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BASIC DOCUMENTATION

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INTERNATIONAL STATISTICAL INSTITUTE
Permanent Office · Director: E. Lunenberg
428 Prinses Beatrixlaan
Voorburg, The Hague
Netherlands

WORLD FERTILITY SURVEY
Project Director:
Sir Maurice Kendall, Sc. D., F.B.A.
35–37 Grosvenor Gardens
London SW1W OBS, U.K.

The World Fertility Survey 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 cooperation 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.

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Prepared by:

WFS Central Staff
International Statistical Institute
35-37 Grosvenor Gardens
London SW1W OBS
United Kingdom

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PART I FIRST COUNTRY REPORT

GENERAL CONSIDERATIONS

As a general rule, WFS country reports will be issued in two stages:

1) A first report describing the field work and presenting basic results for major demographic and social strata, with a minimum of multivariate analysis or complex data evaluation and adjustment, and

2) a second report (or series of reports) in which the basic measures will be evaluated in more detail and multivariate analysis will be used for appropriate problems arising out of the less complex basic tabulations.

The present document is a description of the first general report to be prepared by each country.

While some initial evaluation of data and reference to other sources of data should be part of the first report, a thorough analysis is likely to be a lengthy process which may delay release of the basic data for too long. It is preferable to release the tabulations after preliminary assessment with a frank statement that their quality will be assessed in further detail and adjustments made where necessary in later reports. It is desirable to practice open publication of basic materials. Too much adjustment of data prior to publication may frustrate both the objective evaluation and the use of the data in different analytical modes by experts other than the small group in charge of each survey.

The amount of emphasis given to each topic will depend on the availability of other data sources and on the level of the phenomena in each country. For example, countries which have extensive fertility data from other sources may not wish to present much detail on this topic. For countries in which there is very little use of contraception, the amount of detail on specific methods that will be useful in cross-tabulation may be limited.

The suggested WFS outline for country reports can deal only with the core questionnaires. However, most countries will want to inciude material from the modules or from other questions added to the core.

After initial chapters on the basic objectives, background and methodology of the country survey, a detailed substantive chapter should present for each major area:

1) a description of the basic variables and concepts, with a preliminary evaluation of their quality;

2) selected rates, means, and frequency distributions of dependent variables within major demographic subgroups; and

3) selected rates, means, and frequency distributions for major social strata within very broad demographic subgroups. So far as possible, categories and variables should be consistent throughout.

Measurements of reproductive behaviour should first of all be connected to four primary demographic determinants: age, marital status, marriage duration, and parity. As a second step, when other social and economic characteristics are related to reproductive measures, one or more of the primary demographic characteristics should almost always be controlled by sub-classification or in some other way. For example, in many developing countries both educational levels and the reproductive measures vary greatly with the wife's age. Therefore, the relationship between education and reproductive measures should be analyzed separately for different age groups. Since this is likely to result in small sub-sample bases, it may be necessary for this purpose to use ten-year, instead of the usual five-year, age groups.

Marital and familial institutions vary so much around the world that it is difficult to devise universally valid analytical categories. The term "ever-married women" refers to those who have ever lived in a more or less stable sexual union or marriage (excluding brief "pre-marital" encounters). Marriage duration refers to the time since the first marriage or union. For this first country report it is not recommended that adjustments be made for periods between unions or marriages.

Both age (or birth cohort) and duration of marriage (or marriage cohort) are primary variables in demographic analysis. Marriage duration has the advantage of being closely linked to the stages of reproduction. Also, the period of reproductive risk is specified better by marriage duration than by age. A good cross-sectional sample of ever-married women will represent almost all members of recent marriage cohorts. However, samples of recent (young) birth cohorts do not necessarily represent those who marry at older ages. For example, the average desired family size for a young birth cohort may change after five years, partly by the addition of late-marrying members who are likely to want, and to have, fewer than the average number of children.

Nevertheless, age (or birth cohort) should be a primary demographic variable in the analysis. Age is the primary basis of demographic classification in vital statistics, census and survey work not only with respect to fertility but also in relation to education, labour force status, and other social and economic characteristics. Population projections and policy analyses almost always use age grouping and rarely use duration of marriage. Age-specific, rather than duration-specific, fertility measures are generally used in most models for estimating, correcting or analyzing fertility patterns, e.g., the Brass models, the Princeton model-fertility tables or stable population models. Furthermore, analysis of the reproductive status of married women 20-24 years old, for example, is a description of an important socially-recognized demographic fact even if, five years later, the birth cohort were to include a large number of later-marrying women.

