

## MARITAL STATUS COMPOSITION AND FERTILITY: A COMPARATIVE ANALYSIS OF WORLD FERTILITY SURVEY DATA

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### INTRODUCTION

Rapid mortality decline in recent decades without a parallel fertility reduction has caused high rates of population growth in the developing world. Demographers and policy-makers are concerned with the annual increase rate of over 2 per cent in most developing countries because such rates could lead to a doubling of the population within 35 years. Increasing attention has therefore been given to both assessment of fertility differentials within a population and examination of variations in fertility levels among societies. Among the variables often investigated are rural-urban residence, education, female labour force participation and economic status. One variable which seems to have been neglected in research on determinants of fertility in developing countries is marital status composition of a population. Data from the World Fertility Survey provide an opportunity to conduct a comparative study on the relationship between marital status composition and fertility.

### I. THEORETICAL CONSIDERATIONS AND REVIEW OF THE LITERATURE

Studies of the effect of marital status upon childbearing can be guided by an analytical framework developed by Davis and Blake (1956). In this framework, the amount of reproductive period spent after or between unions represents one of the eleven intermediate variables influencing the level of fertility. This variable attempts to take account of the impact on fertility of those situations when sexual unions are broken by divorce, separation or desertion, or the death of the husband. As Davis and Blake argue, "Any negative effect on fertility from the variable is a function of both the rate of dissolution of unions and the time lost between them.

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If unions are stable, or if they are unstable but no time is lost between them, fertility will not be affected adversely". At the same time, they also emphasize the need to consider factors governing the exposure to intercourse within unions, and involuntary abstinence, including that resulting from unavoidable but temporary separation of spouse.

With respect to marital unions broken by death of a husband, Davis and Blake point out that the effect depends on the institutional position of the widow, that is, whether the society enforces a protracted period of time before remarriage, whether the widow is allowed to remarry at all or whether she will soon be remarried. The availability of potential spouses as reflected in the sex ratio will also be a crucial variable in influencing the extent of remarriage even in those societies that permit or even encourage it.

As mentioned earlier, involuntary abstinence due to temporary separation may also operate as a factor affecting exposure to intercourse and thereby influencing fertility levels. In particular, Davis and Blake cite the separation of couples due to migration as an example of such a situation. Despite the increasing levels of mobility in developing countries, a lack of data poses an obstacle to investigating the extent to which migration results in extensive periods of separation between husbands and wives and the effects this may have on fertility.

Based upon the Davis-Blake theoretical framework, various hypotheses could be formulated. The most common hypothesis is that fertility levels are directly related to time spent exposed to risk of childbearing, especially where contraception is not widely practised to limit family size. At the macro level, this translates into the expectation that the higher the proportion of women in the marital state in a particular region or country at a point in time, the higher the level of current fertility, other things being equal. At the individual level, it is generally expected that the higher the proportion of her reproductive years spent in the marital state, the higher would be her cumulative fertility, other things held constant. This is based on the assumption that exposure to childbearing occurs primarily within the marital state.

The strength of the relationship between fertility and time spent in marriage is also hypothesized to be a function of the level of sexual activity and childbearing outside legal marital unions, the level of contraceptive use, the incidence and timing of first marriage as well as marital dissolution and remarriage. The timing of periods of non-exposure is important, given natural changes in fecundity over the life-cycle. The importance of the relationship has been found to vary significantly given widely

different patterns of marriage as well as significant variations in the incidence of marital dissolution and remarriage.

It has frequently been found in the literature that the completed fertility of women who experienced a marital disruption is lower than that of women who did not (Chamratrithong, 1980; Lauriat, 1969; Downing and Yaukey, 1979; Onaka and Yaukey, 1973; Cohen and Sweet, 1974). However, the amount of reproductive time lost obviously depends not only on the incidence of disruption, but also on the incidence and speed of remarriage. The age range over which periods disruptions after marriage, or between marriages, occur also has been seen to influence the impact on fertility of marital dissolution. In societies in which mortality is high, in which there is a large age difference between husband and wife and in which widows tend not to remarry, widowhood may have an important effect on fertility (Agarwala, 1968). However, there is evidence from a cross-cultural study that post-widowhood celibacy does not necessarily have a generally negative effect on fertility level (Nag, 1962).

Although most authors have hypothesized that the over-all effect of marital dissolution on fertility would be negative, owing to the loss of potential reproductive time, and although many studies have found lower completed fertility among women who have experienced a dissolution, it has also been suggested that women who remarry may tend to make up for the lost time by bearing children at a higher rate than otherwise similar women in intact first marriages<sup>1</sup>. If this effect is strong enough, the effects of remarriage may outweigh the effects of time spent outside marriage. The number of marital partners was found to be positively related to achieved fertility in Barbados (Ebanks and others, 1974), although in other parts of Latin America, marital dissolution has been found to lower completed fertility on balance (Chen and others, 1974).

