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Being Realistic About Age At Marriage and Fertility Decline in Sri Lanka*

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Abstract

THE paper examines the validity of utilizing an indirect measure such as the Singulate Mean Age at Marriage (SMAM) to estimate the central age at marriage in Sri Lanka where the proportions never married have expanded substantially during the past two decades. By tracing the age at marriage of 20 successive birth cohorts from the sample of women in the World Fertility Survey of Sri Lanka itself, it demonstrates that the female SMAM of 25.1 years as claimed in the same Report is unacceptably high and that the median age at marriage of the cohorts are well within 20 years of age. It is submitted that cohort data provide a more robust measure for estimating prevalent trends than SMAM.

The recent fertility decline observed in the country, it is surmised, is due primarily to the increasing numbers who 'postpone' marriage rather than to a dramatic increase in the age at marriage. The latter has been quite moderate at best. Speculating that these 'postponements' are engineered mainly through economic constraints rather than due to a substantive normative charge in society, the paper expects to observe a 'marriage boom' and a 'baby boom' at the first signs of a sustained recovery in the economic realm.

Introduction

Changes in the dynamics of population growth are of prime importance to any society, more so to the societies of the Third World which tread a very delicate balance between allocating its all-too-scarce resources to the development efforts on the one hand and to the general welfare priorities on the other. In Sri Lanka, the death rate which fluctuated considerably during the first four decades of this century has stabilized in the aftermath of the conquest of malaria and now exert minimal influence on the growth of the population. Some marginal impact has been felt on population

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growth through the repatriation programme of the Estate Indian Population. The fertility component has thus assumed the role of the 'pace-maker' in the changing population dynamics of Sri Lanka. The on-set of fertility is signalled with the contracting of a marriage, at least in social terms. In the context of the much publicized fertility decline in Sri Lanka (Fernando, 1979; 1972; Wright, 1968; ESCAP, 1976) and in several other less developed countries, the rise in age at marriage has occupied a central place. This discussion will concern itself primarily with the issue of the age at marriage of females and its relationship with the fertility decline in Sri Lanka.

Marriage is of importance to the fertility issue because of one biological fact and an attendant assumption in the social realm. The fecund period of a woman is between menarche and menopause, generally restricted to the 35-year span between 15 and 49 years of age. It is assumed that the overwhelming majority of births occur within wedlock. When this fact and assumption are juxtaposed the age of entry into matrimony assumes critical importance in determining fertility at both the individual and the societal levels. The higher the age at marriage, the shorter the period available to fulfil the fertility commitment, **ceteris paribus.**

This is perhaps why there has been an apparent 'over-exposure' of delayed marriage in Sri Lanka and one begins to wonder whether the milage gained in publicity has outrun its legitimate share of credibility. It is in this context that we will try to examine some of the evidence more closely.

The Measures

Four measures are commonly used in the estimation of the central age at marriage. They are,

(1) Singulate Mean Age at Marriage (SMAM) as developed by Hajnal (1953),

(2) Average age of registered marriages supplied by the Registrar-General's Department,

(3) Mean age at marriage, and

(4) Median age at marriage.

Items (3) and (4) refer to the entire married population and are not restricted to registered marriages only. (Estimates can also be derived from nuptiality tables but will not be discussed herein.)

Singulate Mean Age at Marriage (SMAM) is an indirect summary measure of the age at first marriage "based on the percentage of never-married within each age group at a specific point in time ..... and makes no use of the known ages of marriage. The SMAM is interpreted to be the mean age at marriage of those women who marry by age 50, estimated by piecing together the age groups as though they referred to a single cohort"

(World Fertility Survey, Sri Lanka 1978 : 58). Although SMAM is only an indirect measure it has enjoyed a circulation of a much higher magnitude than the Registrar-General's figures provided on an yearly basis.

Two factors may have stimulated this over-consumption of SMAM. First, the fact that most developing countries do not have effective vital registration systems rerders the researcher to fall back on indirect measures; it is relatively less demanding to know what proportion of the population is married or not alorg with their current age than have an effective recording system of marriages. The use of one simplified statistical procedure to estimate the central age at marriage further facilitates the comparability across nations.

