

# COMPARATIVE STUDIES

### **CROSS-NATIONAL SUMMARIES**

NUMBER 42

DECEMBER 1984

HAZEL ASHURST SUNDAT BALKARAN J.B. CASTERLINE

**Socio-Economic Differentials in Recent Fertility** 

**REVISED EDITION** 

INTERNATIONAL STATISTICAL INSTITUTE Permanent Office. Director: E. Lunenberg Mailing address: 428 Prinses Beatrixlaan, PO Box 950 2270 AZ Voorburg Netherlands

WORLD FERTILITY SURVEY Project Director: Halvor Gille The World Fertility Survey (WFS) is an international research programme whose purpose is to assess the current state of human fertility throughout the world. This is being done principally through promoting and supporting nationally representative, internationally comparable, and scientifically designed and conducted sample surveys of fertility behaviour in as many countries as possible.

The WFS is being undertaken, with the collaboration of the United Nations, by the International Statistical Institute in co-operation with the International Union for the Scientific Study of Population. Financial support is provided principally by the United Nations Fund for Population Activities and the United States Agency for International Development. Substantial support is also provided by the UK Overseas Development Administration.

For information on Country Reports, WFS publications, and WFS depository libraries, write to the Publications Office, International Statistical Institute, 428 Prinses Beatrixlaan, PO Box 950, 2270 AZ Voorburg, Netherlands. For information on the WFS generally, write to the Information Office, World Fertility Survey, International Statistical Institute, 35-37 Grosvenor Gardens, London SW1W 0BS, UK.

L'Enquête Mondiale sur la Fécondité (EMF) est un programme international de recherche dont le but est d'évaluer l'état actuel de la fécondité humaine dans le monde. Afin d'atteindre cet objectif, des enquêtes par sondage sur la fécondité sont mises en oeuvre et financées dans le plus grand nombre de pays possible. Ces études, élaborées et réalisées de façon scientifique, fournissent des données représentatives au niveau national et comparables au niveau international.

L'EMF est entreprise, en collaboration avec les Nations Unies, par l'Institut International de Statistique, qui coopère avec l'Union internationale pour l'étude scientifique de la population. Le financement de ce programme est essentiellement assuré par le Fonds des Nations Unies pour les activités en matière de population et par l'Agence des Etats-Unis pour le développement international. Une contribution importante est aussi faite par le Département pour le développement des pays d'outre-mer du Royaume-Uni.

Pour toute information concernant les rapports d'enquêtes nationaux, les publications de l'EMF ou les bibliothèques dépositaires, écrire au Bureau des publications, Institut International de Statistique, 428 Prinses Beatrixlaan, BP 950, 2270 AZ Voorburg, Pays-Bas. Pour tous renseignements complémentaires sur l'EMF en général, écrire au Bureau d'information, Enquête Mondiale sur la Fécondité, Institut International de Statistique, 35-37 Grosvenor Gardens, Londres SW1W 0BS, Royaume-Uni.

La Encuesta Mundial de Fecundidad (EMF) es un programa internacional de investigación cuyo propósito es determinar el estado actual de la fecundidad humana en el mundo. Para lograr este objetivo, se están promoviendo y financiando encuestas de fecundidad por muestreo en el mayor número posible de países. Estas encuestas son diseñadas y realizadas científicamente, nacionalmente representativas y comparables a nivel internacional.

El proyecto está a cargo del Instituto Internacional de Estadística, contando con la colaboración de las Naciones Unidas y en cooperación con la Unión Internacional para el Estudio Científico de la Población. Es financiado principalmente por el Fondo de las Naciones Unidas para Actividades de Población y por la Agencia para el Desarrollo Internacional de los Estados Unidos. La Oficina Británica para el Desarrollo de Países Extranjeros proporciona también un gran apoyo financiero.

Puede obtenerse información sobre Informes de Países como otras publicaciones de la EMF y las bibliotecas depositarias, escribiendo a la Oficina de Publicaciones, Instituto Internacional de Estadística, Prinses Beatrixlaan 428, Casilla Postal 950, 2270 AZ Voorburg, Países Bajos. Si desea información de carácter general sobre la EMF, escriba a la Oficina de Información, Encuesta Mundial de Fecundidad, Instituto Internacional de Estadística, 35-37 Grosvenor Gardens, Londres SW1W 0BS, Reino Unido.

# **COMPARATIVE STUDIES**

**CROSS-NATIONAL SUMMARIES** 

Socio-Economic Differentials in Recent Fertility

**REVISED EDITION** 

HAZEL ASHURST SUNDAT BALKARAN J.B. CASTERLINE

#### **Editorial note**

The present report is an extension of an earlier crossnational summary, 'Socio-Economic Differentials in Recent Fertility', published in 1984 as *WFS Comparative Studies* no 33. The present work complements the earlier publication.

The recommended citation for this publication is:

Ashurst, Hazel, Sundat Balkaran and J.B. Casterline (1984). Socio-Economic Differentials in Recent Fertility. *WFS Comparative Studies* no 42. Voorburg, Netherlands: International Statistical Institute.

Printed in Great Britain at the Alden Press. Oxford London and Northampton

# Contents

Pre	FACE	
Асн	NOWLEDGEMENTS	
1	INTRODUCTION	
2	THE SOCIO-ECONOMIC CHARACTERISTICS	
2.1 2.2 2.3 2.4 2.5	Type of place of current residence Respondent's years of schooling Husband's occupation Respondent's work status Associations among the four variables	
3	Methodological Considerations	1
3.1 3.2	Socio-economic characteristics Fertility rates	]
4	The Tables	
4.1 4.2	Appendix tables Discussion	
Ref	ERENCES	2
Арр	endix A – Detailed Tables	4
Тав	LES	
1	Proportions of women aged 15–19 eligible for the individual interview, as estimated using household and individual survey information	
2	Subgroups containing less than 1000 woman-years of within-union exposure during the five years preceding the survey	1
3	Summary fertility measures, national level	
4	Summary fertility measures, by type of place of current residence	
5	Summary fertility measures, by the respondent's years of schooling	-
6	Summary fertility measures, by the husband's occupation	
7	Summary fertility measures, by the respondent's work status	
A1	Age-specific fertility rates by current residence and respondent's education	2
A2	Age-specific marital fertility rates by current residence, respondent's education, husband's occupation and respondent's work status	4
A3	Duration-specific marital fertility rates by current residence, respondent's education, husband's occupation and respondent's work status	5

- A4 Woman-years of exposure by current residence and respondent's education
- Woman-years of exposure by current residence, A5 respondent's education, husband's occupation and respondent's work status
- A6 Duration-specific marital years of exposure by current residence, respondent's education, husband's occupation and respondent's work status

FIGURES

54

56

59

Total fertility rates (TFR) and total marital 1 fertility rates (TMFR), by type of place of current residence 18 2 Total fertility rates (TFR) and total marital fertility rates (TMFR), by respondent's years of school-26 ing 3 Total marital fertility rates (TMFR), by the husband's occupation 36 4 Total marital fertility rates (TMFR), by the respondent's work status

40

One of the main objectives of the WFS programme is the collection and dissemination of internationally comparable data on human fertility, obtained through nationally representative interview surveys carried out in a large number of countries. Many institutions and research workers at international and national levels are engaged in cross-national comparative analysis of the data collected. The WFS London headquarters also undertake comparative analysis such as cross-national summaries.

The cross-national summaries present basic results from WFS surveys in developing countries on a wide range of topics. These summaries are published in the *WFS Comparative Studies* series.

Several of the cross-national summaries are concerned solely with providing detailed and systematized information on the comparability, or lack thereof, of the field procedures, survey characteristics, questionnaire content and wording and content of the First Country Reports (*WFS Comparative Studies* nos 1–5). Such detailed appraisals constitute an essential reference base for anyone using WFS data for comparative analysis.

Other cross-national summaries present comparable results from as many surveys as possible on a wide range of specific topics. Each summary provides, in addition to tabular material, a brief accompanying text, which draws attention primarily to any non-comparability of the data and to any obvious interpretational pitfalls to which the tables may be subject. Furthermore, although these summaries are not intended to be analytic in their orientation, some brief highlighting of the major noteworthy differences and similarities is included.

A first group of topical cross-national summaries based upon data from 19 countries for which the First Country Report and standard recode tapes were available early in 1980 is near completion with the publication of twelve volumes (*WFS Comparative Studies* nos 6–15, 17 and 19). A second group of cross-national summaries based upon data from 28 developing countries, with Africa being represented for the first time, is also now nearing completion.

The cross-national summaries are intended to assist analysts and policy-makers by providing a ready tool for comparison of data between countries, but at the same time they draw attention to the limits, if any, of such comparability. It is intended to update and rationalize issues in both groups of summaries so as to cover eventually all developing countries participating in the WFS programme.

The present report is part of this final series, and updates report no 33, covering all 41 countries where surveys were completed.

HALVOR GILLE Project Director

# Acknowledgements

The authors gratefully acknowledge the contribution of Iqbal Alam in the preparation of this report.

## 1 Introduction

Socio-economic differentials in fertility are a fundamental source of evidence on the underlying determinants of fertility. In the absence of in-depth inquiry into the factors motivating reproductive behaviour, an approach usually not practicable in national-level surveys, sensitive analysis of socio-economic differentials can yield considerable insight as to the causes of observed levels and trends.

This report is one of two WFS cross-national summaries on socio-economic differentials in fertility. The first (Alam and Casterline 1984) presents fertility rates from WFS surveys in 29 countries. The present study reviews an additional 12 surveys, most of which are from Africa (see appendix tables), but integrates both studies for comparative analysis. The rates are computed for subgroups classified by four socio-economic variables: type of place of current residence, the respondent's years of schooling, her partner's occupation, and her work status since first union, with the variables similarly defined in each of the surveyed countries. Thus comparable estimates on fertility differentials are available for 41 WFS participant countries spread across Asia, Africa and the Americas (Latin America and the Caribbean). Portugal is the only country outside the developing region which was included in the WFS survey. The present report provides detailed estimates for only 12 WFS countries; however, we present for all the surveyed countries various summary fertility measures on the socio-economic variables, to illustrate cross-national/ regional differences in fertility.

The availability of rates from a large number of countries, differing substantially in historical and cultural context, level of economic development and stage of fertility transition, provides the opportunity to address many frequently posed questions: Does the pattern of socio-economic differentials vary by region? Does the size of differentials change with fertility transition? Are socio-economic differentials a function of the overall level of socio-economic development or institutional activity in the field of population? We shall not attempt to answer these and related questions in this report, but it is hoped that the detailed data presented here will be used for this purpose by other researchers.

## 2 The Socio-Economic Characteristics

The socio-economic variables examined are confined to those available in roughly comparable form for all WFS countries. While WFS surveys as a body are not rich in socio-economic information, it was possible to identify four variables which represent the major dimensions normally considered in the investigation of socioeconomic determinants of fertility. These same four variables, with identical subgroup definition, are used in other reports in this series on other facets of reproductive behaviour (McCarthy 1982; Ferry and Smith 1983; Sathar and Chidambaram 1984). Further detail on these variables is found in Singh (1984).

#### 2.1 TYPE OF PLACE OF CURRENT RESIDENCE

Type of place of residence is represented by a trichotomy: major urban areas, other urban areas, and rural areas. Major urban areas include cities or urban agglomerations with populations exceeding one million, and also include the political capital, regardless of size. The remaining urban areas fall into the other urban category. In Lesotho, Yemen AR and Nepal the number of urban respondents is too small to support the distinction between major urban and other urban; in these three countries the respondents are classified as simply urban and rural. For most countries, distinguishing major urban and other urban areas requires recourse to the detailed sampling framework information on the survey tape (see Lightbourne 1981 for further details).

The definition of rural and urban localities differs widely between countries. Some distinguish on the basis of population size, the most common criterion for an urban place being 5000 inhabitants or more. Other countries take administrative function or the presence of certain facilities as their criteria. This lack of definitional uniformity reduces the usefulness of type of place of residence in cross-national research. Of further concern is the lack of precision in type of place as an analytical concept. In most societies the continuum from rural to major urban places encompasses variation in socioeconomic and other variables which affect reproductive behaviour.

#### 2.2 RESPONDENT'S YEARS OF SCHOOLING

The completed years of schooling are grouped into four categories: no schooling, 1-3 years, 4-6 years and 7+ years. In Mauritania and Yemen AR the number of educated women is small and respondents could only be grouped into two broad categories – no schooling and some schooling. As educational attainment is recorded standardly in WFS surveys as years of schooling com-

pleted, at least up to the secondary level, this classification is easily implemented. Roughly speaking, the categories 1-3, 4-6 and 7+ years represent incomplete primary, complete primary, and secondary and higher schooling levels, respectively. Controversy surrounds the decision to classify by years of schooling rather than level or type of school. The category 4-6 years, for example, includes those who have completed the primary level in most but not all countries, but the exact year within this range varies (Singh 1984). Development of a multifold classification in terms of level of education attained, on the other hand, would require detailed country-specific research, especially as the years of schooling required to attain each level have changed in recent decades in some countries. Hence years of schooling seems on balance a less ambiguous standard, even taking into account wide variation in the content of curricula (Hermalin and Mason 1980).

The debate over optimal measurement of educational attainment in the comparative analysis of fertility is intensified by the evidence from almost all societies that education has profound effects on reproductive behaviour. The source of these effects is the subject of continuing research (Cochrane 1979).

#### 2.3 HUSBAND'S OCCUPATION

A four-category classification of the respondent's husband's current or most recent occupation is derived by collapsing the nine-category scheme available for most countries. The professional, administrative and managerial group and the clerical workers are combined to form one category of white collar workers. Also combined are skilled and unskilled manual workers, and the sales and service groups. The fourth category consists of agricultural workers (including those engaged in fishing or forestry), represented by two separate categories (selfemployed and non-self-employed) in the standard country data files. For completeness we show as a fifth category those reporting no employment of their husband; in all countries this group is very small or non-existent.

The husband's occupation is a measure of socioeconomic status, with the white collar group of highest status, the agricultural workers of lowest status, and the manual workers and the sales and service workers falling somewhere in between. Obviously there are violations of this assumption: some of the agricultural workers will be large landowners, and some of the clerical workers within the white collar group are of low status. Direct information on income or wealth might be more useful, but such information is notoriously difficult to gather and, in any case, is typically highly associated with occupational status. Occupational position, however achieved, is the main factor determining access to wealth and social status in most societies.

#### 2.4 RESPONDENT'S WORK STATUS

In WFS surveys information is gathered on the respondent's employment before the first union and on the current or most recent work since the first union. (In the Caribbean, the two periods are distinguished by the first birth rather than the first union.) For both periods, occupation and work status are recorded. The latter is defined in terms of (a) the employer – a family member, someone else, or self-employment and (b) type of payment – payment in cash, in kind, or no payment. Additional information on place of work – on the family farm, at home, or away – is also collected.

From the standpoint of fertility behaviour, work away from home, payment in cash, and employment by others are usually thought to be critical distinctions. In most countries these go hand-in-hand, so much so that separating out those employed by a non-relative sufficiently isolates all these factors (Rodríguez and Cleland 1981). Distinguishing as well the substantial numbers reporting no work experience results in a three-fold classification: employed by others, employed by family members or self-employed, and non-workers.

In this report we present fertility rates by work status since first union, as this would seem more relevant to marital fertility, and the data permit estimation of rates by work status for marital fertility only (see chapter 3).

The extensive research on the relationship between female employment and fertility does not lend itself to succinct summary, as it is characterized by diverse findings and intense concern about difficult conceptual and measurement problems (Kupinsky 1977, Singh and Casterline forthcoming). A chief concern – that fertility and female work mutually affect each other – is relevant to our analysis. Observed differentials in fertility by work status cannot be assumed to be the consequence of the employment experience, as levels of childbearing will usually influence the capacity to work.

#### 2.5 ASSOCIATIONS AMONG THE FOUR VARIABLES

In this report fertility rates are presented separately for subgroups defined by each of the four socio-economic variables. The four are known to be highly associated in most societies. Thus estimation of 'independent' effects of each on fertility requires multivariate modelling, as in Rodríguez and Cleland (1981). We note here that, in such modelling, it is important to distinguish background variables from mediating variables. The respondent's education, for example, in most instances precedes temporally and causally the other three variables, and hence its true effect on fertility may resemble that shown in this report. At the other extreme is the respondent's work status, which surely is affected by level of educational attainment, type of place of residence, and the household economy (as reflected by the husband's occupation). Here the danger of attributing effects which are in fact due to other variables is especially great.

When evaluating the differentials shown in this report, it is essential that these considerations be kept in mind. It would be valuable if these findings stimulate further research in which the associations among the variables are explicitly taken into account.

## 3 Methodological Considerations

#### 3.1 SOCIO-ECONOMIC CHARACTERISTICS

With the exception of the respondent's work status, the socio-economic characteristics pertain to the respondent or her partner at the time of the survey, whereas the fertility rates refer to the five-year period before the survey (see below). Schooling is normally completed before childbearing, and hence is probably legitimately assumed to apply to the entire period. Residential or occupational mobility during the period weakens the applicability of the type of place of residence and partner's occupation measures, but on balance it seems reasonable to assume that the magnitude of such mobility over a five-year period will be relatively small in most societies. The respondent's work status measure refers to the most recent work since marriage. For some women this work will have been taken up some time during the five-year period and thus will not characterize the entire period. Other women will have stopped work well before the recent period, in which case the applicability is again questionable.

#### 3.2 FERTILITY RATES

#### Sources of data

The fertility rates presented in this report are calculated in the conventional fashion, as the quotient of counts of births and counts of woman-years of exposure. The reference period is the five years preceding the survey. The counts of births and exposures during this period are obtained from the detailed maternity and union histories gathered in all WFS surveys. In the maternity history, the respondent was asked for the month and year of birth of every child. If she was unable to report the calendar date, she was asked how many years ago the birth occurred. In the union history, the respondent was asked for the month and year of her first union. In the WFS surveys marriage is defined liberally as any cohabitation or sexual union irrespective of whether it is legally recognized, and the beginning of the union is determined by consummation rather than a formal ceremony. In a majority of countries the questionnaire does not instruct the interviewer to ask for age at first union if the date was not known, but undoubtedly this approach was often used and a calendar date arrived at by a conversion procedure. Age-specific rates also require information on the respondent's age at the survey date. The respondent's age was obtained from a direct question on the month and year of birth, with her current age recorded if the date could not be reported.

Where the month and year were not obtained, or were found to be inconsistent with other dates during the editing of the data, a month and year were imputed, using random allocation procedures within the assumed possible range of dates. The extent of such imputation varied across countries; in some instances a large proportion of the events were affected (see Sathar and Chidambaram 1984).

The maternity history data are subject to well-known errors due to omission and incorrect dating of births. Omission is normally concentrated among births occurring many years before the survey, and hence the rates for the five-year period preceding the survey should be relatively free of this bias. Recent births which did not survive may still be subject to significant levels of omission, however, in particular those which occurred after the last surviving birth, due to insufficient probing of this interval and, in some societies, sensitivity about the event (Thompson, Nawab Ali and Casterline 1982). Incorrect dating of births is a more probable threat to the fertility estimates for this period, as there is evidence of a tendency in some societies to 'age' children, which can result in an underestimate of recent fertility levels. Data quality evaluations have been carried out for all the surveys, and these indicate that the estimates of recent levels are sound in almost all countries. We note that estimates of differentials are biased by omission and dating errors only if these are more prevalent among some subgroups than others. It is usually assumed that less educated women are more prone to such reporting errors.