Parity (number of children ever born) is often a significant determinant of such important variables as how many additional children are wanted, or whether contraception is used. However, the number of living children, as distinguished from the number ever born, is of

special interest where there is significant child mortality. The number of living children is more relevant than the number of children ever born as a determinant of how many additional children are wanted, and therefore of the practice of birth control. Furthermore, the number of living children is relevant for problems of housing, education, dependancy, etc.

Differentials in fertility or other aspects of reproductive behaviour can be derived from the WFS Core Questionnaires for a number of variables defining social or geographic strata. Some of these should be given priority in the first country report because they are widely used in fertility research and because they refer to strata generally considered so important that they are likely to be standard in census and other statistical work. On the other hand some of the variables, while important, are likely to require some separate preliminary analysis to establish pertinent categories. In the list below, an asterisk (*) indicates the variables which all countries are asked to include on a priority basis in tabulations for the country report. The addition of the other listed variables in the first report is welcome, if suitable categories can be developed at an early stage.

Variables for defining social and geographic strata:

1)* Wife's education.

2)* Type of place of residence: a rural-urban classification.

3)* Wife's labor force status and history of work.

4)* Husband's occupational status.

5)* Any of the following pertinent in the country:

   a. Region of residence
   b. Religion
   c. Ethnic group

6) Husband's education.

7) Residence background for wife and husband: type of place in which raised, by current type of place of residence (the main objective is to identify those with a rural background who are living in an urban setting).

8) Ownership of modern consumer durables (the number owned and, perhaps, a scale based on combinations of objects owned).

The amount of detail in cross tabulation that is possible or useful will depend on the sample size bases in subcategories as well as on the gross relationship between variables as indicated by initial tabulations. These facts will set limits on the extent to which suggested tabulations should be omitted from the published report, or should be simplified by combining categories.

OUTLINE OF A FIRST COUNTRY REPORT

The report is to consist of three chapters of text, interspersed with some tabular material. These will be followed by five major groups of tables and possible appendices. Participating countries will have considerable flexibility in their manner of organizing material within the three chapters. The following brief outline indicates topics to be included, and just one possible organizing scheme. The cross-tabulations which constitute the bulk of the present document, however, are relatively fixed in content and organization, to facilitate careful international comparisons.

WFS expects that some countries will choose to prepare later a less technical version of Chapters 1-3 for distribution to a broader readership. Such a document, distributed without the detailed cross-tabulations, would presumably take up policy implications which do not have an important place in the following outline. Other countries might choose to distribute Chapters 1-3 by themselves with no other changes.

1 THE BACKGROUND OF THE STUDY

1.1 STATEMENT OF THE MAIN OBJECTIVES

An indication of special objectives or points of emphasis in the country, as well as a statement of general WFS objectives.

1.2 ORGANIZATIONS RESPONSIBLE FOR CONDUCTING, SPONSORING AND FINANCING THE STUDY

1.3 SOCIAL AND DEMOGRAPHIC BACKGROUND OF THE COUNTRY'S POPULATION

1) A brief overview of what is known about recent trends in population size, growth and vital rates.

2) Distribution of the population in major social strata, especially those used in the survey. This should include distribution of the household and individual samples in major social strata, within age controls. Here, and elsewhere in the report, it may be necessary to discuss any major differences between the data from the WFS survey and other sources of data.

3) A brief description of such pertinent social facts as customary marriage, divorce and family systems, governmental and private organizations for family planning services (if any) and pertinent population policy (if any). This should also include reference to both legal constraints and social taboos.

2 METHODOLOGY OF THE STUDY

2.1 THE QUESTIONNAIRES

A list of the instruments used, together with an indication of main additions or modifications to WFS core. The actual questionnaires should be printed in an appendix.

2.2 THE SAMPLE

1) THE SAMPLE DESIGN

An *outline* of the sampling design which describes stages of the sample, overall probabilities of selection (in particular whether or not the sample is selfweighting), sample size, stratification, sampling frame, method of selecting area units, households and individuals within households, eligibility criteria for interview. Summary of response rates and other aspects of sample implementation, and sampling for supplementary operations (e.g., post-enumeration or husbands' survey) if any. It is a good practice not to make this section too long: more detailed description of the sample is best included in an appendix to the report.