Secondly, in Sri Lanka SMAM has demonstrated 'galloping' qualities, especially since the early 1960s and the legitimacy derived from a statistical procedure has apparently been harnessed by the academic and administrative communities to achieve an element of sensationalism and forge into the limelight in the international arena.

The Evidence from Cross-Sectional Data

Casual perusal of the SMAM of females during the seven census years of this century reveals that until 1953 there was hardly any monotonic increase worthy of mention. During 1911—53 SMAM oscillated between 20.7 and 21.4 years (ESCAP, 1976; Table 85). From 1953, however, SMAM increased from 20.9 to 22.1 in 1963 and to 23.5 in 1971. The World Fertiiity Survey of Sri Lanka conducted in 1975 reveals a figure of 25.1 years which is referred to in their report as a 'very high value for SMAM' when compared cross-nationally.

Unlike SMAM which is based on the never married proportions 15—49 years, the Registrar-General bases his estimates on persons who have actually married during a particular year. The Registrar-General provides average age at marriage figures urder three categories, viz., general, Kardyan, and Muslim marriages. The range o these figures for every year between 1963—73 exhibits a fair degree of variation, least of which is recorded within general marriages (between 23.2 and 24.7 years) and the most among Kandyan marriages (between 20.0 and 26.7 years). Muslim marriages, as might be expected, depict very much lower ages at marriage (between 18.0 and 19.7, Registrar-General's Reports). These figures compare tolerably well with the two SMAM estimates of 22.1 and 23.5 in 1963 and 1971, respectively. However, when contrasted with the Registrar-General's unpublished figures for 1977 which stand at 22.9 years in respect of all three types of marriages (23.4, 21.7 and 19.9 years for general, Kandyan and Muslim marriages, respectively), the SMAM figure of 25.1 in 1975 appears suspiciously high.

The Registrar-General's figures in their turn do not account for all females who marry during a particular year. The women who marry according to custom are left out. If one may speculate on the characteristics of these females, it is very likely that they as a group marry at relatively younger

ages than those contracting either general or Kandyan marriages since they are apt to be drawn disproportionately from among the less educated, poorer segments of the society as well as from more rural areas.

The positive association between educational attainment and age at marriage is well documented (Population Reports, 1979) and is evident in the Sri Lankan situation as revealed in Table 1.

TABLE 1

Mean and median age at marriage of females in Sri Lanka 1971 by educational attainment

Educational Attainment	Age at Marriage Mean	Median	No. of Cases	Per cent
No schooling ...	17.9	17.8	2,247	2.9
Grades 1—5 ...	19.1	18.9	29,386	37.9
Grades 6—9 ...	20.4	20.2	16,538	21.3
G. C. E. (O.L.) & (A.L.) ...	22.9	22.9	5,542	7.1
Higher ...	26.6	26.8	757	1.0
Unspecified ...	18.6	18.6	23,144	29.8
All educational attainments ...	19.5	19.4	77,614	100.0
Age at marriage not reported ...	——	——	8,047	10.4

Source: Based on the analysis of 10 per cent sample census tapes, 1971.

Unfortunately there are no readily available estimates of yearly prevalence of customary marriages. The closest estimates are found in the figures of the 1971 census which gives a breakdown of marital status, including registered and customary marriages. Among the 15—49 age group of females, 17.6 per cent of all currently married women were customarily married. Within each of the seven five-year age groups, this proportion ranged from 24.1 per cent (among 15—19) to 14.8 per cent (among 25—29) (unpublished data from the analysis of the 1971 sample census tapes undertaken by the writer). Since a minimum of 15 per cent of the currently married are customarily married and are likely to have entered into unions at much younger ages, the Registrar-General's figures on average age at marriage might be considered as substantial over-statements of the 'true' average age at marriage of females in Sri Lanka.

This is the evidence which emerges from both the third and fourth types of measures mentioned earlier. Both the mean and median age at marriage are based on census or survey investigations and data obtained in response to a retrospective question, viz., 'what was your age when you first got married' or a variant of this. It must be noted that data collected from such a question may be subject to errors arising from memory lapses. However, they constitute the only alternative source to the Registrar-General's records from which direct information on age at marriage on a current basis is obtained.