There has been less investigation of the types of errors likely to occur in the reporting of union histories. For the recent period, the dating of the first union is probably of less concern than the dating of periods of dissolution. There is evidence that out-of-union time is on balance under-reported for even the recent past (Casterline, Singh, Cleland and Ashurst 1984). This results in an overestimation of within-union exposure time and a consequent underestimation of within-union fertility rates. (We define these rates in the next section.) The overall impact on fertility differentials is not known.

The reporting of the respondent's date of birth is imprecise in many of the surveys analysed here (see the pertinent data quality evaluation reports). As we give no attention to fertility trends and our discussion concentrates on summary measures cumulated over age groups, errors in the classification of births and exposures by age of respondent are likely to affect this analysis minimally.

#### **Calculation of rates**

The rates in this report were calculated using the program FERTRATE developed at the WFS headquarters. Sampling weights are applied in all calculations.

Three types of rates are examined: age-period-specific

fertility rates; age-period-specific marital fertility rates; and duration-period-specific marital fertility rates.

The age-period-specific fertility rate (ASFR) is the ratio of (a) births to women in a five-year age group during the five years preceding the survey, to (b) the total number of woman-years spent in that five-year age group during the five years. To arrive at the latter in those surveys where only ever-in-union women were interviewed, the number of ever-in-union women is inflated by dividing by the proportion ever-in-union in that age and socio-economic subgroup, as estimated from data collected in the household survey. (The adjustment uses single-year proportions ever-in-union.) Only two of the socio-economic characteristics considered here are normally recorded in the household survey - type of place of residence and years of schooling – and thus the ASFRs are presented just for these subgroups. Note that the calculation of ASFRs using births from maternity histories of ever-in-union women only assumes implicitly that single women have no births, an unreasonable assumption in some countries, notably Peru (Goldman and Hobcraft 1982). Cumulation of the ASFRs across the five-year age groups (from 15-49) and multiplication by five yields the total fertility rate (TFR), which may be interpreted as the mean number of births to a woman who survived the entire reproductive span and experienced the fertility schedule observed in this five-year period.

The age-period-specific within-union fertility rate (ASMFR) is similar to the ASFR except that both births and exposure are confined to women in unions. The requisite information is provided by the individual survey in all countries. The limitation to within-union experience controls for possible differences in exposure following first union among the socio-economic subgroups, with the accompanying disadvantage of placing heavy weight on the accuracy of reported dates of births, union dissolutions and new unions. The reader is cautioned about the meaningfulness of the ASMFR for younger age groups where age at first union is on average late. In these instances not only will the ASMFR be based on a selective subsample (often characterized by higher fertility), but the exposure may be concentrated at relatively short durations and the births may contain a disproportionate number of pre-union conceptions. Under these conditions, the ASMFR exaggerates the rate of within-union childbearing which would occur were a substantial proportion of women in union for most of the age interval. Hence the cumulation of the ASMFRs, the total marital fertility rate (TMFR), interpreted as the mean number of births to a woman who remained within union during the entire reproductive span and who experienced the observed within-union fertility schedule, is sometimes a misleading indicator. Because of the sensitivity of the TMFR to average age at first union, which in many societies is closely associated with the socioeconomic characteristics examined here (McCarthy 1982), we present TMFRs based on the age ranges 15-49 and 20-49.

The duration-period-specific marital fertility rate (DSMFR) requires classification of births and exposure by duration since first union. All births and exposures since the first union are counted; unlike the ASMFRs,

there is no restriction to within-union experience. A further set of TMFRs are calculated by cumulating DSMFRs to duration 20 years and 25 years. These TMFRs are largely free of the problems which plague the TMFRs calculated from ASMFRs and thus provide a more meaningful picture of subgroup differentials in marital fertility.

Two additional summary measures are computed, the general fertility rate (GFR) and the general marital fertility rate (GMFR). The GFR is the ratio of births to woman-years of exposure, for women aged 15–49. The GMFR is the ratio of within-union births to within-union woman-years of exposure, for women aged 15–49. Because the age distribution of reproductive-age women may differ significantly among socio-economic sub-groups and neither the GFR nor the GMFR takes age into account, these are of limited usefulness in the analysis of socio-economic differentials and we shall not discuss them.

Age- and duration-period rather than cohort-period rates are selected for this report. (For discussion of the merits of the latter, see Ryder 1982.) Conclusions about the patterns of socio-economic differentials are not likely to be affected by this choice. Age- and duration-period rates are more familiar to demographers but are computationally more complex, especially with respect to the counting of exposure. Period can be measured either in calendar years or in intervals of time receding from the survey. We have chosen the latter approach, as it is more straightforward to implement for the countries. Two minor points: the computer program used (FERTRATE) assumes that when the month of a birth coincides with the month of the mother's birth, the latter precedes the former. Births and exposures in the month of interview itself have been omitted, as they pertain to one-half month of exposure.

#### Comparability of the data

In Costa Rica and Panama all women aged less than 20 were excluded from the individual interview, making estimation of a rate for women aged 15–19 at the survey impossible. The TFRs, TMFRs and GFRs for these countries pertain to women aged 20–49. In Venezuela women aged 45 and over were excluded from the individual interview, and thus the summary measures pertain to women aged 15–44.

Mexico, Guyana and Jamaica pose more complex problems. In Mexico women aged 15-19 who had never been in a union and never borne a child were not eligible for individual interview and in Guyana and Jamaica women aged 15-19 at the survey were not eligible if they were still in full-time education. As a consequence the marital fertility rates (ASMFR and DSMFR) for this age group refer to a more selective subgroup than in other countries, although the impact on the rates is likely to be minimal. The denominator for the age-specific fertility rate (for the residence and schooling subgroups) must be calculated by dividing the number of interviewed women by the proportion eligible for interview, which in these countries will differ from the proportion ever-in-union. The proportions are obtained from the household survey for the residence subgroups in Mexico. The residence

Country	Residence	e		Years of schooling						
and age	Major urban	Other urban	Rural	None	1–3	4–6	7+	Total		
Mexico										
15 16 17 18 19	0.032 0.089 0.117 0.222 0.305	0.056 0.083 0.199 0.270 0.393	0.123 0.196 0.301 0.364 0.518	0.167 0.300 0.421 0.378 0.875	0.142 0.232 0.316 0.441 0.613	0.063 0.134 0.187 0.289 0.483	$\begin{array}{c} 0.010 \\ 0.034 \\ 0.082 \\ 0.120 \\ 0.160 \end{array}$	0.076 0.132 0.215 0.291 0.409		
Guyana										
15 16 17 18 19	$\begin{array}{c} 0.390 \\ 0.635 \\ 0.794 \\ 0.943 \\ 1.000 \end{array}$	0.438 0.706 0.700 0.933 1.000	0.568 0.768 0.831 0.940 1.000	$   \begin{array}{r}     1.000 \\     1.000 \\     1.000 \\     1.000 \\     1.000 \\   \end{array} $	$ \begin{array}{r} 1.000 \\ 1.000 \\ 1.000 \\ 1.000 \\ 1.000 \\ 1.000 \\ \end{array} $	$   \begin{array}{r}     1.000 \\     1.000 \\     1.000 \\     1.000 \\     1.000 \\   \end{array} $	0.466 0.707 0.795 0.934 1.000	0.521 0.737 0.817 0.939 1.000		
Jamaica										
15 16 17 18 19	0.083 0.250 0.522 0.639 0.918	0.187 0.323 0.658 0.794 0.913	0.124 0.328 0.583 0.781 0.851	$ \begin{array}{r} 1.000\\ 1.000\\ 1.000\\ 1.000\\ 1.000\\ 1.000 \end{array} $	1.000 1.000 1.000 1.000 1.000	1.000 1.000 1.000 1.000 1.000	0.108 0.278 0.555 0.710 0.863	0.135 0.321 0.587 0.744 0.883		

**Table 1** Proportions of women aged 15–19 eligible for the individual interview, as estimated<sup>a</sup> using household and individual survey information

<sup>a</sup>See text for explanation.

Table 2	Subgroups	containing	less that	ı 1000	woman-years	of	within-union	exposure	during t	he five ye	ears preceding
the surve	у У								_		

Variable and subgroup	Country
Current residence	
Major urban	Lesotho, Yemen AR, Nepal
Other urban	Haiti
Rural	_
Respondent's education	
No schooling	Benin, Ivory Coast, Paraguay, Panama, Guyana, Jamaica, Trinidad and Tobago
1–3 years	Ghana, Senegal, Morocco, Tunisia, Syria, Nepal, Pakistan, Guyana, Jamaica, Trinidad and Tobago
4–6 years	Benin, Senegal, Morocco, Nepal, Haiti
7 + years	Benin, Ivory Coast, Senegal, Morocco, Sudan (N), Pakistan, Thailand, Haiti
Husband's occupation	
No work	All countries, except Mauritania and Malaysia
Agricultural	Lesotho
Skilled-unskilled	
Sales and service	Lesotho, Haiti
Professional and clerical	Lesotho, Senegal, Mauritania, Yemen AR, Dominican Republic, Haiti
Respondent's work status	
No work	_
Family and self	Kenya, Venezuela
Other	Benin, Ivory Coast, Senegal, Mauritania, Morocco, Sudan (N), Jordan, Yemen AR

subgroups are not readily defined in the household data for Guyana and Jamaica, and years of schooling is not included in the household information in any of the three countries. For Guyana and Jamaica, we assumed that full-time students aged 15-19 must have attained at least seven years completed schooling, and thus the proportions for the three other schooling groups can be obtained from the individual (all-women) samples. The remaining proportions – for years of schooling 7 + inGuyana and Jamaica, all schooling subgroups in Mexico, and residential subgroups in Guyana and Jamaica - must be estimated by indirect methods. We assume, first, that the single-year age distribution of women aged 15–19 in the household survey applies to the women in the subset of households from which individual interview respondents were selected; secondly, that in Guyana and Jamaica the percentage distribution of individual survey women aged 20–49 by type of place of residence applies to women aged 15-19; thirdly, that in Mexico the percentage distribution of individual survey women aged 20-24 by years of schooling resembles that of women aged 15-19, with adjustment to take account of increases across cohorts in years of schooling. The assumptions permit estimation of the number of women classified as ineligible for the individual interview and calculation of the eligibility proportions shown in table 1.

A few countries with ever-married samples did not obtain information on education in the household survey: Mauritania, Nepal, Sri Lanka, Fiji, Indonesia and Thailand. Egypt also lacks the necessary data on the short household questionnaire and for Tunisia the information is not readily available. Hence age-specific fertility rates (and TFRs) cannot be calculated for educational subgroups in these eight countries.

#### Sampling errors of the rates

In addition to the non-sampling errors discussed above, all the estimates presented in this report are subject to sampling error. Little (1982) demonstrates that sampling errors of age- and duration-specific fertility rates can be very substantial in size, especially when based on reference periods of less than five years. The TFR and TMFR are subject to much smaller sampling errors. Hence we rely principally on these summary measures in the discussion. When making use of the age- and duration-specific rates, as well as when assessing the TFRs and TMFRs, the reader is urged to consult the tables of woman-years of exposure provided in appendix A, as certain socio-economic groups in some countries contain few respondents. For guidance, we list in table 2 subgroups which contain less than 1000 woman-years of within-union exposure during the five-year period. Small exposures are chiefly a problem for the educational subgroups, due to low levels of schooling in several African and Asian countries (eg Benin, Ivory Coast, Senegal, Morocco, Nepal, Pakistan) and high levels of schooling in countries in the Caribbean area (Guyana, Jamaica, Trinidad and Tobago). The relatively small total sample sizes in the Caribbean surveys also contribute to the small exposure problem and small sample sizes also prevail in some of the occupational groups, especially for Africa.

## 4 The Tables

#### 4.1 APPENDIX TABLES

There are six appendix tables, three containing fertility rates (tables A1–A3) and three containing the womanyears of exposure upon which the rates are based (tables A4–A6). These tables show in detail rates for only the 12 WFS countries which were not reviewed in Alam and Casterline (1984). The reader may refer to that study for the detailed estimates for the other 29 WFS countries. Age- and duration-specific rates are expressed as births per 1000 woman-years of exposure, as are the general fertility rates (tables A1 and A2). The TFRs and TMFRs are expressed as births per woman.

Age-specific fertility rates are shown in table A1, along with the TFR and the GFR. These rates are shown for residential and educational subgroups only (due to the lack of information or inapplicability of the other two variables for single women). The corresponding exposures are presented in table A4.

Age-specific marital fertility rates are shown in table A2, with three summary measures: TMFRs calculated by cumulating the ASMFRs from age 15–49 and from age 20–49, and the GMFR. The corresponding exposures are presented in table A5.

Duration-specific marital fertility rates are shown in table A3, with two summary measures: TMFRs based on durations 0–19 years and durations 0–24 years. The corresponding exposures are presented in table A6.

#### 4.2 DISCUSSION

#### Summary measures

Summary measures of fertility are presented in the text tables for all 41 WFS countries, classified according to region – Africa, Asia and the Pacific, the Americas and Europe.<sup>1</sup> In our discussion we rely on three summary measures derived from appendix A, tables A1–A3: the TFR for ages 15–49; the TMFR for ages 20–49; and the TMFR for durations 0–24 years.

Since with few exceptions very little childbearing occurs outside the age range 15–49 years, the TFRs provide a summary of the full fertility differentials among subgroups. Effects of all of the proximate determinants of fertility (Bongaarts 1978), including nuptiality, lactational amenorrhoea, contraceptive use, and abortion, will enter into these observed differentials. Because the TMFRs are restricted to union births and exposures, nuptiality patterns do not directly affect these measures. There may be important indirect effects, however: the durations of union at ages 20–49 and the age at durations 0–24 years are both determined by the age at entrance to union, and both age and duration effects on fertility rates are observed in most societies (Page 1977, Hobcraft and Casterline 1983).

The TMFR for within-union fertility after age 20 summarizes fertility during the peak and later ages of the reproductive career. We regard variation in this as mainly reflective of volitional fertility control, whether by means of contraception, induced abortion, or prolonged sexual abstinence. Differences in duration of lactation will also influence the observed subgroup patterns.

The TMFR for the first 24 years after marriage measures union fertility over virtually the whole of the woman's reproductive career. As the average age at entrance to first union is less than 30 years for all subgroups, truncation has a minimal effect on this measure. Comparison of the patterns of differentials between the TFR and this TMFR largely indicates the extent to which fertility outside unions (including fertility before the first union) and fertility at durations beyond 24 years account for the observed TFR differentials.

#### National rates

For comparison with the subgroup rates which are the focus of this report, we present in table 3 national-level values of the TFR and the two TMFRs.

The range in total fertility rates among the 41 countries is very wide, with Portugal (2.4 births) and Yemen AR (8.5 births) at the two extremes. Even within regions the TFRs vary considerably. Fertility levels are highest in the Middle East and sub-Saharan Africa where the total fertility rate averages about 7 children per woman. However, among the three Arab countries in the Middle East (Jordan, Syria and Yemen AR) the average is about 8 children per woman with Yemen AR showing the highest fertility rate (8.5). In the Arab countries of North Africa fertility is slightly lower, averaging about 6 children per woman. Total fertility rates in sub-Saharan Africa show a relatively wide range, from 8.3 in Kenya to 5.8 in Lesotho.

Another group of high fertility countries in Asia is in the Indian subcontinent (Bangladesh, Nepal and Pakistan) where the total fertility rate is slightly over 6 children per woman. In the rest of Asia and the Pacific region, however, the corresponding rate drops to an average of 4.5, but varies from 5.2 in the Philippines to 3.8 in Sri Lanka.

<sup>&</sup>lt;sup>1</sup> It should be recognized that the WFS has not covered all the countries in each region nor is it claimed that the surveys in a region are representative of the region's total population.

Table 3	Summary	fertility	measures,	national	level
---------	---------	-----------	-----------	----------	-------

Country	TFR, ages 15-49	TMFR, ages 20–49 <sup>a</sup>	TMFR, durations 0–24 years
Africa			
Benin	7.08	6.76	6.68
Cameroon	6.40	5.86	5.78
Ghana	6.46	8.13	6.08
Ivory Coast	7.36	6.74	6.60
Kenya	8.25	9.95	7.90
Lesotho	5.76	7.45	5.82
Nigeria	6.34	5.93	6.07
Senegal	7.15	8.28	7.00
Egypt	5.26	5.90	6.27
Mauritania	6.25	6.54	6.71
Morocco	5.90	6.58	6.84
Sudan (N)	6.03	8.18	6.82
Tunisia	5.85	7.26	7.02
Asia and the Pacific			
Jordan	7.64	10.69	8.92
Syria	7.48	10.56	8.25
Turkey	4.50	4.49	5.06
Yemen AR	8.51	8.36	7.83
I chich AK	0.31	8.30	7.85
Bangladesh	6.08	6.92	6.21
Nepal	6.15	7.10	6.00
Pakistan	6.27	7.90	6.94
Sri Lanka	3.75	7.12	5.14
Fiji	4.22	6.43	4.90
Indonesia	4.73	6.32	5.18
Korea, Rep. of	4.27	7.40	5.06
Malaysia	4.65	7.94	5.87
Philippines	5.24	8.98	6.42
Thailand	4.63	7.52	5.32
Americas			
Colombia	4.69	7.84	5.37
Ecuador	5.32	6.19	6.02
Paraguay	4.97	7.81	5.44
Peru	5.57	9.21	6.55
Venezuela <sup>b</sup>	4.53	7.66	5.01
Costa Rica <sup>c</sup>	3.32	5.98	4.12
Dominican Republic	5.71	8.24	6.26
Mexico	6.20	9.26	6.93
Panama <sup>c</sup>	3.81	6.66	4.83
Guyana	4.95	6.94	5.38
Haiti	5.51	7.79	5.61
Jamaica	4.99	6.50	4.77
Trinidad and Tobago	3.30	6.50 4.84	3.71
Europe			
Portugal	2.38	3.23	2.47
Within-union fertility.			<b>2</b> , 7 /

<sup>a</sup>Within-union fertility. <sup>b</sup>TFR refers to ages 15–44. <sup>c</sup>TFR refers to ages 20–49.

Within the Latin American/Caribbean region four high-fertility countries (Peru, Dominican Republic, Mexico and Haiti), with a TFR of 6 children per woman, may be distinguished. Two countries (Costa Rica and Trinidad and Tobago) demonstrate rather low fertility, with rates of about 3 births per woman. In the remainder (half of the countries) the average family size is about 4.8, varying between 5.3 in Ecuador and 3.8 in Panama, and roughly comparable to fertility levels in a number of countries found in South-East Asia and the Pacific (excluding the Indian subcontinent).

The relative standings of the TMFRs correspond closely to the TFRs, with Turkey, Trinidad and Tobago and Portugal showing the lowest levels on both measures and the countries of West Asia (Jordan, Syria and Yemen AR) and Kenya occupying the positions of highest fertility. Marital fertility is also appreciable in several American countries – Peru, Dominican Republic, Mexico and Haiti. According to the TMFR (within-union) more than half the surveyed countries are clustered within the range of 7–8 births per woman.

#### Type of place of residence

Rates for subgroups defined by type of place of current residence are shown in table 4 and displayed, by regional group, in figures 1A–1C.