Even if the effect of increased fertility in subsequent marriages is not large enough to compensate totally for loss of reproductive time during dissolution, this phenomenon, if it exists, would tend to lessen the impact of dissolution on over-all fertility. In the United States, white women were found in one study to have made up, through rapid remarriage and relatively high rates of childbearing following remarriage, for the time lost owing to dissolution. There was also evidence of a partial compensation among black women who remarried (Thornton, 1978). Evidence from Latin America shows that, controlling for time since marriage and time lost through dissolution, women who married more than once had higher fertility than women who married only once. The apparent relationship was,

however, due to the influence of other factors (particularly education) on both fertility and the likelihood of having more than one union (Downing and Yaukey, 1979).

Lastly, the relationship between marital status and fertility is complicated by the fact that the achieved fertility may itself affect the likelihood of divorce and remarriage. The most common hypothesis regarding the effect of childbearing on separation is that childlessness increases the likelihood of the break-up of marriage (Thornton, 1978). Suppose couples who separate have lower fertility than otherwise similar couples who do not separate owing to the influence of subfecundity on dissolution. An examination of the completed fertility of continuously married and other couples will then lead to an overestimate of the effect of dissolution on fertility.

In short, research is needed on the over-all extent to which fertility is affected by factors governing the exposure to intercourse within, after and between unions. Of course, no one factor operates in isolation. Although the demographic statistics of less developed regions have raised doubts about the validity of reported fertility differences, the pursuit of comparative analysis of the relation between various social demographic variables and fertility is vitally important for both its practical and its theoretical significance. This argument for needed research remains as valid today as it was in 1956, when David and Blake posited their analytic framework for studying the comparative sociology of reproduction. Availability of data from the World Fertility Survey provides an opportunity to test some of the relations suggested by the Davis-Blake framework.

## II. DATA

The data for this study come from the World Fertility Survey, published country reports and standard recode tapes. The countries included in this comparative analysis are Bangladesh, Fiji, Indonesia, Malaysia, Nepal, Pakistan, the Philippines, the Republic of Korea, Sri Lanka and Thailand. These countries range in population size from a little more than half a million in Fiji to well over 148 million in Indonesia. Crude birth rates range from the mid-20's in the Republic of Korea to over 40 per thousand in Bangladesh. In addition to religious and cultural diversities, these countries also differ in levels of social and economic development.

Prior to an assessment of the relationship between marital status and fertility,

various definitions of key concepts should be explored. The WFS definition of marriage includes not only legal unions but other socially recognized forms of union (i.e., consensual unions and visiting unions as well). This definition is more realistic but may not be comparable with other data. The inclusiveness of the definition of "marriage" will reduce measured extramarital fertility by bringing the definition closer to a measure of the state of being exposed to the risk of childbearing. In countries where significant exposure to the risk of childbearing takes place outside legal marriage, this definition will strengthen the measured relationship between the "marital" status distribution and fertility and between a woman's "marital" history and her completed fertility, unless contraceptive practice is widespread.

However, it is clear from the information already published that the WFS definition of "marriage" is not so broad as to encompass all types of sexual experience. First country report tabulations show that in some Latin American countries a substantial proportion of women who had been married five or more years had experienced a premarital birth (Durch, 1980). Much lower rates were reported for most Asian countries, although rates of 4-5 per cent were observed in Fiji and Thailand. Pre-marital childbearing is also common in parts of Africa.

An evaluation of WFS data with respect to marital status distribution, and time spent in the marital state, requires that procedures relating to date reporting of unions and births as well as union-type designations be well understood. There is some evidence that the probe questions in the individual WFS interview have increased reporting of consensual unions, as compared with census tabulations or the WFS household schedule. This results in a decrease in the proportion recorded as single or as never having been in a union. However, it was found that the WFS group defined as "currently in legal union" was roughly comparable to the census group classified as married.

In some countries where women marry young, the date of formal marriage may precede by a considerable period the time when cohabitation begins. In such countries, the WFS procedure was to record the date of marriage as the date at which cohabitation began (Singh, 1980). In countries in which consensual unions are common, a non-legal union may be converted to a legal one. In such cases, the usual WFS procedure was to record the union type as "legal marriage", but to show the date of the start of the consensual union as the date of marriage.

## III. ANALYSIS

Prior to an assessment of the relationship between marital status composition and fertility, background information on the percentage of all women ever-married by age is presented in table 1. For women of all ages (standardized by using age distribution of female population for the ESCAP region), the percentage varies significantly from a low of 58 per cent in Sri Lanka to a high of 92 per cent in Bangladesh. When age is controlled, it is apparent that substantial differences in proportions ever-married among these countries occur in the younger age groups. While approximately 70 per cent of young women aged 15-19 in Bangladesh have ever been married, the percentages reduce to a mere 3.3 in the Republic of Korea and 6.6 in Sri Lanka. By contrast, no sharp discrepancies exist in proportions ever-married among women aged 45-49. This pattern clearly suggests that marriage is universal in these societies.