2) RESPONSE RATES

An indication of the frequency and kinds of non-response. If the household schedule is used, response rates will be presented separately for the household interview and the individual fertility interview.

3) ILLUSTRATIVE TABLES OF SAMPLING ERROR*

An explanation of how to use the tables of sampling error which will appear in an appendix. The tables show the estimated error for means, percentages, and differences between means and percentages for subsamples with a range of sizes. These should be shown separately for all, or a selection, of the major variables in the report. It may also be useful to show how some of the computed errors differ from those that would be reported if data came from an unrestricted random sample in order to illustrate the design effect.

2.3 THE ORGANIZATION AND EXECUTION OF THE STUDY

1) More detailed description of the organization which conducted the study.

2) Staffing, recruitment and training.

3) Supervision process.

4) Time schedule: dates of major steps, length of interviews, etc.

2.4 QUALITY CONTROL AND THE EVALUATION OF DATA

1) Procedures used for quality control in field work, coding and data processing.

**The WFS has prepared a package programme, called CLUSTERS, for computing sampling errors. Since doing such computations on a large scale for many variables is a relatively new procedure and may overburden country resources while other aspects of the analysis are underway, WFS is ready to do these computations and to prepare the tables of sampling errors.*

2) Post Enumeration Survey results, if available.

3) Checks through internal consistency analysis.

4) Checks by comparing the distribution of sample data with other sources of data.

3 SUBSTANTIVE FINDINGS

The sections of this chapter correspond to the five major groups of tables. It will not be necessary to comment on every table, but important findings should be verbally stated and inter-related. If possible, the findings should be related to expectations based on earlier research in the country or in other countries. The amount of analysis possible will depend on the availability of time and other resources.

3.1 NUPTIALITY AND EXPOSURE TO CHILD-BEARING

Analysis of the proportion of women having various marital statuses and histories, and various levels of exposure to the risk of conception, according to demographic and other background characteristics.

3.2 FERTILITY

Discussion of the levels of cumulative and current fertility, with some consideration of timing; how these measurements vary according to demographic and other background characteristics.

3.3 PREFERENCES FOR NUMBER AND SEX OF CHILDREN

Turning from behaviour to attitudes, a discussion of desired family size as variously measured, and of any preferences for boys or for girls; how these attitudes vary with demographic and behavioural characteristics.

3.4 KNOWLEDGE AND USE OF CONTRACEPTION

Analysis of the knowledge and use of practices which reduce the probability of conceiving, including breast-feeding and sterilization. Past and current use are described. Evaluation of differences in knowledge and use as related to demographic and background variables.

3.5 THE USE OF CONTRACEPTION AS RELATED TO FERTILITY PREFERENCES

The dependent variables of 3.4 are now related to whether the woman wants more children, etc., in order to determine consistency between attitudes and behaviour and motivation to control fertility.

PART II LIST OF VARIABLES

The following list includes all variables which appear explicitly in the tabulation plan, plus a small number of additional "background" variables which some countries might wish to incorporate into their report. It is provided for two purposes: first, it gives a quick indication of the content of the questionnaire, and second, it defines the categories of constructed variables. It certainly does not include all variables, particularly measures of fertility, which are available from the questionnaire and can be used in later analyses.

Some variables, such as Age, appear in the tables in different groupings. Some other variables, such as Level of Education, will be categorized in different ways in different countries, depending both on the observed frequency distributions and on local definitions. Therefore, except for the constructed variables, the categorization is omitted from this list. For more precise definitions, authors of Country Report No. 1 should refer to the Guidelines for Data Processing.

It is not intended that this list should itself appear in the Country Report, though precise definitions and derivations of all constructed variables should be given in an appendix to the Report.

SECTION 1: RESPONDENT'S BACKGROUND

REGION OF RESIDENCE

TYPE OF PLACE OF RESIDENCE
(an urban-rural classification)

CHILDHOOD TYPE OF PLACE OF RESIDENCE

YEAR OF BIRTH

AGE

LEVEL OF EDUCATION

LITERACY

RELIGION, ETHNIC GROUP, etc.

Some countries may also choose to attribute to the woman some characteristics of the household, such as a) a scale based on household amenities and the presence of modern objects, and b) household or family type.