Examining first the TFRs, we note that rural rates are higher than urban rates, with the exception of Cameroon, Nigeria and Guyana. In Cameroon and Guyana fertility is highest among women residing in the other urban (non-metropolitan) areas but this is only marginally higher than rural fertility. Surprisingly, the fertility rate for Nigeria is highest in the major urban (metropolitan) areas (6.73) and lowest in the other urban areas (5.88), with rural areas at an intermediate level (6.39). Rural-urban residence makes little difference to fertility in Mauritania, Bangladesh, Pakistan, Sri Lanka, Indonesia, Trinidad and Tobago and Portugal. Within the urban population, other urban areas tend to show higher fertility than metropolitan areas, but there are several exceptions, especially in Africa (Nigeria, Senegal, Mauritania) but also Haiti and those countries where both subpopulations are substantial. However, in these countries the difference is relatively small and averages as high as about one child only in Nigeria. Besides these countries, there are several others which show variation in fertility between major urban and other urban areas, eg Ivory Coast, Kenya, Bangladesh, Pakistan, Sri Lanka, Costa Rica, Dominican Republic, Panama, Trinidad and Tobago and Portugal. In most other countries there is a one child difference in fertility between the two urban populations; Syria, Ecuador, Peru and Guyana, however, display greater differentials (about two children). In the Americas the two urban rates are generally close, relative to the rural rate, whereas in Africa and Asia the three rates more often are roughly evenly spaced. In these two regions the utility of distinguishing the major urban population is apparent. The range of the TFRs is greatest in the Americas, especially the Spanish Americas where a three-child or greater difference between rural and major urban women is the rule. A substantial range

is also observed in West Asia (Jordan, Syria and Turkey), Kenya and Morocco.

Marital fertility at ages 20-49 is highest for rural women in all countries in Latin America and the Caribbean and in about three-quarters of the countries in Asia and the Pacific and Africa (the exceptions in Asia are Pakistan, Indonesia and Malaysia, and in Africa, Cameroon, Nigeria, Senegal and Mauritania), though the higher urban rates in some of these countries (Cameroon, Senegal, Guyana) are based on relatively small exposures. For Nigeria, Senegal and Indonesia (where the differentials are reversed) the highest fertility occurs among women residing in the major urban areas while in Cameroon, Mauritania, Pakistan, Malaysia and Guyana, women in the other urban areas report the highest fertility rate. However, for most of these countries the urban marital fertility rates (and also the TFRs) do not differ significantly from the rates of rural women.

With few exceptions, rural-urban differences in marital fertility in Africa (particularly in sub-Saharan Africa) and South-East Asia and the Pacific are quite modest, with a one-child difference on average. More substantial differences (about two children or more) are apparent in Kenya, Morocco, Tunisia and West Asia (Jordan, Syria and Turkey) and in most of Latin America, where usually also a relatively significant disparity in the behaviour of populations in the metropolitan and other urban areas emerges. Overall, the pattern of differentials in the TFRs are duplicated to a remarkable extent in these TMFRs. This indicates that the overall effect of urbanity on fertility (as reflected in the TFR differentials) originates from similar patterns of effects on within-union fertility and on other facets of the reproductive career, including the timing of the onset of childbearing and the incidence of union dissolution.

Fertility through the first 24 years of marriage is also highest for rural women, with the exception of three countries in Africa (Cameroon, Nigeria and Senegal) and three in Asia (Bangladesh, Pakistan and Indonesia). As with the TFR, in Cameroon marital fertility is highest among women in the other urban areas (probably affected by relatively small exposures) while in Nigeria, fertility estimates indicate the highest fertility among women in the major urban areas. Marital fertility in Senegal is also highest in the metropolitan areas. In the three Asian countries, the TFR differences are the consequence of differences in fertility at high durations and in the impact of union dissolution. Among the three Asian countries, the highest fertility occurs in the metropolitan areas in Bangladesh and Indonesia and in the other urban areas in Pakistan. In Nigeria, Bangladesh and Indonesia fertility differentials are reversed, with the lowest estimates found among rural inhabitants, though for all these countries (including Cameroon and Senegal) the differentials among the subcategories are generally modest. It should be observed that the TMFRs for the first 24 years of marriage frequently exceed the corresponding TFRs, especially among the urban subgroups but among all three subgroups in North Africa, South-East Asia and the Pacific (excluding Bangladesh and Nepal) and in the Americas (except Guyana and Jamaica). This indicates that in these populations the

Country	TFR, a	ges 15–49		TMFR, ages 20–49 <sup>a</sup>			TMFR, durations 0-24 years		
	Major urban	Other urban	Rural	Major urban	Other urban	Rural	Major urban	Other urban	Rural
Africa									
Benin	5.75	6.70	7.40	6.55	6.52	6.86	6.02	6.35	6.82
Cameroon	5.30	6.70	6.51	5.70	6.15	5.83	5.40	5.99	5.79
Ghana	5.41	6.26	6.79	5.79	6.43	6.59	5.40	5.82	6.30
	6.42	6.86	7.72	6.09					
Ivory Coast					6.31	6.95	6.07	6.31	6.82
Kenya	5.90	6.08	8.48	6.21	5.97	8.01	6.86	6.27	8.03
Lesotho		4.79	6.23		5.41	5.96	_	5.27	5.86
Nigeria	6.73	5.88	6.39	6.41	5.83	5.91	6.60	6.07	6.01
Senegal	6.76	6.32	7.47	7.08	6.37	6.66	7.20	6.70	7.02
Egypt	3.84	4.86	6.12	5.02	5.73	6.39	5.19	6.10	6.75
Mauritania	6.25	6.13	6.28	6.53	6.81	6.46	6.31	6.78	6.81
Morocco	3.85	4.81	7.02	5.26	5.78	7.27	5.34	6.09	7.53
Sudan (N)	4.80	5.68	6.43	5.71	6.09	6.64	6.46	6.52	6.91
Tunisia	——4.7	5	6.95	5.65	6.72	8.15	5.35	6.39	7.95
Asia and the Pacific									
Jordan	6.30	7.70	9.45	7.27	8.49	9.37	7.83	9.03	10.09
Syria	4.72	6.87	9.04	5.83	7.72	9.64	6.10	7.86	9.27
Turkey	3.24	3.72	5.97	3.08	3.56	5.19	3.36	3.96	5.87
Yemen AR	-	7.81	8.60	_	7.82	8.44	_	7.73	7.86
			<i></i>						
Bangladesh	5.73	5.76	6.11	5.29	5.41	5.49	6.32	6.39	6.19
Nepal		4.31	6.22	-	4.48	6.08	_	5.39	6.04
Pakistan	5.90	6.25	6.32	6.25	6.64	6.31	7.04	7.29	6.84
Sri Lanka	3.11	3.23	3.89	4.64	5.07	5.38	4.30	4.73	5.26
Fiji	3.30	3.79	4.59	3.90	4.28	5.00	4.02	4.51	5.21
Indonesia	4.61	4.32	4.87	5.59	5.15	4.72	5.58	5.29	5.12
Korea, Rep. of	3.33	4.18	5.03	4.77	5.38	6.23	3.89	4.82	5.98
Malaysia	3.47	4.48	5.04	5.09	6.05	5.83	4.44	5.79	6.23
Philippines	3.53	4.03	5.97	5.41	6.23	7.26	4.53	5.51	7.00
Thailand	2.53	3.63	4.96	4.60	4.92	5.74	3.81	4.49	5.51
Americas									
Colombia	2.89	3.86	6.95	4.17	4.83	7.48	3.66	4.45	7.37
Ecuador	3.13	4.88	6.65	4.02	5.75	7.33	3.82	5.70	7.14
Paraguay	3.15	3.96	6.31	4.38	4.88	6.94	3.60	4.63	6.61
Peru	3.88	5.41	7.18	5.39	6.77	8.13	5.02	6.39	7.78
Venezuela <sup>b</sup>	3.29	4.30	7.65	4.24	5.08	7.89	4.10	5.33	8.26
m , m t é	0.60	0.70	4.00	2.71	2.02	C 00	2.10	2.42	4.00
Costa Rica <sup>e</sup>	2.52	2.73	4.20	3.71	3.83	5.09	3.19	3.43	4.99
Dominican Republic	4.23	4.43	7.39	4.98	5.26	7.46	4.93	5.12	7.68
Mexico	4.81	5.72	7.63	5.96	6.63	8.00	5.54	6.45	8.15
Panama <sup>c</sup>	2.90	2.88	5.10	4.03	3.87	5.90	3.80	3.72	6.21
Guyana	4.05	5.91	5.25	4.29	5.70	5.35	4.26	5.68	5.88
Haiti	3.98	3.40	6.19	5.30	5.00	7.21	4.24	3.80	6.24
	3.86			3.90			4.24 3.67	5.01	5.42
amaica	3.86 2.88	5.16 3.31	5.65 3.67		4.99	5.55 3.97	3.67 2.98	3.63	5.42 4.24
Frinidad and Tobago	2.00	2.21	5.07	3.04	3.61	5.71	2.70	2.02	4,∠4
Europe									
ortugal	1.80	2.05	2.60	2.87	2.73	3.44	2.02	2.01	2.69

 Table 4
 Summary fertility measures, by type of place of current residence

<sup>a</sup>Within-union fertility. <sup>b</sup>TFR refers to ages 15-44. <sup>c</sup>TFR refers to ages 20-49.

A: TFR ages 15-49.

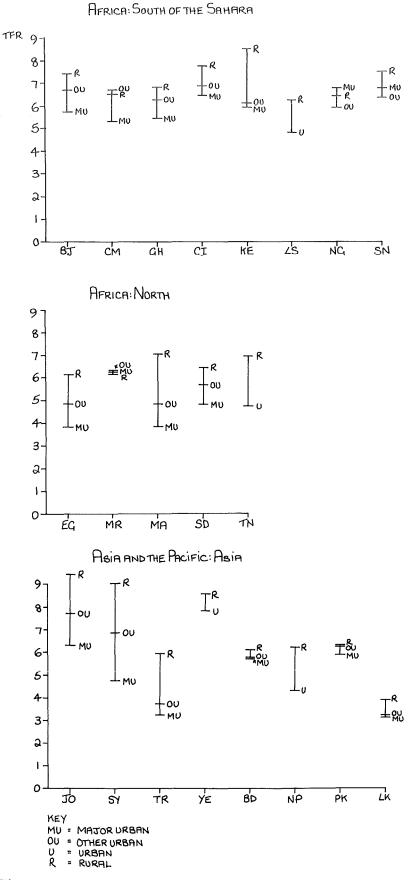


Figure 1 Total fertility rates (TFR) and total marital fertility rates (TMFR), by type of place of current residence

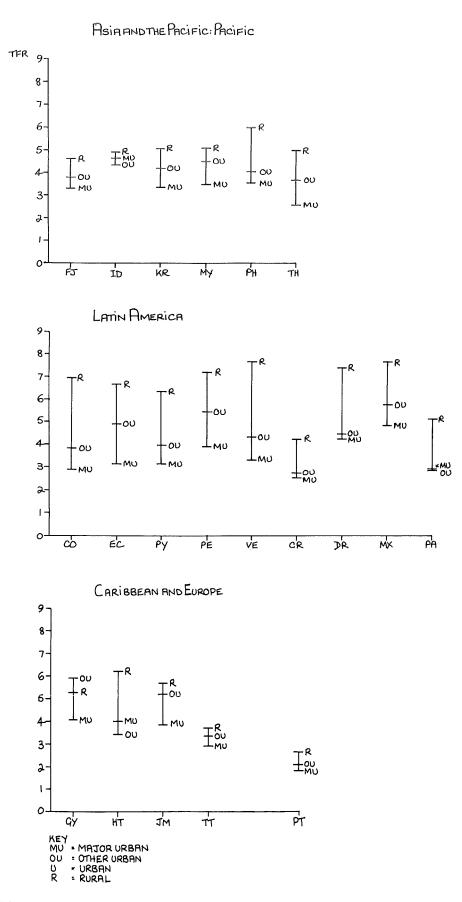
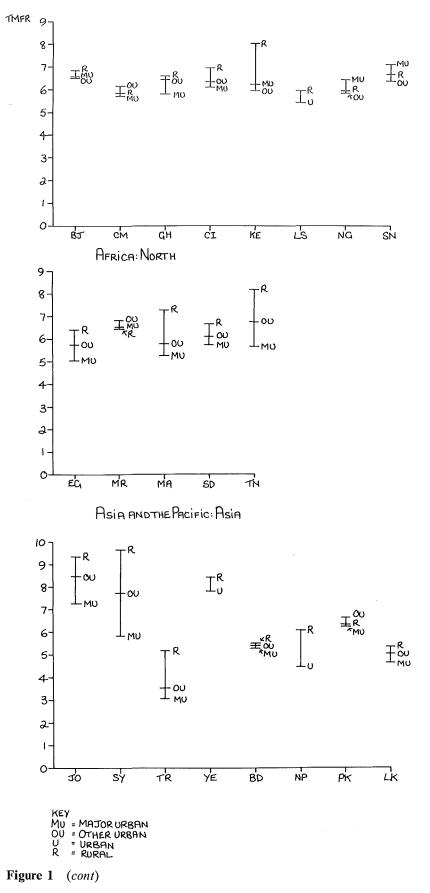


Figure 1 (cont)





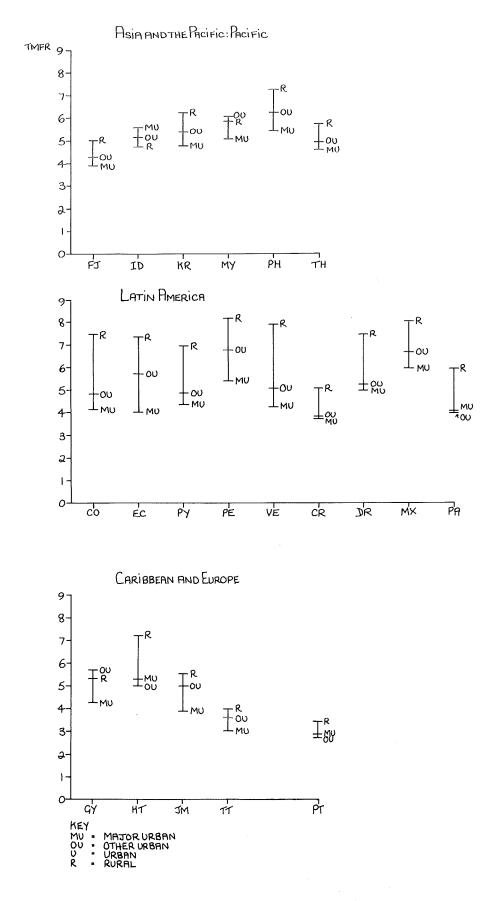
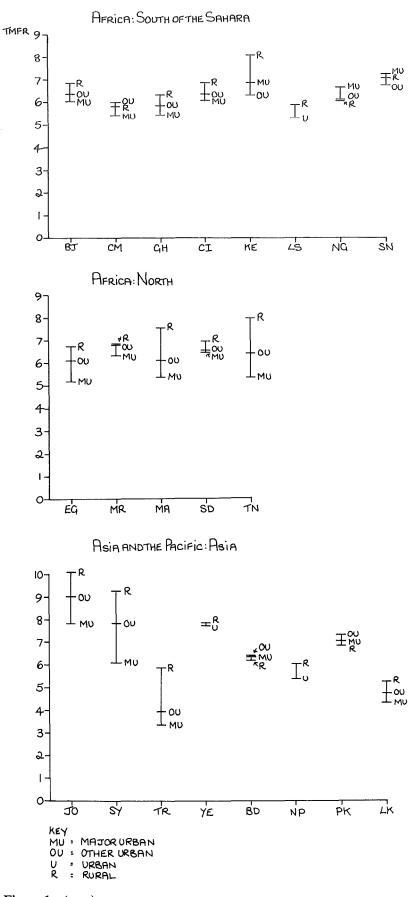
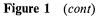


Figure 1 (cont)

#### C: TMFR durations 0-24 years





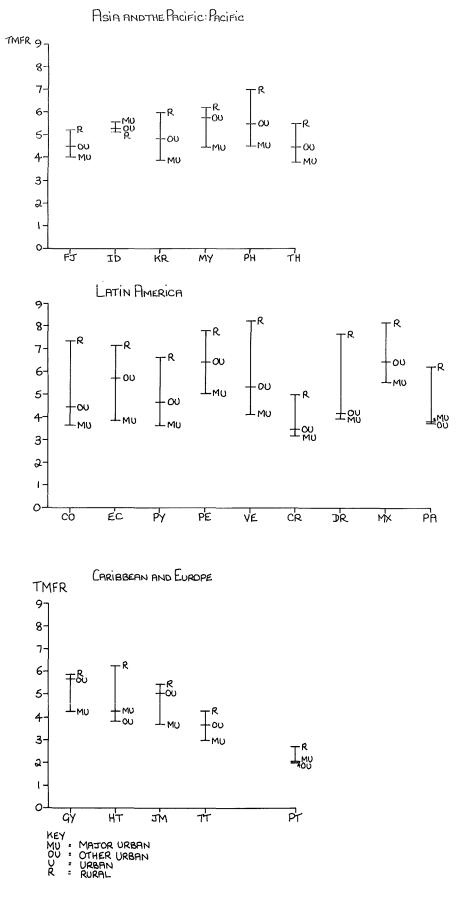


Figure 1 (cont)