Table 1. Percentage of women ever-married by age

Country	Age							All ages*
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Bangladesh	70.2	95.9	99.0	99.8	99.6	99.8	100.0	91.9
Fiji	12.3	65.6	90.9	96.4	96.7	97.9	98.9	70.2
Indonesia	28.8	72.6	91.9	96.7	98.0	98.8	98.4	75.9
Malaysia	11.3	53.0	82.6	92.8	96.4	98.4	99.5	88.3
Nepal	59.0	93.4	97.9	98.9	99.3	99.2	99.3	66.0
Pakistan	38.2	77.9	91.5	96.7	97.4	98.8	99.2	79.0
Philippines	7.8	41.9	70.9	86.3	91.4	95.1	94.3	59.1
Republic of Korea	3.3	44.6	90.1	98.7	99.3	99.7	99.6	64.9
Sri Lanka	6.6	39.4	68.5	86.8	94.3	95.7	98.1	58.7
Thailand	16.3	58.8	80.9	89.9	93.6	96.1	96.7	66.5

\*Standardized for age using population of the ESCAP region as the standard population.

## A. MARITAL STATUS COMPOSITION

In addition to the percentage ever-married, the marital status composition of the ever-married women by five-year age groups is presented in table 2. The percentage of currently married women is quite similar for each country, ranging between 94 and 86 per cent, with Indonesia at the lowest extreme. Of those who are currently married at the time of survey, a small proportion of women reported their marital status as married, but in second or higher-order marriages. Indonesia is characterized by the highest percentage of women in second or higher-order marriages, while Sri Lanka and the Republic of Korea represent the lowest percentages of this category. Of those who were currently married, no information is provided on whether they were living with spouse<sup>2</sup>. This variable can have an important impact upon fertility as it affects exposure to sexual activity within marital union.

The data from table 2 additionally show that considerable proportions of the over-married female populations have had their marriage broken either through the death of husband or by divorce or legal separation. Widowhood is strongly associated with age, but proportions of women divorced and separated differ little among younger and older women. The levels of widowhood are very similar in 8 of the 10 Asian countries. Fiji, which has the lowest level of widowhood, also has very low mortality rates. In Bangladesh, the higher level of widowhood reflects the effects of higher mortality rates, early age at marriage of women and the unusually large difference in age between husbands and wives (Durch, 1980).

The proportions of ever-married women who were divorced at the time of survey are not striking. The percentage of divorced women varies from a low of 1.6 in Nepal to a high of 8.8 in Indonesia. The currently low levels of divorce in these countries are perhaps due to the fact that some divorcees have remarried. In Indonesia, for example, over 26 per cent of ever-married females were in second or higher-order marriages. Therefore, examination of the extent of marital disruption among women should be done by calculating such proportions from their first marriage.

The percentage distribution of all ever-married women according to status of first marriage by age is shown in table 3. The data reveal that marriages in most countries are fairly stable, as illustrated by the considerable proportions of women whose marriages remain intact. However, the levels of marital dissolution are high in Indonesia and Bangladesh, 40 and 21 per cent respectively. In Bangladesh, both divorce and widowhood contribute to the high level of marital dissolution, while

Table 2. Distribution of ever-married women by current marital status and age

Age	Currently married		Widowed	Divorced and separated	Total (percentage)	Number
	in first marriage	in second or higher- order marriage				
<u>Bangladesh</u>						
Under 20	85.7	6.7	0.6	7.0	100.0	1 475
20-24	84.8	9.8	1.8	3.5	100.0	1 346
25-29	82.3	10.7	4.1	2.9	100.0	1 108
30-34	76.7	12.9	8.3	2.1	100.0	791
35-39	71.4	12.4	14.0	2.2	100.0	672
40-44	65.9	11.2	20.6	2.3	100.0	626
45-49	60.5	8.6	28.7	2.2	100.0	495
Total	78.5	10.0	7.8	3.7	100.0	6 515
<u>Fiji</u>						
Under 20	96.5	1.3	0.0	2.2	100.0	228
20-24	90.8	4.1	0.3	4.7	100.0	907
25-29	89.8	5.6	0.5	4.1	100.0	1 049
30-34	88.4	7.5	0.7	3.5	100.0	953
35-39	84.9	9.5	3.1	2.4	100.0	735
40-44	72.9	11.9	5.7	3.2	100.0	616
45-49	80.2	10.0	7.5	2.3	100.0	440
Total	87.1	7.2	2.2	3.5	100.0	4 928
<u>Indonesia</u>						
Under 20	74.9	9.1	0.4	15.6	100.0	992
20-24	71.2	19.2	1.2	8.4	100.0	1 624
25-29	64.7	25.6	1.6	8.2	100.0	1 501
30-34	57.2	31.1	3.7	8.0	100.0	1 414
35-39	54.9	33.6	4.8	6.7	100.0	1 408
40-44	48.7	32.6	10.6	8.1	100.0	1 250
45-49	41.3	33.0	17.2	8.5	100.0	964
Total	59.6	26.5	5.1	8.8	100.0	9 155
<u>Malaysia</u>						
Under 20	93.5	1.5	0.4	4.6	100.0	259
20-24	93.0	3.3	0.4	3.3	100.0	909
25-29	89.3	6.7	0.9	3.1	100.0	1 192
30-34	86.0	9.3	1.7	3.1	100.0	1 089