Table 1 provides the mean and median ages of marriage of females according to educational attainment. The data are derived from the analysis of the 10 per cent sample tape of the 1971 census of Sri Lanka undertaken by the writer. From these figures one finds that a central (mean or median) age at marrige of 23.5 years (i.e. SMAM of 1971) could only be experienced by a sub-sample of the ever-married female population who would have had at least 10 years of education. Table 1 also shows that this is a mere 8.1 per cent of the female population. With more than one half of females over 15 years possessing an education of less than five formal years, the attainment of a central age at marriage of 23.5 (1971) or 25.1 years (1975) as is derived from SMAM calculations, it must be held, is a gross over-statement if not an expression of fantasy.

There is evidence in the same World Fertility Survey Report to reject or cast serious doubts on its own figure of 25.1 years as the SMAM. Of the women who ever-married before the age of 25 in the WFS Sample, the mean age at marriage ranged from 17.7 to 18.9 years while the median age ranged from 16.8 to 18.5 years. Similarly, among those women who ever-married by age 30 the mean age ranged from 19.0 to 19.8 and the median age from 17.7 to 18.5 years (World Fertility Survey, Sri Lanka, 1978: Tables 4.2 & 4.3). Thus, by no conscionable stretch of imagination can we possibly say that half the women (who will ever-marry by age 50) will marry by 25.1 years; this mark is reached much earlier in life.

Age-specific marital status data for all women screened for the WFS reveal that all girls whose current age was 14 years were never married. These proportions (by single year) decrease monotonically to 72.1 per cent at age 20, 37.4 per cent at 25, and 18.3 per cent at age 30. If these women start marrying as per the proportions entailed then, one quarter of the women will be married by 19.8 years, one half by 23.4 years and three fourths by 28.2 years. In comparison to the median age of 23.4, the SMAM of 25.1 years still appears high but the gap has narrowed to a level of relative compatibility.

Evidence from Cohort Data

We obtain a very different picture, however, when the sub-sample of women who are actually married is examined. Table 2 reveals that one quarter of the single-year birth cohorts of ever-married women from 1926 through 1945 have married between the ages 14.8 and 17.1 years; one half between 17.5 and 19.9 years; three fourths between 20.9 and 24.6 years. Compared with the figures in the preceding paragraph for all women, the actual situation experienced by the large majority of women during the recent past reveals that the former are gross over-estimations by at least 4 to 5 years vis-a-vis the central age at marriage.

The implications of suggesting a SMAM of 25.1 years have apparently not been considered by those who use this figure. Marriage in Sri Lanka signifies the on-set of socially accepted sexual relations between man and wife leading to the birth of the first child. Do the proponents of this figure suggest that in Sri Lanka, the central age at which a woman has her first child is around 26 years? This is, once again, an unacceptably high age to have the first child.

TABLE 2.

Central ages at which one fourth, one half and three fourths of women marry in Sri Lanka, estimates from birth cohorts (1926—1945) and during calendar years (1956—1975)

Birth Cohort (B.C.)	Calendar year (C.Y.)	Number of Cases		Central age at marriage of					
				One fourth		One half		Three fourths	
		B.C.	C.Y.	B.C.	C.Y.	B.C.	C.Y.	B.C.	C.Y.
1926	1956	152	150	15.1	14.7	18.2	17.7	20.9	21.1
1927	1957	220	177	15.2	15.4	18.0	18.1	21.3	21.1
1928	1958	169	220	16.4	15.5	19.0	17.7	21.9	20.8
1929	1959	144	237	15.6	15.1	19.4	18.2	24.1	21.7
1930	1960	292	239	14.8	15.1	17.5	18.0	21.6	22.0
1931	1961	102	223	17.1	15.9	19.4	18.8	22.1	22.6
1932	1962	232	206	15.8	15.9	18.4	18.2	21.9	21.3
1933	1963	150	218	16.3	16.4	19.3	18.8	24.4	21.5
1934	1964	169	191	14.8	16.2	18.3	19.3	21.5	23.1
1935	1965	253	227	14.8	16.1	17.6	19.2	21.7	22.4
1936	1966	200	202	15.2	16.4	19.1	19.4	23.8	23.2
1937	1967	260	214	15.4	16.9	19.1	19.3	22.4	24.4
1938	1968	168	267	16.4	17.0	18.8	19.9	24.0	23.6
1939	1969	215	266	15.7	16.8	19.9	19.8	24.6	24.4
1940	1970	304	272	14.9	17.9	17.8	20.5	21.8	23.7
1941	1971	167	257	16.5	17.7	19.4	21.1	23.8	25.5
1942	1972	310	231	15.9	18.7	18.8	22.0	22.8	24.0
1943	1973	207	260	16.4	19.0	19.1	22.4	23.7	25.5
1944	1974	230	274	15.5	18.5	18.4	21.0	23.3	23.6
1945	1975	293	173	15.7	19.6	18.8	23.2	22.9	26.3
Minimum value				14.8	14.7	17.5	17.7	20.9	20.8
Maximum value				17.1	19.6	19.9	23.2	24.6	26.3
Range (in years)				2.3	4.9	2.4	5.5	3.7	5.5
Standard deviation				0.67	1.41	0.67	1.61	1.16	1.62