Country	TFR,	ages 15	549		TMF	R, ages	20–49 <sup>a</sup>		TMFR, durations 0–24 years			
	Years of schooling			Years of schooling				Years of schooling				
	0	1–3	4-6	7+	0	1-3	4–6	7+	0	1–3	4-6	7+
Africa												array Mala
Benin	7.35	8.50	5.79	4.26	6.80	7.95	6.20	5.64	6.75	7.22	5.94	5.29
Cameroon	6.38	6.98	6.77	5.18	5.59	6.57	6.50	5.26	5.47	6.23	6.27	5.16
Ghana	6.84	6.67	6.69	5.49	6.48	6.99	7.02	5.66	6.18	5.74	6.05	5.33
Ivory Coast	7.45	8.02	6.36	5.83	6.75	6.91	5.82	5.65	6.60	7.06	5.66	6.84
Kenya	8.28	9.21	8.43	7.34	7.43	8.53	7.90	7.83	7.48	8.33	8.13	7.69
Lesotho	6.24	5.63	5.97	4.76	5.76	5.45	6.00	5.96	5.41	5.54	5.88	5.88
Nigeria	6.58	6.88	7.59	4.20	5.69	5.85	7.68	5.40	5.78	6.30	7.03	5.36
Senegal	7.32	9.44	6.31	4.47	6.64	8.96	6.42	5.96	6.95	7.28	6.80	6.11
Egypt	_		_	_	6.13	5.90	5.63	4.96	6.53	6.35	6.15	3.78
Mauritania <sup>b</sup>		_	_	_	6.56	5.70	—6.47-		6.89		-6.00-	5.70
Morocco	6.36	5.15	4.39	4.15	6.70	5.86	5.86	6.17	7.03	5.53	5.82	4.63
Sudan (N)	6.47	5.56	4.98	3.37	6.42	6.23	5.80	5.31	6.74	7.35	6.88	5.13
		5.50										
Tunisia		_	_	-	7.53	6.42	6.06	4.67	7.32	5.92	6.01	3.88
Asia and the Pacific												
Jordan	9.34	8.63	6.98	4.91	9.04	7.97	6.96	6.26	9.73	9.27	7.70	6.19
Syria	8.81	6.71	5.59	4.08	9.08	7.29	6.14	6.04	8.97	7.20	6.53	5.42
Turkey	5.91	4.38	3.44	2.07	5.41	4.07	3.30	3.22	6.14	4.74	3.82	2.73
Yemen AR	8.55				8.36		—6.13—		7.83		—8.50—	
Bangladesh	6.07	6.35	6.72	4.98	5,43	5.57	5.93	5.42	6.09	6.27	6.87	5.92
Nepal	-		_	_	6.04	5.83	6.08	3.05	5.97	6.80	6.35	4.00
Pakistan	6.51	5,41	6.12	3.14	6.39	5.80	6.52	4.89	6.97	6.20	7.00	5.11
Sri Lanka	-	_	_	_	5.28	5.11	5.29	5.30	5.56	5.31	5.31	4.28
Fiji		_	_	_	4.35	4.30	4.94	4.68	5.00	5.08	5.23	4.58
Indonesia		_	_	_	4.60	5.30	5.20	5.33	4.95	5.52	5.54	5.02
Korea, Rep. of	5.71	5.46	4.48	3.35	6.22	5.68	5.45	4.97	6.18	5.58	5.02	3.78
Malaysia	5.30	5.26	4.81	3.19	5.89	5.74	5.54	5.22	6.23	5.99	5.79	4.05
Philippines	5,45	6.97	6.15	3.84	6.75	7.54	7.10	5.99	6.70	7.37	6.93	5.01
Thailand	-		0.15	-	5.59	5.75	5.62	4.47	5.49	5.66	5.37	3.16
Americas												
Colombia	7.03	6.04	3.85	2.59	6.84	6.61	4.68	4.06	6.78	6.31	4.33	3.20
Ecuador	7.84	7.25	5.33	2.69	7.60	7.57	5.94	3.79	7.43	7.37	5.85	3.32
	8.23	6,61	4,62	2.09	8.01					6.64	4.98	3.29
Paraguay	7.32	6.75	4.02 5.06	3.27		6.90 7.26	5.43	4.35	7.66			
Peru Venezuela <sup>c</sup>	7.02	6.36	3.00 4.57	2.64	7.88 7.10	7.26 6.30	5.92 4.88	5.35 3.93	7.65 7.40	7.10 6.63	5.64 5.11	4.23 3.57
	4.46	4.07	3.11	2,54	5.84	4.83	3.97	3.98	5.06			
Costa Rica <sup>d</sup>										4.91	3.79	3.22
Dominican Republic	6.99	7.29	5.37	2.98	6.72	7.00	5.61	4.60	6.88	7.20	5.86	3.79
Mexico	8.06	7.47	5.75	3.34	7.89	7.63	6.56	4.87	7.90	7.73	6.27	4.09
Panama <sup>d</sup>	5.70	5.58	4.12	2.71	6.56	6.29	4.84	3.91	6.73	6.66	5.21	3.41
Guyana	6.55	6.97	5.56	4.84	6.11	6.01	4.82	5.15	6.70	7.65	5.81	5.14
Haiti	6.05	4.75	4.06	2.85	7.04	6.08	5.35	4.57	5.94	4.92	4.96	3.91
Jamaica	6.19	5.92	5.76	4.83	5.85	4.90	5.25	4.78	5.65	4.80	5.07	4.66
Trinidad and Tobago	4.63	3.45	4.13	3.21	4.40	3.40	3.79	3.50	6.05	2.24	4.43	3.45
Europe												
Portugal	3.52	3.27	2.33	1.78	4.32	3.94	2.90	2.91	3.04	2.90	2.33	1.95
Within-union fertility												

 Table 5
 Summary fertility measures, by the respondent's years of schooling

<sup>a</sup>Within-union fertility. <sup>b</sup>The two education groups are actually 'illiterate' and 'literate'. <sup>c</sup>TFR refers to ages 15–44. <sup>d</sup>TFR refers to ages 20–49.

equivalent exposure after marriage at the observed duration-specific rates is not achieved; no doubt this is largely due to postponement of entrance to union, coupled with moderate levels of union dissolution. The result is that the pattern of differentials in the TFRs largely parallels that for marital fertility, especially in Asia and the Americas. Only in a few countries is the differential between the two measures appreciable (Kenya, Egypt, Morocco, Tunisia, Jordan and Syria), demonstrating that the urban populations are characterized not only by lower marital fertility but by later marriage patterns. In sub-Saharan Africa marital fertility, especially among rural women, is typically lower than the corresponding TFR, probably reflecting differences in fertility at higher marriage durations in these societies.

#### **Respondent's education**

Rates for subgroups defined by the respondent's years of schooling are shown in table 5 and displayed in figures 2A-2C.

In general the TFRs are inversely related to level of education. The exceptions are Bangladesh, Philippines, Dominican Republic, Guyana and Trinidad and Tobago where the rule is violated either by the 1-3 years or 4-6years subgroup, especially where these contain few respondents. More commonly, countries in sub-Saharan Africa exhibit a curvilinear relationship, fertility being highest among women with 1-3 years schooling (except in Ghana, Lesotho and Nigeria) and declining thereafter. These cases of reversals in the effect of education on fertility may probably be associated with the erosion of traditional practices such as breastfeeding and abstinence (which serve to decrease fertility) following exposure to formal education. It also suggests that modest increases in education may not be sufficient to cause reductions in fertility but other factors may be involved. Small sample sizes may also play a part in the observed discrepancies. Notable examples of higher fertility for the 1–3 years subgroup than for the no schooling subgroup are Kenya and the Philippines.

In the surveyed countries fertility declines as education increases from 1–3 to 4–6 years (except for Ghana, Lesotho, Nigeria, Bangladesh, Pakistan and Trinidad and Tobago). The largest differentials are found in Latin America, about two children on average; a more modest difference emerges in other regions, averaging about one child per woman. The 7 + years subgroup, without exception, shows the smallest TFR, usually two births or more smaller than the 4–6 years subgroup in threequarters of the countries in Asia and Latin America but half those in Africa. In the remainder (mainly in sub-Saharan Africa and the Caribbean) the differential is more modest, about one child on average.

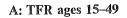
Results from WFS surveys indicate that women with the highest education (secondary and higher) have an average of 4–5 children in Africa (except in Ivory Coast and Kenya where the average is substantially higher) and the Middle East; 3–4 in South-East Asia and the Pacific (except in Bangladesh) and 3 children on average in Latin America and the Caribbean (except Guyana and Jamaica). At the other extreme women with no education have about 9 children in the Middle East, 6–7 children in most of Africa, Latin America and the Caribbean and 5–6 children in South-East Asia and the Pacific. Some notable exceptions among uneducated women are Kenya (8.3), Paraguay (8.2), Mexico (8.1), Ecuador (7.8), Costa Rica (4.5) and Trinidad and Tobago (4.6).

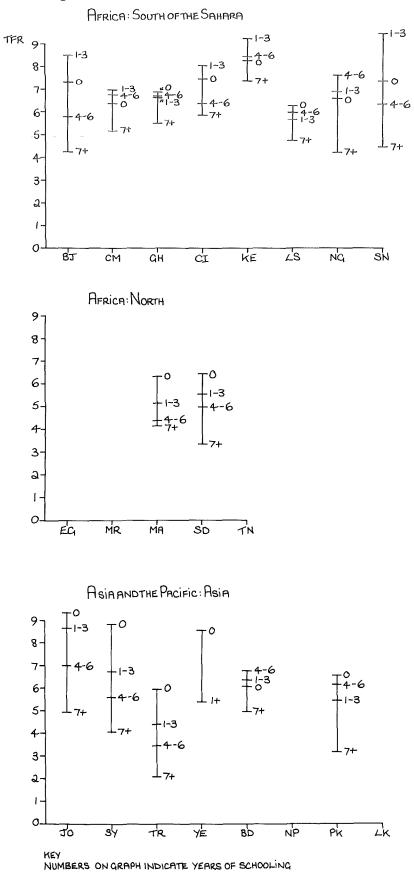
Thus the difference between women in the extreme education categories is greatest in Latin America and the Middle East – as large as 4 or 5 children in most countries except Costa Rica (1.9) and Panama (3.0). In other regions (South-East Asia and the Pacific, Africa and the Caribbean) the differential is significant but less pronounced, ranging from 0.9 in Kenya to 2 children in several other countries, except Benin, Senegal, Sudan (N), Pakistan and Haiti where a difference of 3 children is observed. In general it appears that the range of education differentials is largest where rural-urban differences are also greatest. The sharp drop in fertility experienced by highly educated women demonstrates the powerful effect on reproductive behaviour of schooling beyond the primary level. This evidence of a 'threshold effect' (fertility declining once a certain level of education is attained) in many countries cautions against specifying linear effects on education.

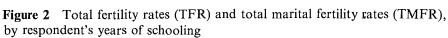
The pattern of differentials in within-union fertility from age 20 is similar to the TFR differentials for the large majority of countries, emphasizing that the respondent's educational level influences fertility within marriage. The TMFR declines monotonically with the wife's education in most countries of Latin America, North Africa and the Middle East. In contrast, countries in sub-Saharan Africa, the Caribbean and South-East Asia and the Pacific exhibit a curvilinear or irregular pattern, with marital fertility typically highest in the 1-3 years or 4-6 years subgroup but declining thereafter. In several countries marital fertility is lowest among women other than the best educated. These countries include Kenya, Lesotho, Sri Lanka, Fiji and Indonesia where women with no education or with 1-3 years schooling report levels of fertility slightly lower than or similar to those of women with 7 + years education; in Costa Rica and Guyana a similar pattern is observed for the subgroup with 4-6 years schooling.

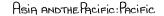
Like the TFRs, the magnitude of the differentials vary by region but appear to be more uniform and less pronounced. As before, Latin America and the Middle East show the largest differentials; more modest differentials occur in Africa, South-East Asia and the Pacific, and the Caribbean, and several countries show minuscule differences. The sharp drop for the 7 + years subgroup is less evident even in the Middle East and Latin America, suggesting that postponement of the onset of childbearing rather than the curtailment of childbearing is probably the main source of the marked pattern in the TMFRs. Although marital fertility is lowest among the best educated for the majority of countries, frequently the difference from the 4-6 years subgroup is modest or negligible; in some countries education appears to have no effect on marital fertility (Sri Lanka, Malaysia) and in several others the results show that small differences in education are not conducive to significant reductions in fertility.

Differences in the TMFRs (for fertility in the 0-24 years since marriage) are also modest if not negligible for









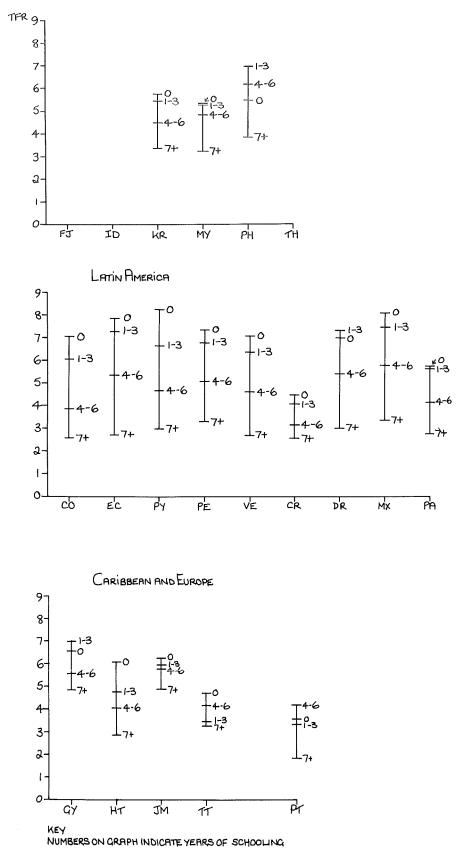


Figure 2 (cont)



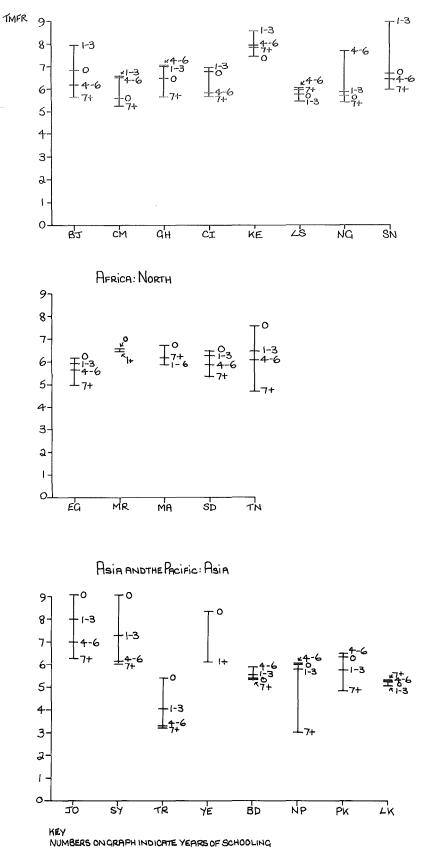


Figure 2 (cont)

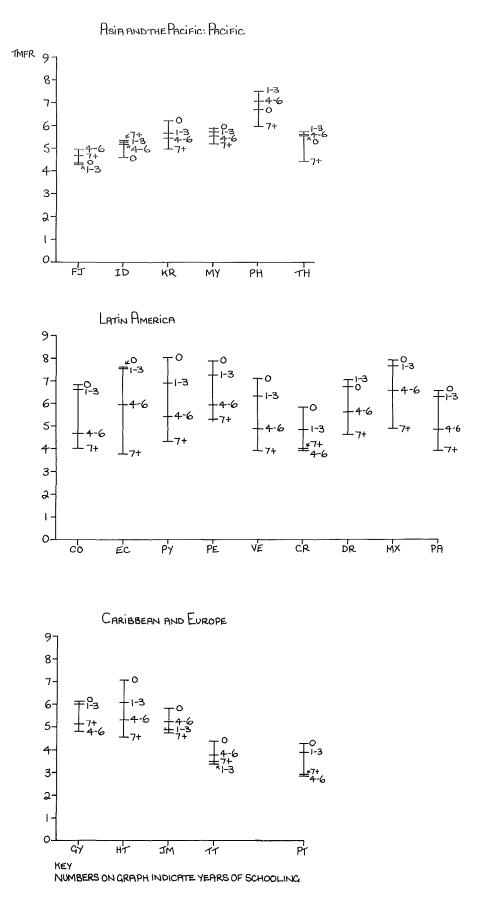
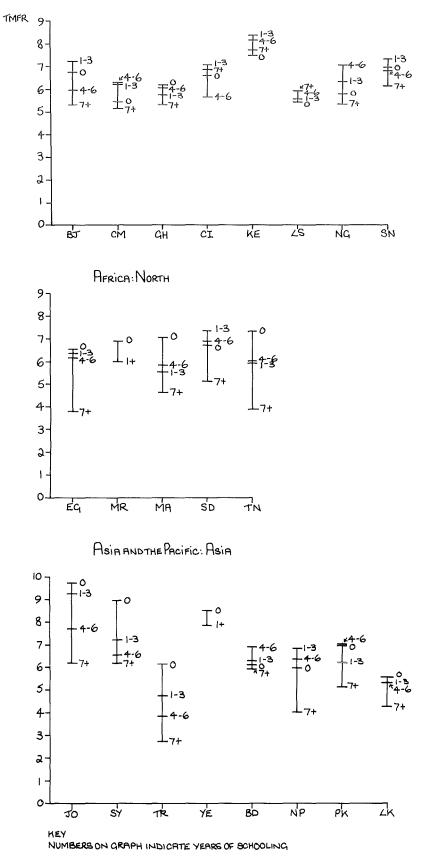
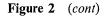


Figure 2 (cont)

C: TMFR durations 0-24 years







ASIA AND THE PACIFIC PACIFIC

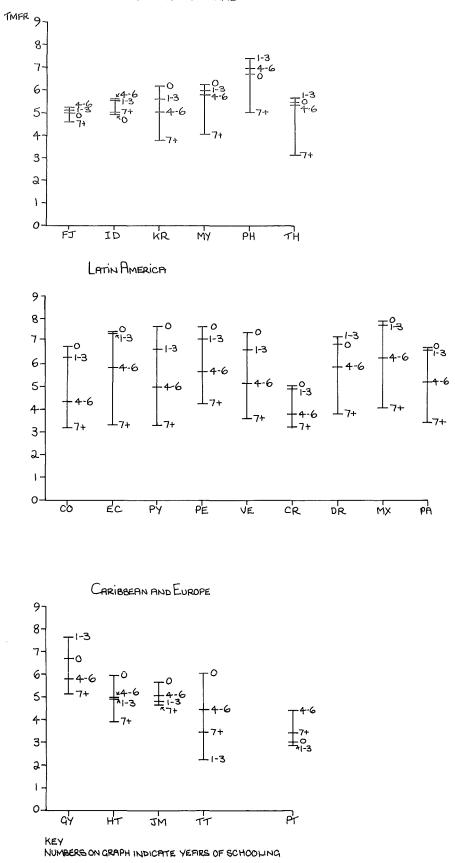


Figure 2 (cont)

sub-Saharan Africa across all four education categories. A similar pattern is noted for the three lower schooling groups in South-East Asia and the Pacific and for the two lower schooling groups in Latin America. More substantial differences between the 7 + years subgroup and the other subgroups are apparent in the Americas, Middle East, North Africa and several South-East Asian countries. It would seem that the sharp drop in the TFR at the highest level of education reflects differences emerging over the first 24 years of marriage, not the effects of prolonged childbearing by those with less schooling. Where entrance to first union is late, of course, the first 24 years will include a substantial proportion of time at ages of diminished fecundity (ages 35 years and over).

The overall similarity in the patterns of association between education and fertility emphasize the importance of nuptiality differences as well as differences in marital fertility. Increased education usually results in lower completed fertility because more educated women tend to delay marriage, to be in non-traditional employment and to practise contraception effectively. Although education has an independent effect on fertility differentials, the effects are partly mediated through socioeconomic factors. The relatively low degree of socioeconomic differentiation in Africa probably contributes to the general lack of sharp fertility differentials.

#### Husband's occupation

Rates for subgroups defined by the husband's occupation are shown in table 6 and displayed in figures 3A–3B. Our attention must be confined to TMFRs, as TFRs cannot be calculated.

With regard to fertility in the first 24 years of marriage, the differentials are modest or negligible in sub-Saharan Africa, Mauritania and Sudan (N), and also in about half the Asian countries eg Syria, Yemen AR, Bangladesh, Nepal, Pakistan, Fiji and Indonesia. In contrast, most of the American countries and several countries in Asia (eg Jordan, Turkey, Republic of Korea, Philippines and Thailand) are distinguished by substantial differentiation, though not regularly or consistently across all four occupational groups. Usually the largest differentials occur between the professional/clerical and agricultural categories - corresponding generally with the groups with highest and lowest status in the social hierarchy. Several North African countries (Egypt, Morocco and Tunisia) and Sri Lanka demonstrate differences but only the professional and clerical group is sharply distinguished from the other categories by its lower fertility. For the most part the magnitude of these differentials corresponds with the size of the educational differentials (table 5). Where substantial differentials exist, wives of those in agriculture have the highest fertility (except in Venezuela) and wives of white collar workers the lowest fertility. Further, in most of these countries fertility declines monotonically across the four occupational categories so that wives of manual workers report higher fertility rates than wives whose husbands are in sales/service occupations.

In countries where differentials are more modest (sub-Saharan Africa, several Asian countries) the relative ranking of the categories varies considerably and generalization appears inappropriate. This no doubt reflects the diversity of social and economic positions within occupational categories in developing countries. Some striking anomalies are demonstrated in the differentials by occupation: three countries (Lesotho, Nigeria and Indonesia) show fertility of the agricultural group to be lower than among all non-agricultural categories, and in Bangladesh fertility is highest among wives of white collar workers. In Venezuela there is a dramatic variation in the fertility of wives of white collar workers and wives whose husbands are in sales/service occupations – the fertility of the former being half that of the latter.