Table 2 (continued)

Age	Currently married		Widowed	Divorced and separated	Total (percentage)	Number
	in first marriage	in second or higher- order marriage				
35-39	78.7	14.4	3.4	3.5	100.0	1 115
40-44	72.3	14.7	7.9	5.1	100.0	860
45-49	60.1	19.1	16.2	3.7	100.0	897
Total	81.2	10.6	4.5	3.6	100.0	6 321
<u>Nepal*</u>						
Under 20	98.8		0.3	0.9	100.0	741
20-24	97.8		0.7	1.5	100.0	1 226
25-29	97.4		1.4	1.2	100.0	1 146
30-34	94.4		3.9	1.8	100.0	855
35-39	89.5		8.6	1.9	100.0	736
40-44	84.0		13.6	2.4	100.0	720
45-49	74.2		24.0	1.7	100.0	516
Total	92.6		5.8	1.6	100.0	5 940
<u>Pakistan</u>						
Under 20	97.9	0.2	0.2	1.7	100.0	628
20-24	95.2	1.6	0.4	2.8	100.0	843
25-29	93.1	2.7	1.6	2.7	100.0	913
30-34	91.4	4.2	1.9	2.5	100.0	821
35-39	86.0	7.5	4.4	2.2	100.0	624
40-44	84.0	6.0	8.4	1.6	100.0	620
44-49	77.6	8.8	10.6	2.9	100.0	503
Total	90.2	4.1	3.4	2.4	100.0	4 952
<u>Philippines</u>						
Under 20	97.7	1.4	0.0	0.9	100.0	276
20-24	95.9	1.7	0.3	2.1	100.0	1 222
25-29	94.4	2.7	0.8	2.2	100.0	1 774
30-34	94.3	2.9	1.5	1.3	100.0	1 711
35-39	90.8	4.8	2.6	1.8	100.0	1 673
40-44	87.4	6.6	4.1	1.9	100.0	1 410
45-49	83.3	7.2	8.0	1.6	100.0	1 201
Total	91.5	4.1	2.6	1.8	100.0	9 267

Table 2 (continued)

Age	Currently married		Widowed	Divorced and separated	Total (percentage)	Number
	in first marriage	in second or higher- order marriage				
<u>Republic of Korea</u>						
Under 20	100.0	0.0	0.0	0.0	100.0	55
20-24	99.1	0.4	0.2	0.4	100.0	557
25-29	98.0	0.4	0.5	1.1	100.0	1 172
30-34	94.9	2.5	1.2	1.4	100.0	1 078
35-39	89.5	4.4	4.1	2.1	100.0	1 024
40-44	80.7	6.7	10.8	1.8	100.0	869
45-49	70.1	8.4	17.5	4.0	100.0	675
Total	89.7	3.6	5.0	1.7	100.0	5 430
<u>Sri Lanka</u>						
Under 20	95.4	0.0	0.6	4.0	100.0	175
20-24	93.3	1.9	0.9	3.9	100.0	912
25-29	91.7	2.9	1.4	4.0	100.0	1 295
30-34	91.0	3.4	2.7	2.9	100.0	1 221
35-39	85.4	4.1	5.4	5.0	100.0	1 203
40-44	80.2	4.1	11.2	4.5	100.0	967
45-49	77.0	5.4	12.8	4.8	100.0	1 035
Total	86.9	3.5	5.5	4.1	100.0	6 809
<u>Thailand</u>						
Under 20	88.9	3.2	1.0	6.9	100.0	217
20-24	88.6	5.5	0.9	5.1	100.0	609
25-29	89.1	6.0	1.0	3.9	100.0	746
30-34	82.9	11.3	2.7	3.1	100.0	607
35-39	79.1	12.4	2.6	6.0	100.0	601
40-44	73.0	16.1	6.5	4.3	100.0	580
45-49	73.3	12.8	7.6	6.4	100.0	460
Total	82.1	10.0	3.1	4.8	100.0	3 820

\*For Nepal, percentage of currently married women cannot be sub-categorized into first marriage and second or higher-order marriage.

Table 3. Distribution of ever-married women according to status of first marriage by age\*