SECTION 2: FERTILITY

NUMBER OF CHILDREN EVER BORN

NUMBER OF LIVING CHILDREN

NUMBER OF LIVING SONS

NUMBER OF LIVING DAUGHTERS

NUMBER OF CHILDREN DECEASED

INTERVAL FROM FIRST MARRIAGE TO FIRST BIRTH

NUMBER OF LIVE BIRTHS WITHIN FIVE YEARS OF FIRST MARRIAGE

Section 2: Fertility (Cont'd)

NUMBER OF LIVE BIRTHS IN PAST FIVE YEARS

CURRENTLY PREGNANT?

LENGTH OF CLOSED BIRTH INTERVAL

LENGTH OF OPEN BIRTH INTERVAL

The last two intervals in the list can be defined by the tables below, under these definitions of critical points in time;

A: expected birthdate of next child for woman currently pregnant

B: date of interview

C: date of last live birth

D: date of next-to-last live birth

E: date of first marriage

Note that we are constructing BIRTH intervals, not PREGNANCY intervals or intervals TO CONCEPTION. The questions in Section 5 regarding contraceptive use and fertility planning refer to the intervals since the most recent births, rather than the most recent pregnancies. For tabulation purposes, our interest thus lies in the lengths of these intervals, rather than the lengths of intervals which may have terminated in a manner other than a live birth. For other uses, one would often prefer pregnancy intervals to birth intervals.

LENGTH OF THE CLOSED INTERVAL

		Currently pregnant?	
		YES	NO or D.K.
Number of children ever born	None	A - E	*
	Exactly one	A - C	C - E
	Two or more	A - C	C - D

* *Indicates the term is undefined*

The closed interval is an interval of exposure which has resulted in a birth. Our operationalizations are approximate in the sense that they include some periods of non-exposure as when the woman is pregnant. In some cases the definition will give an interval of zero length, because the most recent pregnancy resulted in a multiple birth. In these cases the closed interval should be understood to be the most recent non-zero birth interval.

LENGTH OF THE OPEN INTERVAL

Number of children ever born	None	B - E
	One or more	B - C

The open interval is an interval of exposure which has not resulted in a live birth. It is only defined for women who are not currently pregnant.

This section includes questions on breast-feeding as well.

NUMBER OF MONTHS BREAST-FEEDING LAST CHILD

CURRENTLY BREAST-FEEDING?

NUMBER OF MONTHS BREAST-FEEDING NEXT-TO-LAST CHILD

NUMBER OF MONTHS BREAST-FEEDING IN CLOSED INTERVAL = { NUMBER OF MONTHS BREAST-FEEDING LAST CHILD..... If a woman is currently pregnant; NUMBER OF MONTHS BREAST-FEEDING NEXT-TO-LAST CHILD..... If the woman is not currently pregnant

SECTION 3: CONTRACEPTIVE KNOWLEDGE AND USE

This brief but important section indicates knowledge and use of eight specific methods plus an "other" category, and male or female sterilization. The "other" category may be sub-divided into modern or traditional methods.

DO YOU KNOW OF METHOD i?

(i = 1, 2,.....male and sterilization included)

1. Yes - no probing required
2. Yes - probing required
3. No - after probing

DO YOU KNOW ANY EFFICIENT METHOD?

(A constructed variable; methods included as efficient are Pill, IUD, other female scientific, Condom and Sterilization)

1. Know of at least one efficient method
2. Know of at least one inefficient method but no efficient ones
3. Know no method at all

HAVE YOU USED METHOD i?	(i = 1, 2,....., sterilization included) 1. Yes 2. No
HAVE YOU EVER USED ANY EFFICIENT METHOD?	(A constructed variable; methods include Pill, IUD, other female scientific, Condom & Sterilization) 1. Have used at least one efficient method 2. Have used at least one inefficient method but no efficient ones 3. Have never used any method at all
HAVE YOU EVER USED ANY METHOD?	1. Yes 2. No

Sterilization is treated as a CURRENT METHOD in the questionnaire and therefore appears in Section 5. However, sterilization for contraceptive purposes should be included in the tabulations on ever-use and should be included in the above variables.

SECTION 4: MARRIAGE HISTORY

CURRENT MARITAL STATUS

NUMBER OF TIMES MARRIED

AGE AT FIRST MARRIAGE

YEARS SINCE FIRST MARRIAGE

TOTAL MARITAL DURATION
(preceding variable less intervals of widowhood, divorce, or separation)

TYPE OF DISSOLUTION OF FIRST MARRIAGE
(Applies only if first marriage has dissolved)

EXPOSURE STATUS

This variable appears explicitly in a small number of tables, but its principal use is to define subpopulations which comprise the base for many tables in Parts 3, 4 and 5 of the Tabulation Plan.