The patterns of differentials in marital fertility after age 20 largely correspond to patterns of differentials for fertility since marriage. Differentials are largely absent or modest in most of Africa and in several Asian countries. As before, the American countries display the sharpest differentials but in several countries differences are somewhat muted as compared to fertility estimates for duration 0–24 years. Diminished differentials are also common in several Asian and North African countries which have displayed substantial variations in marital fertility at duration 0–24 years, especially between the professional and sales/service and agricultural categories.

Overall the differentials between the professional and agricultural categories correspond closely to differentials between the major urban and rural populations, which is expected since all agricultural workers in developing countries are rural inhabitants.

#### **Respondent's work status**

Rates for subgroups defined by the respondent's work status since first union are shown in table 7 and displayed in figures 4A–4B. Again our attention must be confined to TMFRs. The reader is cautioned that the subgroups of employed women are represented by small numbers of exposures, particularly in Africa.

In general, married women who are employed outside the family (usually in non-traditional occupations) have lower fertility than women who do not work (except in Nigeria and Mauritania). However, the fertility of women employed by others does not always fall below that of family and self-employed workers; this is illustrated clearly in several African and Middle Eastern countries. The relationship between female employment and fertility is complex and not always unidirectional. One of the most common patterns observed from the TMFRs in the first 24 years of marriage and found in most of the American, and several Asian and North African countries, is a monotonic decline across the three categories: reported fertility is highest for wives who have not worked and lowest for those employed by non-relatives, with family and self-employed workers occupying the intermediate level. However, several variant patterns are detected in these countries. For example, one consists of a relatively large difference in fertility (1–2 children) between women who have engaged in any kind of work and those who have not worked, with a comparatively difference between those in family/selfsmaller

employment and non-familial employment (eg Indonesia, Venezuela, Costa Rica, Jamaica); another pattern shows a large difference between the employed categories but minimal difference between non-workers and family/self-employed workers (eg Peru, Guyana). Further, some countries show a minuscule difference across all occupational categories (eg Nepal, Malaysia).

In countries where the decline is not monotonic, fertility is frequently highest among women in family/selfemployment (the exceptions are Kenya, Lesotho, Senegal and Pakistan where fertility is highest among nonworkers and lowest for family/self-employed workers, though the differentials are only modest). Typically, fertility differentials between non-workers and family/selfemployed workers are quite modest (about 1 child on average) but in several countries fertility is substantially lower for women engaged in non-familial work.

Estimates of within-union fertility reveal some discrepancies in the rank order of differentials but for the majority of countries the same ranking is evident. The differentials are in several cases muted, resulting in within-union fertility being more uniform between the subgroups. For example, in most of Asia and Latin America differentials are reduced for women in 'other' employment and non-workers as well as for those in both employed categories. It is clear that in the 41 WFS countries the pattern of work status differentials and the mechanism through which they are generated is extremely diverse.

#### Fertility levels across countries

If cross-national differences in fertility were due principally to differences in socio-economic composition of the populations, we might expect the fertility rates for the socio-economic subgroups to be the same across countries. Tables 4–7 provide no suggestion of this. Indeed, it appears that the range of differences in national-level rates (table 3) is largely duplicated by the rates of each subgroup.

The size and pattern of fertility differences varies least within the homogenous populations of sub-Saharan Africa and most in Latin America and the Middle East, with several South-East Asian and Pacific, North African and Caribbean countries exhibiting moderately high differentials. These findings provide useful insights into the determinants of fertility and are instructive to policymakers who may wish to change the course of human fertility in developing countries.

Country	TMFR,	ages 20-4	9ª		TMFR,	durations	0-24 years	
	Agric	Skld, unskl	Sales, serv	Prof, cler	Agric	Skld, unskl	Sales, serv	Prof, cler
Africa								
Benin	6.78	7.05	6.04	6.79	6.82	6.67	5.85	6.33
Cameroon	5.76	5.77	6.66	5.82	5.73	5.61	6.63	5.78
Ghana	6.56	6.74	6.36	5.48	6.26	6.30	5.93	5.13
Ivory Coast	6.91	6.53	6.48	5.64	6.80	6.51	6.54	5.75
Kenya	7.79	7.73	8.13	7.79	7.78	8.01	8.02	7.71
Lesotho	6.12	5.91	5.59	6.52	5.68	5.85	5.82	6.27
Nigeria	5.53	7.19	5.98	6.34	5.66	7.15	6.34	6.26
Senegal	6.62	6.93	6.37	7.04	7.00	7.02	6.88	7.00
Egypt	6.51	5.67	5.72	5.07	6.75	6.19	6.40	4.71
Mauritania	6.41	6.54	6.44	7.33	7.24	7.11	6.42	6.94
Morocco	7.36	6.46	5.68	5.37	7.62	6.79	5.97	5.44
Sudan (N)	6.45	6.49	6.44	5.56	6.72	7.19	6,80	6.03
Tunisia	7.74	6.66	7.05	5.51	7.57	6.58	6.78	5.03
Asia and the Pacific								
Jordan	9.22	8.41	8.44	6.93	9.97	9.04	9.15	7.23
Syria	9.38	8.31	7.21	7.90	8.96	8.45	7.67	7.77
Turkey	5.41	4.24	3.98	3.65	6.13	4.85	4.59	4.00
Yemen AR	7.85	8.87	8.79	7.30	7.65	8.05	8.18	7.39
Bangladesh	5.55	5.30	5.71	5.35	6.27	5.84	6.36	6.70
Nepal	6.21	5.93	5.66	4.37	6.11	6.40	5.51	5.00
Pakistan	6.29	6.63	6.46	6.02	6.85	7.29	6.97	6.54
Sri Lanka	5.42	5.22	5.41	4.96	5.57	5.08	5.13	3.63
Fiji	5.16	4.52	4.30	4.22	5.38	4.88	4.50	3.97
Indonesia	4.51	5.26	5.27	5.07	4.84	5.59	5.64	5.45
Korea, Rep. of	6.39	5.23	4.81	5.10	6.19	4.84	4.10	4.01
Malaysia	5.91	6.02	5.60	5.00	6.51	6.02	5.37	4.51
Philippines	7.38	6.65	5.92	5.69	7.22	6.23	5.30	4.31
Thailand	6.04	5.23	4.73	4.04	5.85	4.97	4.23	3.26
Americas								
Colombia	7.44	4.78	4.67	3.96	7.21	4.48	4.40	3.19
Ecuador	7.60	6.09	5.16	3.95	7.48	5.91	5.04	3.45
Paraguay	7.30	5.00	4.56	4.41	7.00	4.59	3.85	3.53
Peru	7.97	6.82	5.94	5.21	7.66	6.57	5.65	4.45
Venezuela	5.15	5.30	8.02	4.27	5.70	5.62	8.12	4.00
Costa Rica	5.10	4.11	4.44	3.66	5.08	3.81	4.03	2.93
Dominican Republic	7.69	5.40	5.23	4.04	7.91	5.45	5.30	3.55
Mexico	8.02	7.08	6.41	5.20	8.09	7.12	6.14	4.60
Panama	6.13	4.39	4.53	4.05	6.49	4.45	4.44	3.44
Guyana	5.78	5.16	5.04	4.09	6.60	5.59	5.12	3.95
Haiti	7.31	5.90	5.90	4.64	6.33	4.95	4.80	3.45
Jamaica	5.98	5.06	3.93	3.71	5.93	5.03	3.76	3.43
Trinidad and Tobago	4.41	3.78	3.32	2.81	4.97	4.04	3.28	2.51
Europe								
Portugal	3.86	3.37	3.02	2.69	3.14	2.63	2.29	1.90

Table 6 S	Summary fertilit	y measures,	by the	husband's	occupation
-----------	------------------	-------------	--------	-----------	------------

<sup>a</sup>Within-union fertility.

Country	TMFR, age	s 20–49ª		TMFR, du	ations 0–24 ye	ears
	No work	Family and self	Other	No work	Family and self	Other
Africa						
Benin	6.61	6.80	6.67	6.34	6.80	4.90
Cameroon	5.59	6.04	4.83	5.63	5.89	4.81
Ghana	6.23	6.53	5.34	5.94	6.23	4.72
Ivory Coast	6.62	6.79	5.32	6.62	6.66	6.04
Kenya	7.85	7.04	8.24	7.94	6.73	7.72
2	6.15	5.18	5.27	6.06	5.10	5.16
Lesotho						
Nigeria	6.01	6.07	5.39	5.81	6.25	5.87
Senegal	7.19	6.52	6.72	7.14	6.69	6.87
Egypt	5.82	6.71	5.61	6.30	6.93	5.03
Mauritania	6.51	6.38	8.74	6.51	7.12	7.55
Morocco	6.71	6.23	5.55	7.08	6.35	4.96
Sudan (N)	6.76	5.93	5.71	7.06	6.33	6.17
Tunisa	7.23	8.01	5.82	7.03	7.82	5.05
Asia and the Pacific						
Jordan	8.29	8.85	7.74	9.03	9.35	6.73
Syria	8.11	9.23	8.24	8.23	8.75	6.91
Turkey	4.32	4.82	4.02	4.88	5.55	4.05
Yemen AR	8.99	7.73	7.84	8.25	7.44	
Yemen AK	0.99	1.15	7.04	0.23	/,44	7.25
Bangladesh	5.59	4.99	4.83	6.37	5.65	5.15
Nepal	5.99	6.10	5.55	6.20	5.90	5.84
Pakistan	6.34	6.30	6.55	6.96	6.69	6.93
Sri Lanka	5.49	5.49	4.73	5.32	5.50	4.45
Fiji	4.80	4.56	4.12	5.19	4.50	3.64
Indonesia	5.91	4.40	4.37	6.33	4.74	4.53
	5.55	5.61	4.82	4.75	5.32	4.17
Korea, Rep. of						
Malaysia	5.85	5.48	5.63	6.01	5.92	5.49
Philippines	7.20	6.58	6.47	6.97	6.23	5.77
Thailand	5.40	5.68	5.26	4.95	5.50	4.69
Americas						
Colombia	6.13	5.32	4.87	6.03	5.17	4.26
Ecuador	6.54	6.03	5.30	6.60	5.59	4.94
Paraguay	6.44	5.88	4.87	6.11	5.54	4.06
Peru	6.97	7.10	6.12	6.82	6.78	5.35
Venezuela	5.66	4.26	4.96	6.07	4.67	4.85
Costa Rica	4.65	3.89	4.07	4.53	3.76	3.46
Dominican Republic	6.70	6.12	5.72	6.88	6.15	5.38
Mexico	7.29	6.83	6.00	7.38	6.13 6.79	
						5.35
Panama	5.38	4.91	4.21	5.69	4.91	3.93
Guyana	5.22	5.39	4.59	5.44	5.20	4.05
Haiti	7.02	7.00	5.69	5.40	5.98	4.75
Jamaica	7.06	4.76	4.82	7.18	5.06	4.79
Trinidad and Tobago	4.08	3.66	3.06	4.34	3.72	3.00
Europe						
Portugal	3.28	3.68	2.99	2.54	2.84	2.27
					·····	

 Table 7
 Summary fertility measures, by the respondent's work status

<sup>a</sup>Within-union fertility.



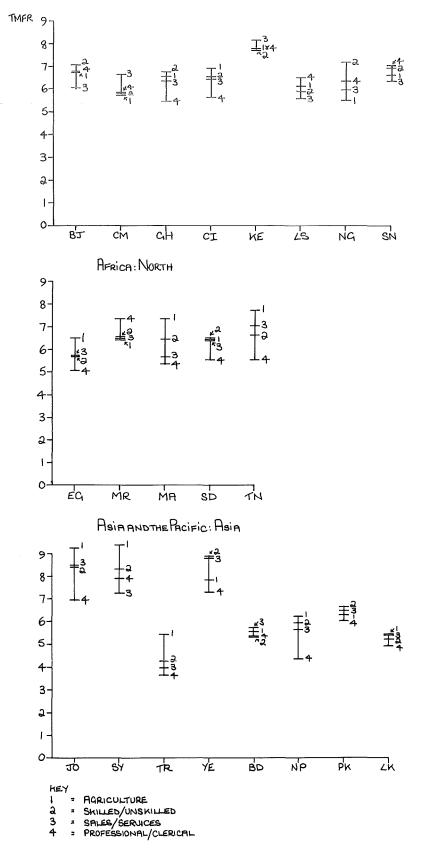
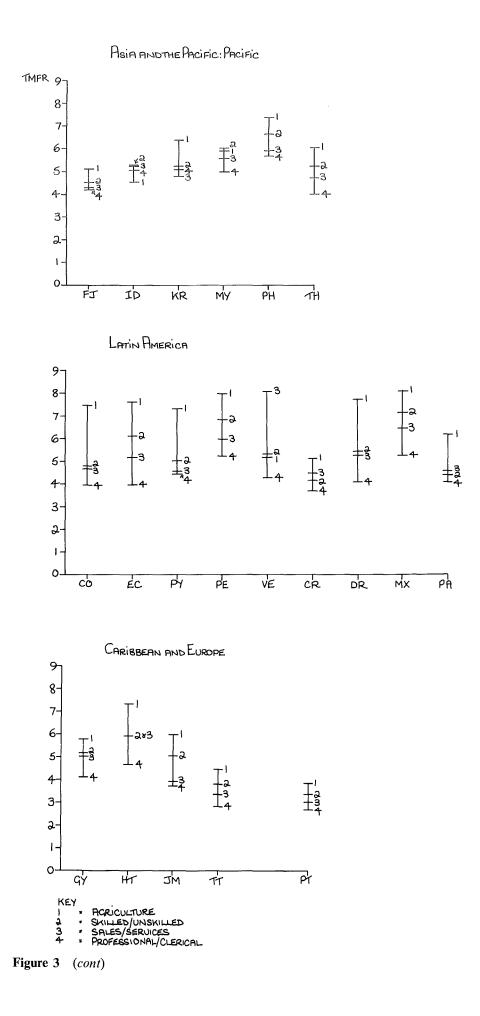
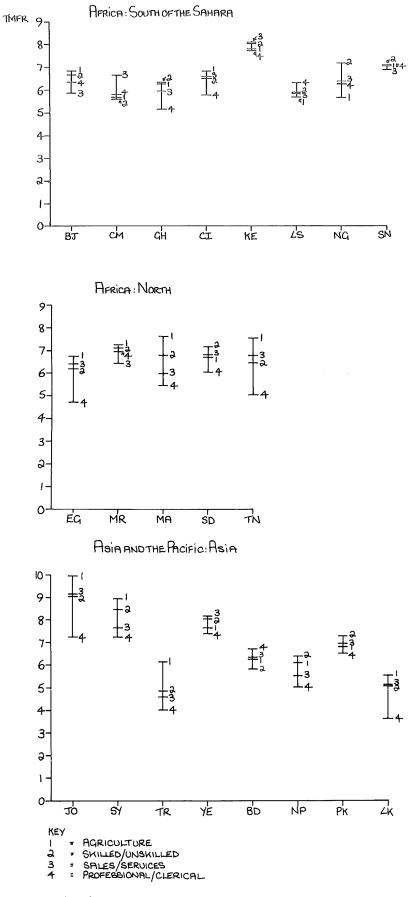


Figure 3 Total marital fertility rates (TMFR), by the husband's occupation



**B:** TMFR durations 0-24 years





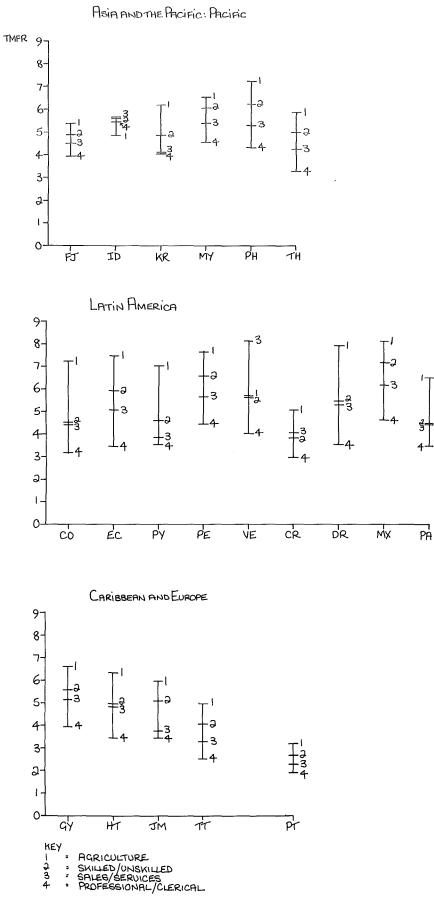
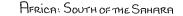


Figure 3 (cont)

A: TMFR ages 20-49



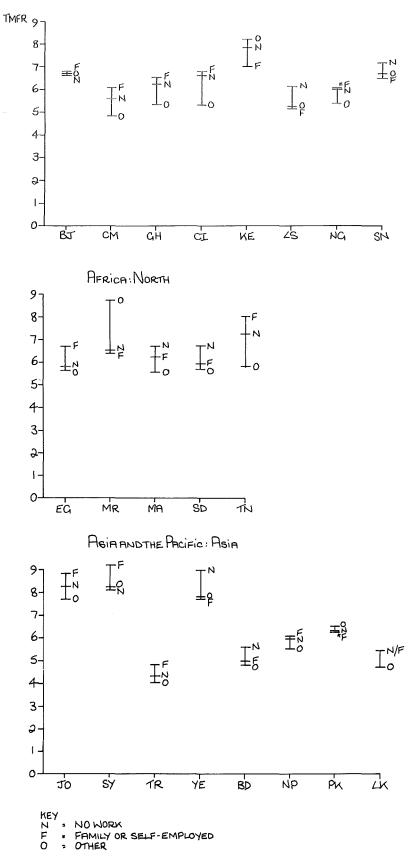


Figure 4 Total marital fertility rates (TMFR), by the respondent's work status

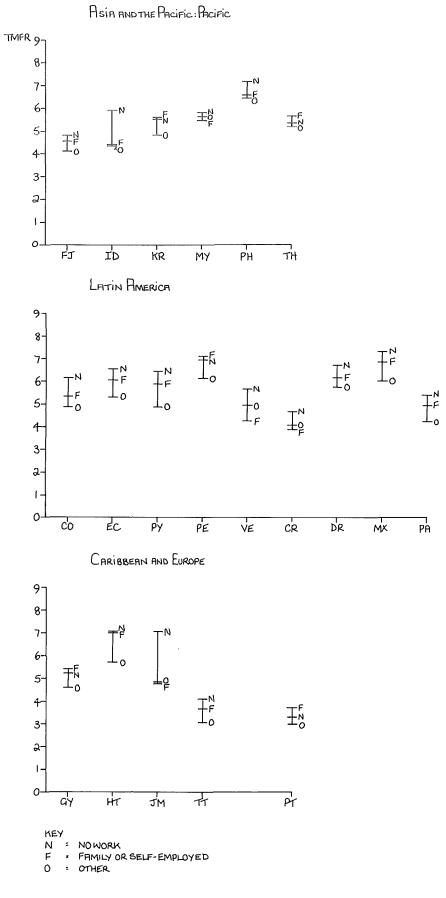


Figure 4 (cont)

**B: TMFR durations 0–24 years** 



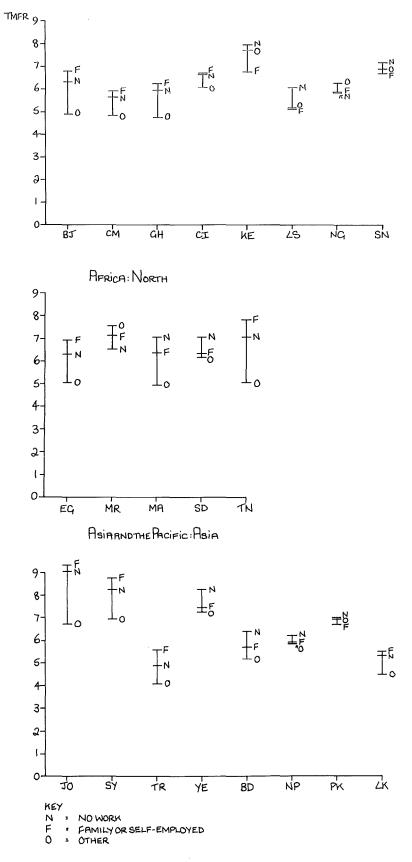


Figure 4 (cont)

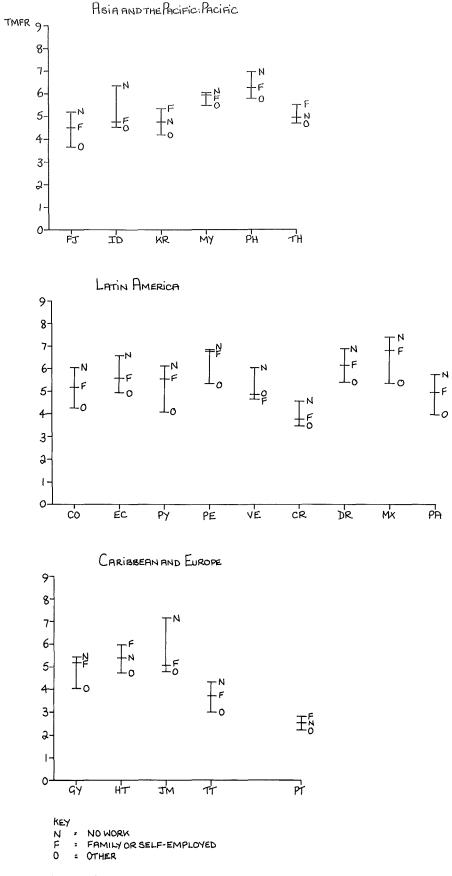


Figure 4 (cont)

ł

# References

Alam, Iqbal and J.B. Casterline (1984). Socio-Economic Differentials in Recent Fertility. *WFS Comparative Studies* no 33.