Country	Age							All ages	Number
	15-19	20-24	25-29	30-34	35-39	40-44	45+		
<u>Percentage of women whose first marriage not dissolved</u>									
Bangladesh	84.8	84.8	82.3	76.7	71.4	65.9	60.5	78.5	5 117
Fiji	96.5	90.8	89.8	88.4	84.9	79.2	80.2	87.1	4 293
Indonesia	74.9	71.2	64.7	57.2	54.9	48.7	41.3	59.6	5 424
Malaysia	93.3	93.0	89.3	86.0	78.7	72.3	61.0	81.2	5 130
Pakistan	97.8	95.2	93.1	91.4	86.0	84.0	77.6	90.2	4 435
Philippines	97.7	95.9	94.4	94.3	90.8	87.4	83.3	91.5	8 480
Republic of Korea	100.0	99.1	98.0	94.9	89.5	80.7	70.1	89.7	4 868
Sri Lanka	95.4	93.3	91.7	91.0	85.4	80.2	77.0	86.9	5 917
Thailand	89.9	88.6	89.1	82.9	79.1	83.0	73.3	82.1	3 136
<u>Percentage of widows</u>									
Bangladesh	1.3	2.9	6.3	10.2	17.7	25.4	31.9	9.9	642
Fiji	0.0	0.6	1.1	2.0	4.5	8.0	9.5	3.2	160
Indonesia	0.8	2.0	3.3	5.5	8.4	16.0	21.0	7.5	687
Malaysia	0.4	0.7	1.3	2.9	5.6	12.0	19.5	6.2	395
Pakistan	0.2	0.8	3.3	3.8	9.7	12.6	17.8	6.0	297
Philippines	0.0	0.7	1.5	2.7	4.9	8.6	12.4	4.7	432
Republic of Korea	0.0	0.2	0.5	1.2	4.1	10.8	17.5	5.0	274
Sri Lanka	0.6	1.9	2.0	3.7	6.9	12.8	15.3	6.7	454
Thailand	1.4	0.7	1.9	6.0	6.9	10.9	12.2	5.7	218
<u>Percentage of divorced and separated women</u>									
Bangladesh	13.9	12.3	11.4	13.1	10.8	8.6	7.7	11.6	728
Fiji	3.5	8.6	9.1	9.7	10.6	12.8	10.2	9.6	475
Indonesia	24.3	26.9	32.0	37.2	36.7	35.0	37.4	32.8	2 987
Malaysia	6.3	6.3	9.3	11.1	15.6	15.6	19.3	12.4	786
Pakistan	2.0	4.0	3.6	4.8	4.4	3.3	4.5	3.8	189
Philippines	2.3	3.5	4.1	3.1	4.3	4.0	4.4	3.8	355
Republic of Korea	0.0	0.4	1.1	1.4	2.1	1.8	4.0	1.7	94
Sri Lanka	4.0	4.8	6.2	5.3	7.6	6.8	7.8	6.4	434
Thailand	8.6	10.7	9.0	11.1	14.0	16.1	14.6	12.2	463

\*Excluding Nepal, because data not available.

in Indonesia, divorce appears to be a major factor. It should also be noted that the levels of divorce seem to be linked with religion. The countries with the high levels of divorce, Indonesia and Bangladesh, are both predominantly Muslim. In countries where the Catholic Church is influential, like the Philippines, divorce appears less likely to occur.

## B. REMARRIAGE

When marriage is broken by either divorce or death of the husband, a woman may remarry depending on factors such as the woman's age, the number of children she has already had or the reason for dissolution of her first marriage. In addition to these factors, societies have evolved laws, regulations and customs pertaining to remarriage. For example, some cultures prohibit widows from remarrying and others have refused to recognize the marriage of divorcees. The availability of potential spouses as reflected in the sex ratio is another crucial variable influencing the extent of remarriage.

A comparison of the levels of remarriage across countries is shown in table 4.

Table 4. Percentage of all ever-married women who married more than once by age

Country	Age							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45+	
Bangladesh	9.4	11.4	12.5	15.7	16.2	16.9	16.5	12.8
Fiji	1.3	4.2	6.3	8.3	9.9	12.8	11.5	7.9
Indonesia	11.6	21.3	28.9	36.7	39.4	40.8	44.1	31.7
Malaysia	2.4	3.7	7.2	10.4	16.7	17.6	25.8	12.8
Nepal				NA				
Pakistan	0.2	1.6	2.9	4.3	7.9	6.5	8.9	4.2
Philippines	1.4	1.7	2.9	3.0	5.1	7.4	8.2	4.5
Republic of Korea	NA	0.4	0.4	2.6	4.8	7.8	11.0	4.2
Sri Lanka	0.3	2.0	3.2	3.7	5.3	5.4	7.5	4.4
Thailand	3.2	6.3	6.5	12.9	13.1	19.0	15.8	11.7

Note: NA = not available.

The data reveal that there are striking differences in proportions remarried among the countries under investigation. Indonesia is characterized by the highest percentage of women remarried, close to 32 per cent. This finding is not surprising, given the high level of marital disruption in this country. By contrast, the extent of remarriage is very low in the Republic of Korea, Pakistan, Sri Lanka and the Philippines. These figures support the hypothesis that high rates of remarriage accompany high rates of marital dissolution. The data additionally show that the percentage remarried increases as women age. This is obviously due to the fact that prevalence rates are used and consequently show the cumulative effect of age on remarriage. (Women are more exposed to marital disruption and remarriage with rising age.) Hence, the results may be different if the incidence of remarriage by age of women is calculated.