Source: Computed from World Fertility Survey, Sri Lanka 1975. 1978 Appendix Table 1.1.2

A small survey conducted in Puttalam District by the Demographic Training and Research Unit of the University of Colombo during late 1980 revealed that while the mean age at first marriage was 19.6 years, the first child was born at the central age of 21.0 years (unpublished data). This sample, however, does not necessarily represent the national population. It has been documented elsewhere that one half of the same sample of ever-married women of the WFS in Sri Lanka (whose median age at marriage ranged from 17.5 to 19.9 years) went on to have their first child between 19.4 and 22.1 years of age (Abeysekera, 1981).

Unfortunately there is almost a total absence of national data collected on a current basis that pertain to the mother's age at the birth of her first child. In a country where a fertility decline has been observed concurrently with the operation of a National Family Planning Programme for the past 15 years, it is imperative that marital fertility be monitored closely in order to ascertain the changes in the beginning, timing and termination of child bearing among successive cohorts of women. This will also provide the acid test for judging the efficacy of the National Family Planning Programme as well as provide invaluable feed back on the deficiencies and strengths of the Programme that can, in turn, be utilized to reorganize its strategy. In this regard, the need for incorporating parity (birth order) data on the birth registration form cannot be over-emphasized. (In cognizance of its importance the Registrar-General has since 1981 instructed his district registrars to include birth order in each of the birth registraton forms. However an adequate space for this is still to be provided on the official form.)

One major limitation of SMAM is that it assumes the current age-specific proportions never married would have prevailed for the multitude of women who form the bulk of those marrying around the period of inquiry. Within a context of delayed marriages, this is an assumption that is best not made. What SMAM captures is a cross-sectional feature (a still photograph, if one may use the analogy) at one point in time but interpreted as if it were monitoring the process of change over time (as if it were a movie). The cross-sectional picture one may project may very well be a chancy occurrence which does not do justice to trends that have prevailed. It is no secret that many eminent demographers have erred by taking this 'easy-way-out' in using cross-sectional data to assess the prevalent 'trends' and to prognosticate future patterns of change.

Table 2 displays that the range of variation in the estimation of the central age at marriage is sometimes more than double when using calendar year statistics (i.e. cross-sectional data) in comparison to the estimates using birth cohort (i.e. by following the performance of women born in a single year through the better part of their lives).

The performance of each birth cohort is compared with the calendar year's situation that is 30 years away from the cohort's year of birth (1926 cohort compared with marriages taking place in 1956, and so on), thus giving each cohort 30 years of life, a period within which more than 80 per cent of all women enter matrimony according to the World Fertility Survey.

Estimates of the central age at which one quarter, one half and three fourths of ever-married women enter marriage arrived at by the two procedures reveal that during the mid-1950s to early 1960s the yearly estimates at the three percentiles were generally lower than the estimates arrived at through cohort data; this pattern changed dramatically in the opposite direction during the late 1960s to mid-1970s (see Table 2). This was due to larger proportions marrying at later ages. While there was a comprehensive fluctuation of only 2.4 years in the median age at marriage for 20 successive birth cohorts, the twenty calendar yearly estimates manifested a fluctuation of 5.5 years, well over double the variation of the former. The cohort performance also indicates that over the twenty-year period which purports to have registered an unprecedented rise in the age at marriage there was remarkable consistency in the age at which women got married and gave signs of only a very moderate increase.