Bongaarts, J. (1978). A Framework for Analysing the Proximate Determinants of Fertility. *Population and Development Review 4 (1):* 105–32.

Casterline, John B., Susheela Singh, John Cleland and Hazel Ashurst (1984). The Proximate Determinants of Fertility. *WFS Comparative Studies* no 39.

Cochrane, S.H. (1979). *Fertility and Education*. Baltimore: Johns Hopkins University Press.

Ferry, Benoît and David P. Smith (1983). Breastfeeding Differentials. WFS Comparative Studies no 23.

Goldman, Noreen and John Hobcraft (1982). Birth Histories. WFS Comparative Studies no 17.

Hermalin, A.I. and W.M. Mason (1980). A Strategy for the Comparative Analysis of WFS Data, with Illustrative Examples. In UNFPA, *The United Nations Programme* for Comparative Analysis of World Fertility Survey Data.

Hobcraft, John and J.B. Casterline (1983). Speed of Reproduction. WFS Comparative Studies no 25.

Kupinsky, S. (1977). The Fertility of Working Women: a Synthesis of International Research. New York: Praeger.

Lightbourne, Robert (1981). Distinguishing 'Major Urban' from 'Other Urban' in 41 World Fertility Survey Countries. WFS Technical Papers no 1725. Little, Roderick J.A. (1982). Sampling Errors of Fertility Rates from the WFS. *WFS Technical Bulletins* no 10.

McCarthy, James (1982). Differentials in Age at First Marriage. WFS Comparative Studies no 19.

Page, H. (1977). Patterns Underlying Fertility Schedules: a Decomposition by both Age and Marriage Duration. *Population Studies 31 (1):* 85–106.

Rodríguez, G. and J. Cleland (1981). Socio-Economic Determinants of Marital Fertility in Twenty Countries: a Multivariate Analysis. *World Fertility Survey Conference* 1980: Record of Proceedings 2: 337–414.

Ryder, Norman B. (1982). Progressive Fertility Analysis. WFS Technical Bulletins no 8.

Sathar, Zeba A. and V.C. Chidambaram (1984). Differentials in Contraceptive Use. WFS Comparative Studies no 36.

Singh, Susheela (1984). Comparability of Questionnaires: Forty-one WFS Countries. *WFS Comparative Studies* no 32.

Singh, S. and J.B. Casterline (forthcoming). Socio-Economic Determinants of Fertility. In J. Cleland and J. Hobcraft, eds, *The Demography of Developing Countries*. Oxford: OUP.

Thompson, L.V., M. Nawab Ali and J.B. Casterline (1982). Collecting Demographic Data in Bangladesh: Evidence from Tape-Recorded Interviews. *WFS Scientific Reports* no 41.

Appendix A-Detailed Tables

	Age gr	quo						TFR	GFR
	15–19	20-24	25-29	30-34	35-39	40-44	45-49		
RICA									
BENIN									
Major urban Other urban Rural	81 133 171	240 318 325	312 297 342	250 250 286	131 175 206	93 98 101	44 70 49	5.75 6.70 7.40	223
No school 1-3 years 4-6 years 7+ years	173 177 135 45	327 287 313 149	337 268 290 278	281 272 257 252	197 284 141 44	102 119 19 84	52 294 0 0	7.35 8.50 5.77 4.26	249 255 221
CAMEROON									
Major urban Other urban Rural	120 204 196	262 337 297	265 301 276	183 172 229	145 132 159	79 124 106	6 70 40	5.30 6.70 6.51	214
No school 1-3 years 4-6 years 7+ years	217 220 183 107	271 377 324 263	266 285 297 318	218 225 236 183	156 145 166 98	105 144 95 67	43 0 53 0	6.38 6.98 6.77 5.18	200 256 245
IVORY COAST									
Major urban Other urban Rural	190 209 230	285 304 328	259 294 317	227 262 250	173 162 218	129 126 133	19 15 69	6.42 6.86 7.72	243
No school 1-3 years 4-6 years 7+ years	224 266 222 136	315 346 326 265	304 298 272 284	252 231 206 168	204 210 173 59	130 253 72 256	62 0 0 0	7.45 8.02 6.36 5.83	292 263
NIGERIA									
Major urban Other urban Rural	177 127 182	322 246 287	270 296 271	296 272 218	111 143 151	109 83 102	62 10 67	6.73 5.88 6.39	
No school 1-3 years 4-6 years 7+ years	241 251 151 35	287 302 324 178	263 290 322 272	225 231 277 217	142 150 209 121	97 101 182 16	61 52 53 0	6.58 6.88 7.59 4.20	217 249 246

## Table A1 Age-specific fertility rates by current residence and respondent's education

.

	Age gr	oup						TFR	GFR
	15-19	20-24	25-29	30-34	35-39	4044	45_49		
SIA									
TURKEY									
Major urban Other urban Rural	116 124 211	217 232 323	171 204 280	86 120 191	47 39 125	11 24 60	0 0 3	3.24 3.72 5.97	117 137 197
No school 1—3 years 4—6 years 7+ years	172 135 105 19	327 296 231 119	297 227 186 147	206 119 105 62	120 67 44 61	58 33 17 7	3 0 0 0	5.91 4.38 3.44 2.07	184 146 136 61
YEMEN									
Urban Rural	152 178	384 340	333 348	317 337	170 240	172 199	34 78	7.81 8.60	263 273
No school Some school	181 60	347 235	346 373	336 0	229 409	197 0	75 0	8.55 5.38	275 114
UROPE									
PORTUGAL									
Major urban Other urban Rural	26 27 32	114 152 154	124 124 150	70 68 97	18 26 57	8 11 22	0 2 9	1.80 2.05 2.60	57 62 78
No school 1-3 years 4-6 years 7+ years	139 59 43 13	199 240 170 96	108 160 139 141	130 115 76 68	84 53 28 31	33 16 10 8	11 10 0 0	3.52 3.27 2.33 1.78	57 75 83 58
MERICAS									
ECUADOR									
Major urban Other urban Rural	69 103 126	163 246 287	183 231 320	104 171 257	68 135 211	37 76 106	4 15 24	3.13 4.88 6.65	110 161 213
No school 1—3 years 4—6 years 7+ years	240 172 130 50	331 317 271 156	351 333 269 169	284 275 177 93	228 218 138 51	108 113 71 19	27 24 11 0	7.84 7.25 5.33 2.69	234 236 183 97

.

	Age gr	oup						TMFR (15-49)	TMFR (20-49)	GMFR		Age gr	oup						IMFR (15–49)	IMFR (20-49)	GMFI
	15–19	20-24	25-29	30-34	35-39	40_44	45_49					15-19	20-24	2529	30-34	35–39	40_44	45-49			
AFRICA											IVORY COAST										
BENIN											Major urban Other urban Rural	312 341 338	330 339 352	289 313 331	254 274 256	178 178 231	141 142 142	26 16 77	7.65 8.01 8.64	6.09 6.31 6.95	281 290 279
Major urban Other urban Rural	408 365 325	370 369 352	354 308 347	279 263 294	150 186 215	102 101 109	54 78 55	8.58 8.35 8.48	6.55 6.52 6.86	283 281 286	No school	324	340	321	262	217	141	70	8.37	6.75	273
No school 1-3 years	333 491	355 338	344 286	290 270	206 284	108 119	58 294	8-46 10-41	6.80 7.95	283 312	1—3 years 4—6 years 7+ years	387 363 330	372 374 327	309 294 324	213 215 188	258 189 74	229 93 219	0 0 0	8.84 7.63 7.30	6.91 5.82 5.65	346 339 305
4-6 years 7+ years	376 350	414 316	305 364	302 282	192 46	28 119	0	8.08 7.39	6.20 5.64	320 281	No work Agricultural	287 343	308 347	104 328	0 265	0 224	0 143	0 75	3.49 8.62	2.06 6.91	281 269
No work Agricultural Skilled-unsk.	192 351 305	429 350 349	347 340 356	377 289 276	198 215 179	75 104 150	0 58 101	8.09 8.53 8.57	7.13 6.78 7.05	293 282 296	Skilled-unsk. Sales & serv. Prof. & cler.	325 334 330	349 338 338	306 330 292	263 265 185	209 201 143	141 125 171	38 37 0	8.15 8.15 7.29	6.53 6.48 5.64	298 299 286
Sales & serv. Prof. & cler.	363 368	364 411	284 367	308 300	202 145	52 102	0 34	7.86 8.63	6.04 6.79	275 302	No work Family & self Others	319 343 332	351 344 329	312 326 256	293 256 220	234 216 164	79 147 94	56 71 0	8.22 8.51 6.98	6.62 6.79 5.32	313 273 273
No work Family & self Others	283 366 536	340 360 383	336 340 361	275 294 272	235 198 78	111 104 238	25 64 0	8.03 8.63 9.34	6.61 6.80 6.67	281 287 292	NIGERIA	<u> </u>	529	200	220	104	94	0	0.90	<b>عر ، ر</b>	213
CAMEROON Major urban	282	335	292	227	178	95	15	7.11	5.70	265	Major urban Other urban Rural	363 299 305	393 312 319	287 320 277	298 275 229	122 150 161	117 96 110	66 11 87	8.23 7.32 7.43	6.41 5.83 5.91	290 260 249
Other urban Rural	370 292	375 311	312 282	182 237	160 168	142 117	60 51	8.00 7.29	6.15 5.83	258 241	No school	293	300	267	235	150	107	78	7.15	5.69	233
No school 1—3 years 4—6 years	269 330 344	286 398 347	271 294 319	227 264 260	166 194 192	116 164 105	52 0 77	6.94 8.22 8.22	5-59 6-57 6-50	217 309 319	1–3 years 4–6 years 7+ years	299 378 386	325 403 371	297 347 327	229 285 233	162 231 132	101 199 18	70 55 72 0	7.34 9.57 7.33	5.85 7.68 5.40	255 268 345 314
7+ years	284	336	339	188	103	86	0	6.68	5.26	296	No work Agricultural	326 298	284 284	359 263	147 223	74 149	183 101	127 86	7.50 7.02	5.87 5.53	251 229
No work Agricultural Skilled-unsk. Sales & serv.	234 295 280 412	274 302 324 378	269 278 287 329 293	186 241 211 218 215	93 166 172 181 188	65 110 145 190	142 55 16 37 22	6.31 7.23 7.17 8.72 7.11	5.14 5.76 5.77 6.66 5.82	209 231 259 306 262	Skilled-unsk. Sales & serv. Prof. & cler.	327 316 326	387 341 363	315 302 297	293 245 278	216 154 164	173 112 92	54 43 77	8.82 7.56 7.98	7.19 5.98 6.34	311 267 285
Prof. & cler. No work Family & self	258 310 291	340 325 316	293 249 302	215 218 239	180 141 182	107 121 119	63 50	7.14 7.49	5.62 5.59 6.04	202 248 244	No work Family & self Others	278 330 337	313 327 340	264 293 271	239 245 214	110 170 154	130 109 75	147 70 24	7.40 7.72 7.07	6.01 6.07 5.39	253 255 248

Table A2 Age-specific marital fertility rates by current residence, respondent's education, husband's occupation and respondent's work status

	Age gr	oup						TMFR (15-49)	TMFR (20-49)	GMFR		Age gr	oup						TMFR (15-49)	TMFR (20-49)	GMFR
	15–19	20-24	25-29	30-34	35-39	40_44	45-49					15-19	20-24	25-29	3034	35-39	40_44	45_49			
EGYPT											MOROCCO										
Major urban Other urban Rural	403 377 341	383 415 386	295 325 350	185 223 268	105 128 172	32 37 76	6 17 26	7.04 7.61 8.10	5.02 5.73 6.39	216 253 277	Major urban Other urban Rural	324 373 358	351 383 400	300 312 370	188 195 275	126 151 235	66 84 136	23 32 38	6.88 7.65 9.06	5.26 5.78 7.27	207 231 294
No school 1-3 years 4-6 years 7+ years	348 360 373 381	377 429 409 409	336 335 333 299	254 217 228 177	161 137 130 80	72 47 28 16	27 15 0 11	7.88 7.70 7.50 6.86	6.13 5.90 5.63 4.96	263 234 265 237	No school 1-3 years 4-6 years 7+ years	359 358 417 266	397 391 367 328	353 299 295 311	250 121 169 212	197 124 204 172	110 156 137 211	34 81 0 0	8.49 7.65 7.94 7.50	6.70 5.86 5.86 6.17	264 276 291 287
No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	0 327 376 383 398	0 388 389 385 409	0 347 335 322 302	0 266 229 235 190	0 178 138 133 93	0 87 36 52 19	0 35 6 19 0	.00 8.14 7.55 7.64 7.06	.00 6.51 5.67 5.72 5.07	0 273 260 242 236	No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	378 367 350 342 347	285 407 401 370 347	267 374 356 295 298	214 272 231 216 193	274 226 190 163 118	74 153 86 78 74	22 41 29 13 43	7.56 9.20 8.21 7.39 7.10	5.67 7.36 6.46 5.68 5.37	209 288 273 226 236
No work Family & self Others	362 310 296	391 396 386	328 370 312	228 302 236	145 161 145	56 72 42	17 42 0	7.63 8.26 7.09	5.82 6.71 5.61	256 278 251	No work Family & self Others	364 320 349	395 385 317	346 327 351	248 222 205	199 194 170	114 111 67	41 8 0	8.53 7.83 7.29	6.71 6.23 5.55	272 247 226
MAURITANIA											TUNISIA										
Major urban Other urban Rural	315 332 323	341 370 340	294 349 337	275 290 265	184 172 212	149 131 89	63 51 48	8.10 8.47 8.07	6.53 6.81 6.45	288 293 280	Major urban Other urban Rural	386 407 377	428 441 439	291 341 402	198 249 319	167 179 248	40 94 167	6 40 55	7.58 8.76 10.04	5.65 6.72 8.15	221 250 309
No school Some school	335 283	349 339	335 320	269 290	199 207	114 72	46 66	8.23 7.88	6.56 6.47	286 278	No school 13 years 4-6 years	371 315 429	445 475 443	380 409 329	296 222 206	218 107 141	125 21 92	43 50 0	9.39 7.99 8.20	7-53 6.42 6.06	266 299 342
No work Agricultural Skilled-unsk.	312 352 333	321 358 358	296 345 349	235 265 291	196 199 199	145 89 77	96 27 34	8.01 8.17 8.21	6.45 6.41 6.54	252 278 308	7+ years	414	367	288	133	119	26	0	6.74	4.67	269
Skilled-disk. Sales & serv. Prof. & cler.	302 296 320	325 380 344	309 350 324	277 322 262	197 279 199	132 76	49 58 61	7.95 8.81 8.11	6.44 7.33	280 319 284	No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	357 397 438 388 387	411 436 454 481 404	357 386 356 351 310	526 302 261 238 209	106 230 177 202 121	246 145 75 102 44	60 51 8 36 14	10.31 9.72 8.85 8.99 7.44	8.53 7.74 6.66 7.05 5.51	247 285 279 255 249
Family & self Others	333 330	353 353	347 361	274 399	198 298	89 162	16 176	8.05 10.39	6.38 8.74	275 340	No work Family & self	394 323	448 397	366 384	275 338	210 242	115 163	34 80	9.20 9.62	7.23 8.01	249 279 284

[Table continues]

Table A2(cont)