The Core Questionnaire contains several filters, so that questions on fertility intentions and contraceptive use are asked only of certain subsets of women. For example, questions on current contraceptive use are not asked of women who are currently pregnant, and questions on fertility intentions are not asked of women who believe themselves to be sterile. The main filters are based on these three characteristics: whether the woman is currently pregnant, whether she is currently

married, and whether she believes herself able to have more children. All these relate to the woman's "risk" of conceiving in the next month. If she is currently pregnant, for example, then she has no risk at all. It will be meaningless to ask such a woman about her current contraceptive use, although questions dealing with intentions for future births will be appropriate. The variable Exposure Status classifies women into categories of risk on the basis of these characteristics. It distinguishes between women who have been sterilized (or whose husbands have been sterilized) for contraceptive purposes, and those who are sterile from other causes. On the one hand, women who have been sterilized for contraceptive purposes may be regarded simply as sterile, in which case they would not be fecund nor exposed and would be totally excluded from tabulations on contraceptive use and fertility intentions. On the other hand, these women may be regarded as current users of a contraceptive method which is perfectly efficient although usually irreversible. WFS takes the view that intentional sterilization is an alternative to other efficient methods, and that these women, who have taken the strongest possible action to control their fertility, should be included in the tabulations just mentioned. If they are not, then current levels of use will be underestimated and future fertility intentions will be overestimated. Therefore, these women are classified as current users who want no more children.

The categories are defined as follows:

Category No	Description
1	A. Currently pregnant
	B. Not currently pregnant
2	B.1 Widowed, divorced, or separated
	B.2 Married and living with husband
3	B.2.a Husband or wife sterilized for contraceptive purposes
4	B.2.b Other self-reported fecundity impairment
5	B.2.c Remainder - women reported as fecund.

Columns based on this variable would be labelled approximately as follows:

EXPOSURE STATUS

Currently Pregnant	Not Currently Pregnant			
	Widowed, Divorced or Separated	Married and Living with Husband		
		Couple Sterilized Contraceptively	Other Impairment	Reported Fecund

In several table titles in Parts 3, 4 and 5 of the Tabulation Plan, the words "exposed" or "fecund" will be found in quotation marks. The quotation marks are employed because the words are used in a sense which is not conventional but which follows from the second part of the preceding paragraph. By the usual convention, "exposed" means "currently exposed to the risk of conception", and consists of women in category 5 of the variable Exposure Status. In the Tabulation Plan, "exposed" will be enlarged to consist of women in categories 3 or 5 of Exposure Status.

Conventionally, "fecund" means "able to have (more) children". The term differs from the usual sense of "exposed" in that a) a woman may be fecund without being sexually active and b) a pregnant woman is presumed to be fecund but she is not exposed. Thus, currently married fecund women are found in categories 1 or 5 of Exposure Status. For reasons already given, the concept will be enlarged, and currently married "fecund" women will be taken to be women in categories 1, 3 or 5 of Exposure Status.

In the tabulations on fertility intentions, women who have been sterilized for contraceptive purposes will automatically be coded as wanting no more children. Some women may in fact regret having been sterilized, but it is believed that the number of such women will be negligible.

Finally, it should be noted that it will generally be possible to remove the women in category 3 of Exposure Status from tabulations of "exposed" and "fecund" women. Users can determine the number of such women from those related tables which give the distribution of Exposure Status or of specific contraceptive methods currently used. In this way the conventional definitions can be applied if desired.

SECTION 5: FERTILITY PLANNING

See Section 2 for the definitions of closed and open intervals.

5.1 PREFERENCES FOR CHILDREN

DO YOU WANT A FUTURE BIRTH?
WOULD YOU PREFER A BOY OR A GIRL?
ADDITIONAL NUMBER OF CHILDREN WANTED
TOTAL NUMBER OF CHILDREN DESIRED

5.2 CONTRACEPTION IN OPEN INTERVAL

(Interval defined only for women not currently pregnant; sterilization included as a contraceptive method.)