It must also be pointed out that the mean is not the best suited measure of central tendency to assess the 'matrimoniality' of the population because it is susceptible to the influence of extreme values. In a context as in Sri Lanka where the age at marriage distribution is noticeably skewed towards the higher ages, the mean tends to be biased upwardly. The median, estimating the age at which one half of the women marry, is a much better measure of central tendency avoiding this bias. While the median age at marriage of females in 1975 according to the WFS data is 23.2 years, the mean age from the same source is 23.9 years; in calculating SMAM the estimate escalates to 25.1 years. All these estimates, however, are derived from cross-sectional data and are ill-suited as dependable sources for assessing trends.

It is submitted that the estimates based on the birth cohorts' 'performance at the altar' are much more robust and dependable for monitoring trends. One half of (20 successive birth cohorts of) ever-married women who were at least 30 years of age at the time of the World Fertility Survey of 1975 had married between the ages of 17.5 and 19.9 years.

Accordingly, we firmly hold that the central age at marriage which prevailed in Sri Lanka during the mid to late 1970s is within 19 to 20 years rather than 25.1 years as is suggested through the calculation of SMAM. It is suggested that the 19 to 20 year range be taken as the more realistic estimate of the central age at marriage of females for all practical purposes relating to planning and development in Sri Lanka.

Implications

Within a context of declining fertility, the over-exposure of a SMAM of 25.1 years for females in Sri Lanka may have the disastrous effect of generating complacency among policy makers. They might be led to think that delayed marriage and declining fertility are mutually reinforcing social behaviour signalling the emergence of a steady trend indicative of a preference for smaller families. The fact that the evidence from cohort fertility performance suggests that the median age at marriage of ever-marrying women has but increased moderately and that it has been within the limit of 20 years indicates a sufficient contradiction worthy of deeper probing as to the causes responsible for the fertility decline.

The most striking observation during the recent past is perhaps the growing proportion of population who remain unmarried through their early 20s to their mid-30s. The 20—24, 25—29 and 30—34 age groups of females who had only 29.4, 11.8 and 6.6 per cent, respectively unmarried in 1946 had increased to 53.2, 24.6 and 10.9 per cent, respectively by 1971 (ESCAP, 1976: Table 89). The World Fertility Survey of 1975 depicts a further increase in the same trend. The writer has documented elsewhere that the 'problem' of having unmarried sons and daughters past their mid-30s is much greater in the wet zone areas than in the dry zone areas of the country (Abeysekera, 1979: 423—425). It is to be noted that the wet zone exerts greater pressure of population on land and it is the wet zone peasantry who eagerly sought and secured the 'driblets' of extra-agricultural employment opportunities as a means of adapting their life styles to the fast diminishing land/man ratio (ESCAP, 1975).

Whether this 'postponement' of marriage is willingly pursued or 'thrust upon' from without is of crucial significance to the understanding of the fertility decline. Based on the evidence of cohort fertility which suggests that the change in the timing of nuptiality in Sri Lanka during the recent past has only been raised moderately, one is willing to speculate that no drastic change has occurred in this respect.

The normative expectation as well as the predominant nuptiality behaviour of the society still demands that its young adults be married and initiate the process of forming their respective families of procreation. Then why are the young adults postponing marriage? It is submitted that marriage demands the satisfaction of certain prerequisites among which is the economic viability of the family unit to be formed. With growing unemployment especially among the youth (Srivastava & Selvaratnam, 1972) this has proved to be an increasingly difficult condition to satisfy by otherwise marriageable persons.

Basing our observations on these factors we would expect a substantial rise in the proportions marrying as well as a consequent 'baby boom' resulting in a fertility up-turn at the first signs of a mass-based recovery in the economic realm. Unpublished birth statistics with the Registrar-General's Department for 1979 and the first half of 1980 are already indicative of this trend. One might stretch further to speculate that the 'middle-east money' that is finding its way into the lower strata of society might be performing the same role although it would not necessarily indicate a concomitant indigenous economic recovery.

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