	Age gr	oup						TMFR (15-49)	TMFR (20-49)	GMFR		Age gr	oup						IMFR (15-49)	TMFR (20–49)	GMFR
	15-19	2024	25-29	30-34	35-39	40_44	45-49					15–19	20-24	25-29	3034	3539	40-44	45-49			
ASIA											EUROPE										
TURKEY											PORTUGAL.										
Major urban Other urban Rural	346 365 371	282 295 357	185 221 286	88 127 198	48 44 130	12 26 63	0 0 4	4.81 5.38 7.04	3.08 3.56 5.19	147 178 222	Major urban Other urban Rural	323 328 406	259 278 295	191 148 185	91 77 109	23 29 63	10 11 25	0 3 10	4.48 4.37 5.47	2.87 2.73 3.44	95 87 119
No school 1-3 years 4-6 years 7+ years	357 376 372 385	365 347 290 314	312 238 195 191	216 121 110 68	124 72 47 64	62 37 18 7	4 0 0 0	7.20 5.95 5.15 5.15	5.41 4.07 3.30 3.22	211 177 202 166	No school 1-3 years 4-6 years 7+ years	336 402 402 338	373 374 290 249	184 201 165 199	159 125 85 87	98 58 31 37	37 18 11 10	13 12 0 0	6.00 5.95 4.92 4.60	4.32 3.94 2.90 2.91	67 89 124 131
No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	363 384 351 382 352	323 349 333 329 277	228 299 243 225 227	77 216 155 139 142	23 150 65 72 65	12 65 47 31 20	0 3 5 0 0	5.13 7.33 6.00 5.89 5.41	3•31 5-41 4•24 3•98 3•65	164 216 205 191 172	No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	833 410 391 366 315	392 279 312 291 236	455 216 167 182 184	119 141 102 92 81	0 89 60 27 25	0 34 22 9 11	0 12 10 4 0	9.00 5.91 5.32 4.85 4.26	4.83 3.86 3.37 3.02 2.69	276 99 123 98 96
No work Family & self Others	359 381 360	330 330 326	252 268 208	163 189 110	82 116 99	37 55 60	0 5 0	6.11 6.72 5.82	4.32 4.82 4.02	210 198 169	No work Family & self Others	401 370 375	312 329 262	184 187 172	100 113 94	36 65 52	15 29 16	10 13 3	5.28 5.53 4.87	3.28 3.68 2.99	117 102 110
YEMEN											AMERICAS										
Urban Rural	339 279	452 388	368 373	339 358	187 263	183 219	35 86	9.51 9.83	7.82 8.44	337 326	ECUADOR										
No school Some school	284 280	395 442	373 390	358 0	251 395	215 0	81 0	9.78 7.53	8.36 6.13	327 355	Major urban Other urban Rural	395 419 414	298 381 411	248 305 365	127 207 290	79 155 242	49 92 127	5 10 31	6.00 7.85 9.40	4.02 5.75 7.33	194 252 300
No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	259 296 266 290 331	471 382 388 443 449	346 368 381 386 293	250 330 397 367 338	185 231 271 276 221	323 199 220 228 159	0 60 118 60 0	9.17 9.33 10.20 10.24 8.96	7.87 7.85 8.87 8.79 7.30	332 308 339 347 321	No school 1—3 years 4—6 years 7+ years	382 439 422 380	409 420 387 313	378 379 327 241	313 308 213 117	258 242 165 63	130 139 85 25	31 27 10 0	9.50 9.77 8.05 5.69	7.60 7.57 5.94 3.79	272 301 274 204
No work Family & self Others	297 276 233	424 362 382	370 374 382	381 333 309	272 228 226	243 209 144	108 41 125	10.48 9.11 9.01	8.99 7.73 7.84	346 310 294	No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	122 434 405 416 352	143 427 365 348 300	124 379 313 290 242	0 307 222 186 128	313 246 188 148 66	0 132 103 61 55	0 28 28 0 0	3.50 9.77 8.12 7.24 5.71	2.89 7.60 6.09 5.16 3.95	138 308 270 215 185
											No work Family & self Others	435 365 326	391 368 317	340 316 283	248 223 214	201 172 164	107 104 81	21 23 0	8.71 7.85 6.93	6.54 6.03 5.30	288 229 231

	Marit:	al dura	ution (y	ears)				IMFR (0-19)	TMFR (0-24)		Marit	al dura	ntion (y	rears)				IMFR (0-19)	ТМ 0)
	0-4	5 <del>-</del> 9	10-14	1519	20-24	25-29	3034				0-4	5-9	1014	15–19	20-24	25-29	30-34		
RICA										IVORY COAST									
BENIN										Major urban	303	305	244	229	130	77	0	5.42	
Major urban Other urban Rural	359 357 339	330 320 334	254 258 313	167 211 246	92 122 129	43 70 67	263 33 18	5.56 5.74 6.17	6.0 6.3 6.8	Other urban Rural	316 332	327 329	263 280	210 236	143 184	103 80	0 34	5.59 5.90	
					-					No school 1—3 years	317 363	327 323	272 325	232 236	171 162	82 227	25 0	5.75 6.25	
No school 1-3 years 4-6 years	342 367 363	336 309 333	304 273 277	237 300 158	128 193 56	66 84 0	28 0 0	6.10 6.25 5.66	6.7 7.2 5.9	4-6 years 7+ years	339 315	314 307	250 211	227 149	0 384	0 200	0	5.66 4.91	
7+ years	341	327	188	100	100	0	0	4.79	5.2	No work Agricultural	270 333	186 332	172 280	0 238	0 175	0 87	0 26	3.15 5.93	
No work Agricultural Skilled-unsk.	298 343 333	427 336 323	394 309 289	111 249 210	212 125 176	198 58 82	0 34 0 0	6.16 6.20 5.78	7.2 6.8 6.6	Skilled-unsk. Sales & serv. Prof. & cler.	318 313 321	325 347 265	269 264 221	226 227 165	163 153 177	69 85 41	24 26 0	5.70 5.77 4.86	
Sales & serv. Prof. & cler.	337 393	315 337	245 256	196 185	76 94	77 77	0	5.47 5.86	5.8 6.3	No work	312	333	289	229	158	61	0	5.82	
No work Family & self Others	324 353 335	290 343 287	289 303 158	250 229 198	113 130 0	117 58 0	0 32 0	5.78 6.14 4.90	6.3 6.8 4.9	Family & self Others	330 312	325 280	271 200	232 200	171 215	87 0	27 0	5.80 4.97	
CAMEROON										NIGERIA									
Major urban Other urban Rural	307 335 291	269 319 287	244 256 250	178 150 203	79 137 125	39 97 66	9 11 34	5.00 5.31 5.16	5.4 5.9 5.7	Major urban Other urban Rural	371 318 308	340 300 293	268 302 269	184 192 197	156 103 134	38 32 95	168 20 43	5.82 5.56 5.34	
No school 1-3 years 4-6 years 7+ years	262 316 331 319	266 370 313 292	239 267 323 242	199 164 195 124	125 127 89 51	66 126 76 88	31 19 0	4.84 5.59 5.82 4.90	5.4 6.2 6.2 5.1	No school 1-3 years 4-6 years 7+ years	284 308 391 386	286 304 355 289	261 287 337 280	195 212 200 100	130 149 124 17	87 81 36 22	45 75 0 0	5.13 5.56 6.41 5.28	
No work	239	227	218	165	110	15	0	4.26	4.8	No work Agricultural	332 283	313 278	243 257	109 184	81 131	43 93	* 37	4.98 5.01	
Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	285 305 361 292	289 265 362 274	243 258 267 280	202 183 207 168	124 108 129 141	61 81 163 64	37 8 0 24	5.10 5.07 5.99 5.08	5.7 5.6 6.6 5.7	Skilled-unsk. Sales & serv. Prof. & cler.	345 329 361	354 307 301	323 280 281	229 213 214	178 139 94	81 69 62	92 20 48	6.26 5.64 5.79	
No work Family & self Others	306 291 304	274 295 276	234 261 195	188 202 137	122 127 49	76 68 28	16 36 16	5.02 5.25 4.57		No work Family & self Others	278 331 360	296 304 271	282 278 225	164 210 167	143 125 151	112 83 48	4 64 15	5.10 5.62 5.12	

Table A3 Duration-specific marital fertility rates by current residence, respondent's education, husband's occupation and respondent's work status

[Table continues]

### Table A3 (cont)

	Marit	al dura	tion (y	ears)		·		TMFR (0-19)	TMFR (0-24)		Marit	al dura	tion (y	ears)				IMFR (0-19)	Т (0)
	0-4	5-9	10–14	15–19	20–24	25-29	30-34				0-4	5-9	10-14	15-19	20-24	25-29	30-34		
GYPT										MOROCCO									
fajor urban Other urban Aural	384 390 347	267 332 355	176 242 301	142 168 220	68 85 124	25 30 49	14 16 17	4.85 5.67 6.13	5.19 6.10 6.75	Major urban Other urban Rural	350 364 359	266 315 376	197 234 326	150 197 262	102 105 182	33 42 97	6 16 22	4.82 5.56 6.62	
No school 1—3 years 4—6 years 7+ years	349 373 388 377	343 360 339 211	288 263 230 97	208 177 190 51	116 93 81 18	49 32 20 19	21 10 5 0	5.95 5.88 5.74 3.69	6.53 6.35 6.15 3.78	No school 1-3 years 4-6 years 7+ years	365 358 354 311	358 345 288 248	298 172 210 216	234 131 180 150	150 99 130 0	72 44 82 0	18 0 0 0	6.28 5.04 5.17 4.63	
Wo work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	0 335 384 384 372	0 358 334 333 262	0 305 246 266 160	0 226 190 183 96	0 124 83 112 50	0 64 23 31 12	0 27 6 12 9	.00 6.13 5.77 5.84 4.46	.00 6.75 6.19 6.40 4.71	No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	253 370 366 331 340	327 390 345 314 268	217 326 280 223 236	186 262 220 198 163	197 172 143 124 80	77 110 52 34 31	16 25 17 0 22	4.93 6.75 6.07 5.35 5.04	
No work Family & self Others	367 345 354	337 370 243	262 305 161	188 252 141	103 113 105	39 55 17	18 12 0	5.78 6.36 4.51	6.30 6.93 5.03	No work Family & self Others	364 350 317	364 290 220	292 290 194	237 218 151	157 119 107	73 89 21	21 11 0	6.29 5.75 4.42	
MAURITANIA										TUNISIA									
Major urban Other urban Rural	307 295 309	296 304 328	264 315 289	243 241 241	149 198 193	81 60 93	47 56 27	5.56 5.79 5.85	6.31 6.78 6.81	Major urban Other urban Rural	411 439 431	270 315 392	197 230 315	120 181 258	69 113 192	37 55 83	0 29 50	5.00 5.83 6.99	
No school Some School	310 291	326 278	294 276	248 210	196 143	85 71	41 9	5.90 5.28	6.89 6.00	No school 1-3 years 4-6 years	438 419 436	365 397 323	287 244 198	221 103 155	150 19 89	68 0 32	37 0 0	6.56 5.82 5.57	
Work Agricultural Skilled-unsk.	305 351 293	261 358 335	231 302 338	193 245 261	150 189 193	47 96 89	17 36 60	4.96 6.29 6.15	5.71 7.24 7.11	7+ years	386	192	98	44	53	0	0	3.61	
Sales & serv. Prof. & cler.	279 314	291 282	264 295	241 285	207 211	88 79	37 29	5.38 5.89	6.42 6.94	No work Agricultural Skilled-unsk. Sales & serv.	439 446 438 453	404 368 356 310	357 290 248 270	164 238 166 185	232 169 107	113 75 30 72	82 44 0	6.82 6.72 6.05	
o work amily & self thers	305 300 322	306 349 310	276 321 326	234 249 293	178 201 256	77 95 78	42 19 98	5.62 6.11 6.27	6.51 7.11 7.55	Prof. & cler.	455 393	283	151	125	135 53	14 12	27 0	6.10 4.77	
JUICE'S	J22	015	20	273	200	10	90	0.21	(+22	No work Family & self Others	440 407 340	354 354 247	268 311 200	209 269 107	134 222 112	67 80 26	20 84 21	6.36 6.71 4.48	

	Marit	al dura	tion (y	ears)				11MFR (0-19)	TMFR (0-24)		Marit 	al dura	tion (y	ears)				TMFR (0-19)	TMFR (0-24)
	0_4	5-9	10-14	15-19	20-24	25-29	30-34				0_4	5-9	1014	15-19	20-24	25-29	30-34		
IA										EUROPE									
TURKEY										PORTUGAL									
Major urban Other urban Rural	315 341 364	183 188 319	104 149 228	42 86 161	26 25 99	4 21 46	0 17 7	3.23 3.83 5.37	3•36 3•96 5•87	Major urban Other urban Rural	258 255 291	87 84 129	44 39 63	11 13 35	2 7 17	0 10 17	0 0 21	2.01 1.97 2.60	2.0 2.0 2.
No school 1-3 years 4-6 years 7+ years	370 382 334 320	332 271 214 129	268 140 112 49	160 111 71 40	98 41 30 7	45 15 17 0	10 0 0 0	5.65 4.53 3.67 2.70	6.14 4.74 3.82 2.73	No school 1-3 years 4-6 years 7+ years	284 311 289 251	173 143 107 95	69 81 45 29	53 31 16 8	27 12 6 4	21 12 7 0	26 0 0 0	2.91 2.84 2.30 1.93	3. 2. 2. 1.
No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	328 371 350 358 315	153 322 254 258 209	102 251 180 152 145	18 177 128 89 93	11 103 56 58 36	0 56 18 16 24	0 10 13 0 0	3.01 5.62 4.57 4.30 3.82	3.07 6.13 4.85 4.59 4.00	No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	505 296 296 282 240	322 160 124 110 85	0 96 59 41 36	0 48 31 15 10	0 26 13 7 7	0 14 21 6 0	0 0 26 0 0	4.14 3.01 2.56 2.25 1.87	4. 3. 2. 1.
No work Family & self Others	350 366 296	255 288 231	183 219 126	126 144 100	59 92 56	29 37 57	0 9 31	4.58 5.09 3.77	4.88 5.55 4.05	No work Family & self Others	313 305 255	108 142 107	51 66 52	26 32 26	7 21 12	16 25 2	0 47 0	2.50 2.73 2.21	2. 2. 2.
										AMERICAS									
YEMEN	<b>50</b> 1				a 11 11					ECUADOR									
Urban Rural	334 280	391 361	381 361	292 325	144 244	112 192	74 140	7.00 6.64	7.73 7.86	Major urban Other urban Rural	313 398 409	211 262 332	116 208 282	76 157 230	45 114 172	16 54 86	18 13 42	3.59 5.13 6.27	3. 5. 7.
No school Some School	285 285	365 278	363 607	320 0	230 529	185 0	135 0	6.68 5.85	7.83 8.50			010				-	- 4	<b>6</b> 1 -	
No work Agricultural Skilled-unsk.	279 303 270	550 359 349	166 355 379	219 276 386	298 235 224	0 169 235	0 99 210	6.08 6.47 6.93	7.57 7.65 8.05	No school 1-3 years 4-6 years 7+ years	367 419 401 337	348 355 295 181	318 295 231 75	250 243 148 51	201 160 91 18	67 93 52 0	34 30 28 0	6.42 6.57 5.39 3.23	7. 7. 5. 3.
Sales & serv. Prof. & cler.	294 301	408 385	389 290	328 241	217 259	191 119	141 0	7.10 6.10	8.18 7.39	No work Agricultural Skilled-unsk.	269 436 369	166 352 279	0 298 227	2000 235 182	357 172 124	0 84 76	0 42 34	12.18 6.61 5.29	13 7 5
No work Family & self Others	301 268 263	402 319 359	373 356 339	341 297 295	231 245 192	240 142 140	117 170 83	7.09 6.22 6.29	8.25 7.44 7.25	Sales & serv. Prof. & cler.	358 322	250 180	177 81	132 63	90 41	14 0	0	4.59 3.24	5 3
	-	-	-							No work Family & self Others	409 352 315	310 285 220	268 207 151	196 164 158	135 108 143	83 47 48	51 8 20	5.92 5.04 4.23	6. 5. 4.

\* Base less than 20

-- ---

	Age gr	oup						Total		Age gr	oup						To
	15–19	20-24	25-29	30-34	35-39	40_44	45-49			15–19	20-24	25-29	30-34	3539	40_44	45-49	
ICA									EGYPT						I		
BENIN									Major urban	3634	3089	2446	1965	1566	1312	450	1
Major urban Other urban Rural	765 879 2279	632 809 3118	522 708 2449	413 485 1788	283 423 1575	194 235 1155	69 85 467	2878 3624 12830	Other urban Rural	2859 7556	2294 5793	1793 4540	1309 4014	1111 3360	949 2719	347 886	1 2
to school  -3 years  -6 years  + years	2696 96 371 507	3689 188 301 254	3077 108 252 140	2242 70 179 91	2030 39 71 46	1439 17 53 24	578 3 16 7	15751 521 1243 1070	No school 1—3 years 4—6 years 7+ years			No	ot Avail	able			
									MAURITANIA								
CAMEROON Major urban Other urban Rural	1873 682 5507	1671 517 4973	1112 472 4684	697 401 3499	623 465 3794	356 287 2443	116 127 965	6448 2950 2586 <sup>1</sup>	Major urban Other urban Rural	1239 1493 2743	1111 1100 1776	776 1055 1701	410 663 1174	364 501 1083	256 339 689	74 206 227	
No school 1-3 years 1-6 years 7+ years	2641 678 3475 1837	2996 682 2536 1164	3903 357 1333 572	3310 280 657 163	3883 248 367 118	2544 197 114 45	1044 43 26 21	2032 2485 8510 3920	No school 1-3 years 4-6 years 7+ years			N	ot Avail	lable			
IVORY COAST									MOROCCO								
Major urban Other urban Rural		1217 1390 3214	850 831 2469	542 591 2076	334 458 1960	209 270 1559	52 67 569	4702 5184 1532	Major urban Other urban Rural	1124 1675 3682	853 1229 2930	699 890 1976	450 796 1762	523 831 1757	431 648 1335	177 268 595	1
No school 1—3 years 4—6 years 7+ years	4419 365 976 782	298 767	3485 131 305 229	3008 35 78 89	2673 33 29 17	1985 20 14 20	667 5 10 6	2050 881 2173 161	No school 1-3 years 4-6 years 7+ years	4512 227 744 982	3731 153 646 461	2817 76 378 272	2650 53 199 105	2890 51 130 40	2346 19 35 10	1020 12 7 0	1
NIGERIA									TUNISIA								
Major urban Other urban Rural		1984		519 931 4242	479 903 3831	236 495 2056	66 201 910	431 806 3040	Urban Rural	5232 4747	3131 2968	2119 2008	1640 1747	1825 1794	1568 1563	576 574	1 1
No school 1—3 years 4—6 years 7+ years	3917 1455 2061 2463	1443 1616	1393 1041	607	580 378	2316 293 128 47	1029 112 43 4	2652 609 587 429	No school 1—3 years 4—6 years 7+ years			Ň	ot Avai	lable			

## Table A4 Woman-years of exposure by current residence and respondent's education

Age group

Total

15-19 20-24 25-29 30-34 35-39 40-44 45-49

ASIA

#### TURKEY

Major urban	649	750	655	488	423	448	166	3579	
Other urban	1200	1325	1048	767	829	546	176	5892	
Rural	2291	2582	2147	2022	2076	1894	603	13615	
No school	1695	1828	1712	1811	2029	1855	600	11529	
1-3 years	520	527	498	447	463	391	132	2977	
4-6 years	2976	1958	1249	733	632	472	158	8177	
7+ years	1709	772	463	289	165	155	49	3602	
YEMEN									
Urban	394	346	312	184	182	82	21	1521	
Rural	2862	2562	1984	1454	994	821	220	10897	
No school	3064	2843	2276	1630	1170	903	241	12124	
Some school	220	68	10	1	4	0	0	303	

#### EUROPE

#### PORTUGAL

Major urban	685	717	736	616	616	745	303	4419
Other urban	1016	866	1018	1174	1029	919	429	6451
Rural	4859	3748	3407	3342	3351	3478	1580	23765
No school	36	91	93	292	926	1461	718	3616
1—3 years	337	380	593	1299	1408	1452	675	6143
4—6 years	3140	2977	2952	2510	1941	1624	663	15806
7+ years	3152	1842	1508	1022	712	596	260	9092

