rise is supported by a substantial increase in the proportions single in younger age groups of women in the censuses of 1972 and 1981. In 1972, 65 percent and in 1981 about 70 percent of the women in 15-19 age group were single as compared to less than 45 percent in 1951. Males have also shown an increase of two years in SMAM, from 23.4 in 1951 to 25.4 in 1981, indicating a gradual and smoother change in age at marriage than that for females.

The direct estimates of mean age at marriage also indicate a rising trend. Based on PLM survey, the marriage cohort of 1950-54 (years of marriage) married at age 16.4 on average, as compared to 18.2 during 1975-79, indicating a gain of almost 2 years within two decades. The trend is further supported by the fact that the percentage marrying at age 21 or later increased from 3.2 during 1950-54 to 17.7 during 1975-79.

The trends revealed by examination of cross-sectional survey data are not as obvious as they are in case of proportions single in successive census data. The sample of married women between the ages 15-49 is under representative of the current levels of age at marriage. Nevertheless, there is considerable variance in age at first marriage in the sample, and there is not enough reason to suspect that associations of background variables and age at first marriage are highly biased.

It may be concluded that the analysis pertaining to differentials in marriage patterns by background variables also reveals the tendency to delayed marriage. The overall findings suggest that urban residence, especially life-time exposure to urban living, educational attainment above the primary level, work experience before marriage, and residence in a more developed region are important factors associated with delayed age at marriage.

Based on the PLM survey estimates, there are not substantial urban-rural differentials in age at marriage except for the marriage cohorts of 1970-74 and 1975-79. Looking at these differentials by age, young urban women married 0.6 year later than the corresponding rural women in PFS and 0.7 years later in the PLM survey. In the older age cohort, urban-rural differentials in age at marriage are negligible both in PFS and PLM. Moreover, younger women living in urban areas throughout their lives married 1.5 year later than rural in-migrants in PFS and 0.7 year later in PLM survey, narrowing the differentials over-time. The findings thus suggest that a change in the values regarding the timing of girls' marriage seems to have been taking place both in urban and rural areas, but such a departure is more pronounced for life-time urban residents.

Of all the variables used to examine the association with age at marriage, female education has shown the highest delay particularly above primary levels of education. In the PLM survey sample, only 11.2 percent have been exposed to formal schooling out of which only 5.9 percent have attained above primary education. The mean age at marriage of women with above primary education is about 3 years higher than those with no schooling in PFS and about 2 years higher in PLM survey. The results further suggest that younger women with no schooling or below primary education have not shown much change in their timing of marriage when compared with the older women within similar levels of education.

As expected, the small percentage of women who have formal schooling exposure are mostly from urban areas. Young urban women (25-29) with six or more years of schooling married about 2 years later than those with no schooling and 1.4 years later than those with below primary education in 1979 (PLM). In the case of corresponding rural women, such difference is of a magnitude of 1.6 years and 0.9 year respectively.

These findings thus suggest that the impact of educational attainment on age at marriage is growing for younger generation in both urban and rural areas. However, the impact is more conspicuous in urban areas where educational opportunities alongwith employment chances are greater.

Another important inference which may be drawn is that the effects of education are more than just a postponement of marriage until schooling is complete. For the small proportion of women exposed to formal schooling, marriage has been postponed several years beyond the age of completion of their education. This implies that higher education has

other consequences that influence young women (and their families) to delay marriage. Since education is viewed as an approach to more job opportunities outside home, the status and socio-economic aspirations of women may also enhance with more education, which are both conducive to delayed marriage.

The differentials in the marriage behaviour of women by pattern of work are also in the expected direction. Women with premarital work experience married about one year later than those who ever worked and 1.3 year later than those who worked after marriage in the PLM survey. However due to a very small percentage of women with premarital work experience, the estimated effect of employment on the timing of marriage could be upwardly biased and can not be generalized.

In the light of these findings, the present study suggests a variety of policy options. As stated earlier, age at marriage is important in reducing birth rates. Thus policies designed to reduce population growth in general should be aimed at bringing sociological changes that include the provision of greater education and employment opportunities for women, particularly outside the home in both urban and rural areas.

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