### C. TIME SPENT IN MARITAL UNION

Time spent outside marriage, whether due to late marriage or to marital dissolution, represents a loss of potential reproductive time. One way to summarize the quantity of time lost is by calculating the percentage of the time since a woman's first marriage which she spent in a marital union. The amount of reproductive time lost depends not only the incidence of disruption, but also on the incidence and speed of remarriage. One of the hypotheses to be tested is whether the societies in which marital dissolution is frequent are necessarily the ones in which a large proportion of total reproductive time (or total time after first marriage) is spent outside marital unions. It has been hypothesized in the literature that high rates of dissolution lead to a loss of a relatively high proportion of all time following first marriage, but this may not be so. High rates of remarriage may accompany high rates of dissolution, so that there could be little difference in the amount of reproductive time lost through marital disruption among countries which do and which do not have high rates of disruption.

The average percentage of time since first marriage which an ever-married woman spent in a marital union is presented in table 5. For all countries, an average woman of reproductive age, once married, has spent a very large proportion of her time in a marital union. The greatest loss of reproductive time is found in Indonesia, where women of all ages spent 93 per cent of their entire reproductive time in the married state. However, considering the country's high frequency with which first unions end, this finding is not surprising. The substantial loss of reproductive time among young women in Bangladesh and Indonesia reflects the fact that the

Table 5. Average percentage of time since first marriage which has been spent in the married state by age

Country	Age							All ages	Number
	Under 20	20-24	25-29	30-34	35-39	40-44	45+		
Bangladesh	90.3	94.9	95.4	94.7	93.3	91.9	89.2	93.0	6 515
Fiji	97.1	95.6	96.2	96.2	96.2	95.5	95.6	96.0	4 928
Indonesia	90.1	92.7	91.9	92.0	92.4	89.9	87.6	90.7	9 136
Malaysia	95.4	96.6	97.4	96.5	94.9	92.3	90.8	95.3	6 321
Nepal	99.2	99.3	99.2	98.3	96.5	94.9	90.6	96.1	5 930
Pakistan	97.9	98.4	98.0	97.9	96.6	95.7	94.3	97.2	4 952
Philippines	99.9	98.4	98.9	98.9	98.5	97.6	97.0	94.4	9 268
Republic of Korea	98.2	99.1	99.3	98.3	97.0	94.1	90.0	96.6	5 430
Sri Lanka	98.6	97.1	96.8	97.2	95.2	94.0	93.1	95.0	6 580
Thailand	94.4	96.1	96.7	96.1	94.4	94.8	92.7	95.2	3 820

early unions there are unstable. The decline in percentage of time in a marital union among older women probably occurs as a result of traditional limitations on the remarriage of widows.

The relationship between marital disruption, remarriage and time spent in marital union has been summarized in table 6. The data seem to indicate that high rates of remarriage accompany high rates of marital dissolution. Indonesia represents the highest percentage of women whose first marriage is disrupted and the highest proportion of remarriage. Conversely, the philippines contain the lowest percentage of widowed and divorced women. The data also show that the percentages of remarried women are consistently low in Sri Lanka, Pakistan, the Republic of Korea and the philippines. These figures probably reflect the traditional restrictions on remarriage by widowed or divorced women.

The effects of marital disruption and remarriage upon the average percentage of time spent in marital union can be seen from the figures in table 6. As expected, there is an association between the extent of broken marriage and the amount of time spent in the married state. With high frequency of marital break-up, Indonesia has the lowest average percentage of time spent in marital union. Remarriage,

Table 6. Percentage distribution of status of first marriage, percentage remarried and average percentage of time since first marriage spent in a marital union

Country	Percentage of status of first marriage				Total	Number	Percentage remarried*	Average percentage of time spent in marital union (6)	Number
	(1)	(2)	(3)	(4)					
Bangladesh	78.5	9.9	11.6	21.5	6 515	12.8	93.0	6 515	
Fiji	87.1	3.3	9.6	12.9	4 928	7.9	96.0	4 928	
Indonesia	59.7	7.5	32.9	40.4	9 123	31.6	90.7	9 136	
Malaysia	81.3	6.2	12.4	18.6	6 308	12.7	95.0	6 321	
Nepal					NA				
Pakistan	90.0	6.0	4.0	10.0	4 949	4.0	97.2	4 952	
Philippines	91.5	4.7	3.8	8.5	9 268	4.5	94.4	9 268	
Republic of Korea	89.6	7.2	3.2	10.4	5 420	4.2	96.6	5 430	
Sri Lanka	87.7	6.2	6.1	12.3	6 577	4.0	95.0	6 680	
Thailand	82.1	5.6	12.3	17.9	3 776	11.6	95.2	3 820	

Notes: NA = not available.

\* As a percentage of all ever-married women.

however, does not seem to make up for the total reproductive time lost owing to disruption of a marital union. With some exceptions, there seems to be an inverse relationship between marital dissolution and average percentage of time spent in marital union.

#### **D. THE RELATIONSHIP BETWEEN MARITAL STATUS AND FERTILITY**

Nuptiality patterns are known to be important in affecting fertility. Not only are the timing and tempo of first marriage among the significant intermediate variables determining the time span of the reproductive process, but also the extent of broken marriages from widowhood, divorce and separation (Chamratrithirong, 1980). In this report, an attempt is also made to examine the effects of marital status on the cumulative fertility of ever-married women<sup>3</sup>. Table 7 presents number of children ever born alive per ever-married woman by marital status. The completed fertility<sup>4</sup> of currently married women aged 40-49 was much higher than that of women whose marriages were disrupted by widowhood, divorce or separation. This pattern exists for all countries. The explanation for this general pattern is probably related to the amount of time women were exposed to the risk of childbearing.