#### AMERICAS

#### ECUADOR

Major urban	2235	1963	1325	933	764	595	262	8077
Other urban	1849	1514	1088	1013	699	602	264	7028
Rural	3421	2743	2407	2088	1778	1421	532	14390
No school	334	390	521	599	670	586	257	3356
1-3 years	1008	1214	1098	1119	910	791	339	6479
4-6 years	2683	2113	1746	1356	978	821	282	9977
7+ years	3480	2503	1456	960	682	420	181	9682

i	Age gr	oup						Total		Age gr	oup						Tota
•	15–19	20-24	25-29	30-34	35-39	40-44	45-49			15-19	20-24	25-29	30-34	35-39	40-44	45-49	
RICA									IVORY COAST								
ININ									Major urban	729	942	734	465	292	164	39	33(
									Other urban	712	1089	734	529	399	240	39 63	37
Major urban	105	376	446	366	247	167	55	1762	Rural	1892	2686	2227	1947	1801	1413	492	124
Other urban	280	680	655	442	393	219	77	2745									
Rural	1059	2785	2363	1701	1476	1038	419	10841	No. och 1	2503	3599	3129	0760	0404			
									No school 1-3 years	2503 194	255	113	2769 33	2424 27	1770 18	575 5	167
No school	1245	3300	2955	2125	1900	1310	521	13355	4-6 years	436	255 549	259	55 65	27	18	с 8	1:
1-3 years	33	151	98	67	39	17	3	407	7+ years	200	309	182	75	14	18	6	-
4-6 years	109	215	230	149	47	36	12	797	-			-				•	
7+ years	31	98	102	78	43	17	4	373	N	=0					-		
									No work Agricultural	1293	1951	1834	1749	1725	1419	499	10
No work	26	49	29	16	25	13	5	164	Skilled-unsk.		1458	919	639	426	234	53	4
Agricultural	889	2399	2224	1598	1432	997	416	9954	Sales & serv.		709	603	347	249	112	27	2
Skilled-unsk.		781	545	388	263	174	60	2534	Prof. & cler.	. 367	545	315	205	91	53	21	1
Sales & serv.		275	296	162	144	97	30	1091									
Prof. & cler.	93	268	291	260	166	98	30	1205	No work	1304	1334	690	369	179	113	36	4
									Family & self		3094	2783	2445	2263	1671	536	14
No work	445	789	627	422	375	252	79	2989	Others	181	289	211	127	49	32	21	
Family & self		2949	2704	1940	1634	1114	454	11760									
Others	6	29	53	62	26	8	2	185	NIGERIA								
									Major urban	510	834	798	477	440	211	63	3
AMEROON									Other urban	798	1526	1486	936	866	431	184	6
Major urban	524	1170	905	543	477	243	48	3908	Rural	3770	5468	6231	3986	3515	1809	705	25
Other urban	296	404	410	333	330	233	94	2100									
Rural	3185	4263	4254	3158	3286	2004	701	20851	No school	3025	4702	5768	2005	2020	1000		~~
									1-3 years	1155	4702 1326	1353	3805 787	3839 507	1998 269	801 104	23 5
		0670	2500	2017	2240	2000	760	17425	4-6 years	739	1288	981	594	351	119	32	4
No school 1-3 years	1942 391	2673 603	3598 311	3017 207	3340 171	2096 143	760 25	1850	7+ years	206	499	432	226	87	47	4	ī
4-6 years	1492	2057	1152	562	298	93	18	5671									
7+ years	453	717	456	123	101	34	7	1890									
1									No work	89	55	121	54	65	24	22	
									Agricultural Skilled-unsk.		3690 1.398	4585 1198	3014 703	2799 498	1489 255	557 110	18 5
No work	138	126	87	86	71	37	21	567	Sales & serv.		1328	1392		787	355	123	5
Agricultural Skilled-unsk.		2584 1545	3007 1204	2359 790	2625 582	1638 382	585 92	14763 5563	Prof. & cler.		1208	1059	654	529	250	110	4
Sales & serv.		717	561	325	332	208	92 94	2753									
Prof. & cler.		924	684	443	404	182	47	3214								_	
								-	No work	1952	2102	1954	1022	872	358	110	8
									Family & self Others	2681 384	4619 1008	5460 1126	3673 757	3393 591	1852 274	755 102	22 4
No work Family & self	1533	1822	1686	1091	1100	481	152	7865	OTIGES	204	1000	TT50	151	727	2/4	102	4
		3533	3464	2774	2869	1967	701	17642									

Table A5 Woman-years of exposure by current residence, respondent's education, husband's occupation and respondent's work status

	Age gr	oup						Total	Age group	Total
	15-19	20-24	25-29	30-34	35–39	40-44	45-49			cernal-detection (14 18 her)
EGYPT									MOROCCO	
Major urban Other urban Rural	519 608 2748	1433 1327 4503	1917 1528 4075	1771 1222 3612	1394 967 2930	1112 805 2254	348 301 694	8495 6757 20816	Major urban 105 396 518 400 454 351 129 Other urban 281 723 737 704 702 563 219 Rural 1190 2224 1792 1631 1631 1210 524	2352 3929 10202
No school 1—3 years 4—6 years 7+ years	2585 427 709 152	4429 632 1611 590	4321 737 1540 919	4058 729 1130 686	3340 714 840 398	2460 675 780 256	779 208 269 88	21973 4121 6878 3089	No school 1406 2750 2508 2443 2610 2061 857 1-3 years 50 100 67 41 40 19 12 4-6 years 77 319 278 166 108 29 2 7+ years 34 162 183 85 29 10 0	14633 330 979 502
No work Agricultural Skilled-unsk Sales & serv Prof. & cler	. 1112 . 567	0 2797 2187 1262 1004	0 2550 2231 1346 1380	0 2460 1835 1235 1073	0 2058 1430 1070 728	0 1550 1181 909 525	0 481 333 315 214	0 13773 10309 6704 5240	No work 29 53 60 75 102 81 45 Agricultural 653 1330 1122 1022 1053 896 412 Skilled-unsk. 518 1101 922 913 865 568 174 Sales & serv. 219 457 465 425 465 386 149 Prof. & cler. 104 309 376 186 220 135 70	445 6488 5060 256 1399
No work Family & sel: Others	3415 f 365 91	6080 700 482	5842 788 887	5175 753 674	4347 566 379	3516 416 239	1110 143 91	29485 3731 2842	No work 1367 2811 2480 2207 2227 1724 713 Family & self 169 393 373 338 366 280 126 Others 40 139 194 190 194 120 33	1352 204 91
MAURITANIA										
Major urban Other urban Rural	617 603 1250	823 698 1362	633 827 1479	334 531 1005	255 389 907	168 252 546	48 139 170	2878 3438 6717	TUNISIA Major urban 101 528 643 567 604 495 170 Other urban 211 882 1032 959 1123 943 322 Rural 528 1710 1750 1652 1684 1440 506	
No school Same school	1937 521	2192 645	2404 525	1575 311	1349 239	817 166	278 73	10552 2481	No school 494 1975 2373 2628 3140 2737 944 1-3 years 60 149 142 108 84 48 20 4-6 years 233 663 539 247 127 54 22	
No work Agricultural Skilled-unsk Sales & serv Prof. & cler	. 710 . 781	282 766 819 790 211	285 940 842 698 176	212 665 442 445 113	242 682 282 301 48	182 380 179 186 36	71 120 53 86 15	1527 4129 3327 3288 763	4-6         years         255         305         555         247         127         54         127           7+ years         53         333         371         195         59         39         11           No work         3         22         6         10         28         37         17           Agricultural         398         1566         1826         1698         1999         1707         610	
No work Family & sel Others	1880	2049 604 194	1959 788 184	1244 532 108	1013 532 35	612 323 46	232 108 11	8989 3320 724	Agricultural         1367         1360         1362         13633         1363         1363	308
Juiced	741	1/1	204	100	55	70			No work 730 2603 2725 2495 2678 2288 772 Family & self 99 348 402 433 521 449 151 Others 11 169 299 251 210 141 74	240

[Table continues]

 Table A5 (cont)

	Age gr	oup						Total		Age gr	oup						Total
	15-19	20-24	25–29	30-34	35–39	40-44	45-49			15-19	20-24	25–29	30-34	35-39	40-44	45-49	
ASIA								<u> </u>	EUROPE	<u>_</u>					×		
TURKEY									PORTUGAL								
Major urban Other urban Rural	214 406 1263	574 1039 2310	607 966 2090	464 724 1950	418 734 1993	406 493 1781	131 153 560	2815 4515 11946	Major urban Other urban Rural	56 82 374	309 464 1920	471 822 2753	471 1038 2963	488 907 2979	593 828 3009	236 383 1357	2622 4524 15355
No school 1-3 years 4-6 years 7+ years	785 183 826 83	1622 446 1552 290	1627 476 1182 352	1722 429 699 264	1946 432 602 157	1726 354 451 134	546 122 136 39	9972 2443 5448 1318	No school 1-3 years 4-6 years 7+ years	15 45 328 124	48 232 1714 698	54 468 2466 1054	239 1189 2252 790	788 1268 1721 596	1236 1280 1405 509	618 585 558 214	2999 5067 10444 3986
No work Agricultural Skilled-unsk Sales & serv Prof. & cler	c. 626 7. 408	189 1038 1296 907 404	189 1033 1064 896 415	169 1061 889 714 261	132 1242 814 667 263	84 1147 636 523 256	27 344 201 173 87	831 6478 5526 4287 1821	No work Agricultural Skilled-unsk Sales & serv Prof. & cler	. 327 . 66	10 218 1442 362 656	4 305 2020 621 1094	8 497 2147 698 1117	7 743 1923 712 984	2 930 1898 667 925	3 491 814 276 390	40 3234 10571 3401 5226
No work Family & sel Others	1090 Lf 688 92	2211 1337 359	1823 1327 485	1491 1232 390	1370 1415 352	1099 1282 283	319 439 85	9404 7720 2047	No work Family & sel Others	207 f 84 221	754 495 1443	1060 765 2220	1211 973 2288	1120 1248 2005	1057 1463 1911	525 642 809	5934 5670 10897
YEMEN		,							AMERICAS								
Urban Rural	169 1795	286 2230	273 1844	168 1338	162 899	75 748	20 201	1154 9054	ECUADOR								
No school Some school	1920 43	2483 35	2103 10	1499 1	1058 4	824 0	221 0	10108 93	Major urban Other urban Rural	345 370 867	981 878 1762	942 797 1982	708 816 1800	593 581 1479	452 479 1155	222 194 427	424] 4119 9472
No work Agricultural Skilled-unsk Sales & serv Prof. & clea	k. 691 v. 372	29 794 874 460 138	25 814 590 473 81	8 609 450 273 62	11 481 254 217 68	6 424 144 156 42	0 120 33 42 13	108 3788 3035 1992 494	No school 1-3 years 4-6 years 7+ years	165 330 687 400	296 824 1372 1128	445 912 1367 997	527 959 1093 744	565 772 774 542	462 638 660 326	223 264 206 150	2682 4699 6159 4288
No work Family & sel Others	1040 1f 775 148	1345 977 195	1105 807 207	794 589 121	584 367 113	369 342 111	109 89 22	5345 3946 917	No work Agricultural Skilled-unsk Sales & serv Prof. & cler	. 644 . 207	7 1226 1351 466 570	8 1387 1243 466 616	1 1263 1051 515 493	3 1048 789 420 393	2 862 612 374 236	0 360 212 175 96	29 6727 5903 2624 2546
									No work Family & sel Others	1156 f 208 218	2323 622 675	2104 826 791	1842 858 623	1458 709 487	1138 615 333	425 308 110	10447 4146 3236

	Marita	l durat	ion (ye	ars)				Total	Ma	arital	durat	ion (ye	ars)				Tot
	0_4	5-9	10-14	15–19	20-24	25-29	30-34		(	0_4	59	10-14	15-19	20-24	25-29	30-34	
TICA			<u></u>						IVORY COAST								
BENIN									Major urban	1374	909	666	401	261	142	70	3
Major urban Other urban Rural	532 834 2886	451 640 2587	374 561 2174	281 448 1664	184 254 1334	92 113 590	4 30 109	1917 2880 11342		1418 3399	1023 2833	690 2291	499 2182	355 1608	184 1055	54 320	1 1 <u>3</u>
No school 1—3 years 4—6 years 7+ years	3477 153 322 88	3107 120 240 165	2733 70 162 85	2132 40 108 50	1622 31 53 10	749 12 15 10	142 0 0	13961 424 899 408	No school 1-3 years 4-6 years 7+ years	4573 349 827 435	3758 214 527 267	3274 83 168 123	2990 38 26 27	2176 31 10 8	1349 9 13 10	430 6 4 4	11
No work Agricultural Skilled-unsk Sales & serv	74 2443 - 931	19 2318 612 349	28 2033 493	27 1606 333 137	19 1291 187 105	10 567 97 52	0 117 9 13	176 1037 <sup>1</sup> 266 <sup>-</sup> 117 <sup>1</sup>	No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	2024 918	32 2109 1365 746 513	6 1992 873 506 271	0 2022 618 281 158	0 1580 350 215 79	0 1078 158 93 48	0 338 40 38 27	1
Prof. & cler No work Family & sel Others	1068	285 647 2866 66	569 2415	205 459 1829 25	117 292 1418 9	52 102 663 4	3 18 124 0	132 315 1231 22	No work Family & self Others	2247 3560 384	1070 3375 321	546 2928 174	301 2710 70	176 2011 37	-	31 400 13	1
									NIGERIA								
CAMEROON Major urban Other urban Rural	1420 552 5310	1136 435 4714	425	598 378 3587	413 392 2947	197 233 1895	99 117 937	461 253 2403		965 1553 5410	921 1551 5972	639 1338 6181	511 1108 4487		147 306 1559	51 90 564	2
No school 1—3 years 4—6 years 7+ years	2978 648 3031 1113	3563 628 1654 524	326 799	3624 243 445 90	150		1055 30 11 1	217 614	No school 1-3 years 4-6 years 7+ years	4306 1355 1573 690	5384 1427 1165 444	5683 1420 862 249	4644 787 486 163	511 133	257 50	101 23	2
No work Agricultura Skilled-unsk Sales & serv Prof. & clev	k. 1991 v. 933	109 3117 1586 676 834	3483 5 956 5 560	785 378	2417 583 322	1624 316 170	96	1734 635 313	No work Agricultural Skilled-unsk. Sales & serv. Prof. & cler.	1666 1240	67 4133 1341 1447 1264	97 4679 1035 1326 875	92 3398 772 1067 628	2389 389 670	1313 173 270	445 75 84	1
No work Family & se Others	2362 1f 4308 431		3 3832		2661	1790		2066	No work Family & self Others	2583 4103 1060	2136 5231 1008	5450	1233 4172 734	2810	1464	522	2

Table A6 Duration-specific marital years of exposure by current residence, respondent's education, husband's occupation and respondent's work status

[Table continues]

 Table A6 (cont)

	Marita	L durat	ion (ye	ars)				Total
	0-4	5-9	10-14	15-19	2024	25-29	30-34	
EGYPT								
Major urban Other urban Rural	2025 1787 5241	1756 1409 4488	1708 1179 3843	1401 1033 3571	1166 931 2941	852 631 1970	268 239 687	9176 7208 22740
No school 1-3 years 4-6 years 7+ years	4955 802 1959 1335	4602 707 1597 747	4198 721 1260 545	3988 760 945 311	3380 757 734 167	2089 626 634 103	798 188 191 18	24011 4561 7320 3225
No work Agricultural Skilled-unsk Sales & serv Prof. & cler	2805 1277	0 2857 2121 1344 1317	0 2533 1935 1233 1012	0 2494 1644 1201 665	0 2079 1358 1138 456	0 1371 952 801 329	0 481 291 316 106	0 15048 11106 7310 5620
No work Family & sel Others	7276 f 746 1027	6139 738 775	5404 787 533	4890 734 381	655	2885 399 169	964 158 73	31656 <sup>4</sup> 216 3244
MAURITANIA								
Major urban Other urban Rural	814 950 1776	977 851 1526	717 833 1309	432 703 1256	510	270 400 727	127 159 340	3665 4406 7885
No school Some school	2695 846	2577 731	2291 537	1981 437		1189 224	554 84	12804 3156
No work Agricultura Skilled—unsk		420 812 959	849	799	672	552	86 287 106	2144 4790 3892
Sales & ser Prof. & clei	r. 1127	941 206	762	555	5 392	282		4174 962
No work Family & se Others	2628 1f 640 286	2415 672 226	688	702	2 510	467		11093 3894 973

æ

	Marita	l durat	ion (ye	ars)				Total		Marita	l durat	ion (ye	ars)				Tota:
	0-4	5-9	10-14	15-19	20-24	25-29	30-34			0_4	5-9	10-14	15–19	20-24	25-29	30-34	
A		<u></u>						<u> </u>	EUROPE								
TURKEY									PORTUGAL								
Major urban Other urban Rural	722 1228 2448	612 1018 2304	458 743 1922	401 693 2105	417 622 1917	246 330 1373	56 58 272	2912 4691 12341	Major urban Other urban Rural	655 985 3567	559 1081 3431	546 1065 3056	632 877 3005	358 512 2064	108 192 698	11 15 46	28 47 158
o school -3 years -6 years + years	1532 421 1924 499	1662 511 1413 340	1578 491 821 204	1986 422 653 123	1887 383 530 139	1386 263 230 58	293 55 34 2	10324 2547 5605 1365	No school 1-3 years 4-6 years 7+ years	130 508 2988 1581	259 975 2761 1073	534 1248 2201 682	983 1302 1670 559	890 888 912 244	366 329 257 46	38 14 17 3	32 52 108 41
ko work Agricultural Skilled-unsk Sales & serv Srof. & cler	• 1468 • 975	222 1054 1190 962 424	117 1047 864 765 282	111 1171 912 706 268	86 1219 750 612 248	49 911 431 361 165	8 192 77 53 43	860 6704 5691 4434 1894	No work Agricultura Skilled-uns Sales & ser Prof. & cle	k. 2607 v. 725	3 462 2549 750 1293	6 599 2130 798 1122	7 864 1980 715 943	4 693 1268 392 567	0 280 424 148 143	0 20 38 6 8	33 109 35 54
ko work Tamily & sel Others	2618 £ 1341 412	2060 1399 462	1437 1294 363	1436 1341 408	1219 1381 339	706 1020 210	136 217 31	9612 7992 2226	No work Family & se Others	1441 lf 903 2863	1350 1095 2625	1194 1165 2307	1155 1304 2055	677 1049 1208	241 356 402	12 21 39	60 58 114
YEMEN									AMERICAS								
Urban Rural	295 2803	244 2018	256 1819	276 1420	127 901	64 663	28 343	1290 9968	ECUADOR								
ko school Komme school	3011 86	2240 22	2074 3	1686 1	1026 3	727 0	371 0	11135 116	Major urban Other urban Rural		1083 975 2187	765 815 1913	613 681 1596	498	250 310 696	55 77 166	47 49 102
o work gricultural killed-unsk ales & serv rof. & cler	• 1050 • 555	17 737 751 442 130	16 813 608 440 73	26 650 456 359 96	7 440 251 221 61	2 355 154 134 54		127 4113 3329 2242 572	No school 1—3 years 4—6 years 7+ years	405 994 1952 1794	502 1041 1553 1149	515 986 1238 754	528 916 940 505	734 676	397 381	115 99 69 15	29 5 61 40
No work Family & sel Others	1672 1178 248	1173 919 167		891 645 163	563 343 126	293		5854 4362 1043	No work Agricultura Skilled-uns Sales & ser Prof. & cle	ik. 1852 v. 755	6 1500 1551 511 677	8 1382 1171 469 464	1 1141 881 507 360	937 700 387	612 340 202	140 88	73 65 28 21
									No work Family & se Others	3179 1f 858 1108	2421 926 898	1875 917 702	809	653	468		110 47 38

. المحمد المحمد

\_

\_\_\_\_\_

\_\_\_