Among widowed women, those who remarried had higher numbers of children ever-born than those who did not, except in Fiji, Indonesia and Malaysia. However, the differences are not pronounced. For divorced and separated women, remarriage led to higher fertility except for Bangladesh. The discrepancies are quite marked for all countries, especially Pakistan. It might be that in this region, divorced women who remarried desired to form a second family and subsequently experienced higher fertility than their counterparts who did not remarry.

#### **E. THE RELATIONSHIP BETWEEN REPRODUCTIVE TIME LOST AND FERTILITY**

As demonstrated earlier, there appears to be an inverse relationship between marital disruption and fertility for all countries under study. To be sure, the association between these two factors is very complex. Women who experience marital dissolution presumably lose a period of exposure to risk of childbearing during the period between their marriages. The effect of this lost exposure may, however, be less than might first be assumed because of the prevailing pattern of remarriage. Fertility can also vary both in quantity and in timing such that a woman with lower than average fertility in first marriage can, if she desires, make up her



Table 7. Mean number of children ever-born to ever-married women aged 40-49 by continuity of first marriage and whether remarried

Marital status	Bangladesh	Fiji	Indonesia	Malaysia	Nepal	Pakistan	Philippines	Republic of Korea	Sri Lanka	Thailand
First marriages not dissolved	7.67	6.64	6.31	6.57	5.88	7.29	6.96	5.76	6.00	6.71
Widowed:					4.75					
Remarried	5.58	5.36	4.59	5.85	NA	6.45	6.50	4.69	6.18	6.47
Did not remarry	5.54	5.78	4.75	6.02	NA	5.47	6.42	4.56	5.08	5.59
Divorced or separated:					3.00					
Remarried	5.98	4.90	4.43	4.93	NA	5.33	6.19	4.00	4.71	5.53
Did not remarry	6.61	3.91	2.93	3.61	NA	1.97	4.52	3.24	3.31	3.67
Number	1 121	1 056	2 214	1 757	1 236	1 123	2 610	1 544	2 003	1 040

Note: NA = not available.

fertility deficit in subsequent marriage. Thus, lost "exposure" may have little, if any, impact on fertility. The whole process becomes even more complicated by the fact that the inability or unwillingness to have children may increase the risk of marital disruption while the presence of children, given marital conflict, may reduce the probability of divorce (Cohen and Sweet, 1974).

In this report, an attempt is made to examine whether the effect of marital break-up upon fertility occurs through a variable called reproductive time lost or time spent outside marriage. Table 8 presents mean number of children ever-born to ever-married women aged 40-49 by years since first marriage and time spent outside marriage. For all countries, there is an inverse relationship between the amount of reproductive time lost and completed fertility. This association persists even when controlling for number of years since first marriage.

As mentioned earlier, reproductive time lost may not have a direct negative impact upon childbearing because of remarriage. Therefore, number of times married should be controlled. Table 9 presents mean number of children ever-born per ever-married woman by reproductive time lost and number of marriages. With some exceptions, fertility decreases as reproductive time lost increases. The highest fertility levels occur among women with the lowest amount of reproductive time lost for the once-married in every country except Fiji and Indonesia. For women who married more than once, fertility appears highest in the category of under two years of reproductive time lost. It should also be noted that the fertility of those who married more than once is lower than that of women who married once in almost all reproductive-time-lost categories. In the total sample, the largest difference in number of children ever-born is found in Pakistan, where the fertility levels of women who have lost more than 10 years of reproductive time are 42 per cent those of women who have lost less than 2 years of reproductive time. But over-all, the differences are quite sharp for all countries. This means that there is an inverse relationship between reproductive time lost and fertility, holding number of times married constant.

## V. SUMMARY AND CONCLUSIONS

This paper presents a comparative analysis of the relationship between marital status composition and fertility using data from 10 Asian countries participating in the World Fertility Survey. These countries differ widely in their social, economic and demographic components. Examination of the marital status compositions

Table 8. Mean number of children ever-born to ever-married women aged 40-49 by years since first marriage and time spent outside marriage

Time spent outside marriage	Bangladesh	Fiji	Indonesia	Malaysia	Nepal	Pakistan	Philippines	Republic of Korea	Sri Lanka	Thailand
Less than 25 years since first marriage										
First union intact	6.53	5.62	5.34	5.50	5.06	6.64	5.98	4.91	4.80	5.72
Less than 2 years	6.36	4.77	4.43	5.13	5.14*	3.18*	6.00	4.77	5.83	5.37
2-4 years	—	4.12	4.51	5.29	4.31	4.07*	5.59	4.79	4.10	5.06
5-9 years	6.61*	3.77	3.11	4.47	4.79	4.02*	4.94	4.08	4.16	4.52
10 + years	1.55*	3.46	2.23	3.85	2.00	2.00*	2.89	1.94	1.61	3.04
Number	37	414	483	568	366	179	1 453	606	850	519
25-29 years since first marriage										
First union intact	8.06	7.03	6.59	7.73	6.15	7.34	8.15	6.06	6.75	7.65
Less than 2 years	6.36	6.68	5.52	6.70	8.67*	6.62	7.10	5.35	6.20	6.67
2-4 years	6.65	6.27	4.64	6.58	6.23	5.68	6.78	5.10	5.25	7.56
5-9 years	5.57	5.43	4.14	6.31	4.52	5.79	7.08	4.33	5.68	5.55
10 + years	3.59	3.76	3.20	3.42	2.28	2.69	4.08	2.54	3.27	3.45
Number	295	398	855	587	438	531	834	534	718	388
30 + years since first marriage										
First union intact	7.55	7.75	6.81	7.21	6.40	7.54	8.68	6.93	7.33	8.16
Less than 2 years	6.70	6.67	5.57	5.95	4.85	6.63	8.35	5.92	7.54	7.17
2-4 years	6.68	5.35	4.94	5.57	5.48	7.35	7.97	6.54	5.82	6.98
5-9 years	6.07	6.09	4.26	5.74	6.89	7.10	9.06	5.93	5.91	7.66
10 + years	4.41	5.70	3.49	4.11	4.08	3.46	6.49	3.54	4.48	4.57
Number	790	244	876	602	432	414	324	404	434	132

\*Number of cases less than 10.

Table 9. Mean number of children ever-born per ever-married woman by reproductive time lost and number of marriages

Country	Reproductive time lost (years)										Total	
	Married once only					Married more than once						
	Under 2	2-4	5-9	10+	Under 2	2-4	5-9	10+	Under 2	2-4		5-9
Bangladesh	7.62	6.99	6.42	4.19	6.35	6.48	5.31	4.40	7.54	6.67	5.91	4.25
Fiji	6.61	7.05	5.20	4.04	6.25	4.45	4.52	4.31	6.59	5.25	4.81	4.15
Indonesia	6.30	4.36	5.02	3.39	5.35	4.82	3.69	3.03	6.09	4.75	4.05	3.21
Malaysia	6.52	6.44	7.09	4.05	5.87	5.76	4.89	3.59	6.64	5.90	5.88	3.84
Nepal		NA				NA			5.94	5.19	5.64	3.39
Pakistan	7.25	6.39	6.12	3.06	6.52	6.43	5.56	2.87	7.22	6.41	5.97	3.05
Philippines	6.97	6.92	6.56	3.81	6.80	5.50	5.41	4.58	6.96	6.44	6.22	4.02
Republic of Korea	5.77	5.60	5.12	2.94	4.74	4.87	4.36	2.91	5.73	5.24	4.78	2.94
Sri Lanka	6.02	4.91	5.03	3.03	6.55	4.99	5.13	2.92	6.03	4.94	5.05	3.02
Thailand	6.71	6.05	5.15	3.51	5.85	6.35	5.99	3.82	6.64	6.31	5.57	3.62

Note: NA = not available.

of these countries reveals substantial variations in proportions currently married by age as well as the extent of marital disruption. As hypothesized, remarriage appears to accompany frequency of broken marriages. The data additionally show that in Asia, a woman once married spends a large proportion of her time in marital union. Differences in levels of marital dissolution and remarriage were hypothesized to affect variations in average percentage of time spent in the married state. The data from this comparative study lend partial support to this hypothesis. The data also confirm the notion that marital instability has a negative impact upon childbearing. This is true even when controlling for age. Reproductive time lost is another crucial variable which was found to have an adverse effect upon childbearing. The relationship persists even when holding number of marriages constant. Lastly, this comparative study suggests that marital instability produces a negative effect upon fertility. Hence, differences in marital status compositions may partially be responsible for variations in levels of fertility among societies.

#### NOTES

1. This is more likely in contracepting societies, where women who wanted no more children may decide to have additional children from the new marriage.
2. Evidence from Thailand, for example, shows that a substantial proportion of currently married women in the capital city were living apart from their spouse. This phenomenon is hypothesized to result from migration and other factors associated with residence (Goldstein and others, 1973).
3. If data were available, it would also be desirable to measure the impact of marital status upon current fertility.
4. The cumulative fertility of ever-married women of various age groups can also be investigated.

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# 婚姻狀況組成與生育率之關係

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## (中文摘要)

本文主要在就「婚姻狀況組成與生育率之關係」，從事國際間的比較分析，研究對象包括10個參與「世界生育力調查」(The World Fertility Survey)的亞洲國家。資料顯示，就年齡別有偶婦女比率以及婚姻破裂的水準而言，各國間的差異相當顯着。本文進一步假設其他與婚姻狀況有關的變數，例如再婚，婚姻期間長度，以及生殖時間損失等都會影響生育率。實證分析發現，在控制其他因素之後，婚姻不穩定性對生育兒女有負的影響。因此，婚姻不穩定性可能是造成所研究各國間生育率差異的部分原因。