ARE YOU CURRENTLY USING A METHOD?
WHAT METHOD ARE YOU CURRENTLY USING?
ARE YOU CURRENTLY USING AN EFFICIENT METHOD?
DID YOU USE A METHOD EARLIER IN THE OPEN INTERVAL?
WHAT WAS THE LAST METHOD YOU USED IN THE OPEN INTERVAL?
DID YOU USE AN EFFICIENT METHOD IN THE OPEN INTERVAL? (Includes current use)

5.3 FUTURE USE OF CONTRACEPTION (If no current or past use)

DO YOU INTEND TO USE A METHOD IN THE FUTURE?

5.4 STERILIZATION

STERILIZED FOR CONTRACEPTIVE PURPOSES?
HUSBAND STERILIZED?

5.5 SUMMARY VARIABLE

This section (and part of Section 3) can be summarized by the following variable:

PATTERN OF CONTRACEPTIVE USE

Category No.	Description
	A. Never used
	A.1 Currently married and fecund
1	A.1.a Intends future use
2	A.1.b Does not intend future use, or undecided
3	A.2 Not married or not fecund
	B. Past user but not current user
4	B.1 Used in open interval
5	B.2 Used earlier in some closed interval
	C. Current user
6	C.1 Wife or husband sterilized for contraceptive purposes
7	C.2 Other methods

Category 4 is limited, by the definition of the open interval, to non-pregnant women. Category 5 applies to any woman, regardless of pregnancy status, who has used some method in the past, but not at the present and not during the open interval. Categories 4, 5 and 6 are the only categories which do not include a control (explicit or implicit) on current marital status. Columns based on the variable would be labelled as shown in Appendix I, with the omission of the column headed "In Last Closed Interval".

SECTION 6: WOMAN'S WORK HISTORY

For some purposes the variables in this section can be grouped with those in Section 1 and can be referred to as Background Variables in the sense that they are independent or explanatory variables. They are

listed below in the approximate order of their relevance to any particular woman's life history.

OCCUPATION BEFORE FIRST MARRIAGE
WORK STATUS BEFORE FIRST MARRIAGE
MOST RECENT WORK STATUS

The categories of WORK STATUS BEFORE MARRIAGE are as follows:

Category No.	Description
	A. Employed by family member
1	A.1 Paid in cash
2	A.2 Paid in kind
3	A.3 Unpaid
	B. Employed by someone else
4	B.1 Paid in cash
5	B.2 Paid in kind
6	B.3 Unpaid
7	C. Self-employed
8	D. Did not work before marriage

The variable MOST RECENT WORK STATUS refers to work since the date of first marriage. Its categories are slightly different from the above because of slight differences in the component questions.

Category No.	Description
1	A. Worked on a family farm
	B. Employed by a family member (but not on a family farm)
2	B.1 Paid in cash
3	B.2 Paid in kind
4	B.3 Unpaid
	C. Employed by someone else
5	C.1 Paid in cash
6	C.2 Paid in kind
7	C.3 Unpaid
8	D. Self-employed (but not on a family farm)
9	E. Did not work after marriage

Both WORK STATUS variables refer to the type of employer and form of payment, and indicate the woman's degree of economic independence.

In many countries the frequencies in some categories will be quite small. If the "Unpaid" categories are small they may be combined with "Paid in kind". If both are small, then the distinction as to form of payment may be dropped altogether.

A summary of the timing of the woman's work history is referred to as PATTERN OF WORK and is defined as follows:

Category No.	Description
	A. Currently working
1	A.1 Also worked before marriage
2	A.2 Did not work before marriage
	B. Worked since marriage but not currently
3	B.1 Also worked before marriage
4	B.2 Did not work before marriage
5	C. Worked before marriage but not after
6	D. Never worked

When this variable is used in a tabulation, it may be desirable to include total, or aggregate categories, for all women in part A of the outline and for all women in part B of the outline.

SECTION 7: CURRENT (LAST) HUSBAND'S BACKGROUND

The variables in this section are also explanatory in nature.

HUSBAND'S CHILDHOOD TYPE OF PLACE OF RESIDENCE
HUSBAND'S LEVEL OF EDUCATION
HUSBAND'S LITERACY
HUSBAND'S MOST RECENT OCCUPATION
HUSBAND'S WORK STATUS

The categories for HUSBAND'S WORK STATUS are as follows. They are largely parallel to those for wife's WORK STATUS BEFORE MARRIAGE, but refer to the husband's most recent work.

Category No.	Description
	A. Employed by family member
1	A.1 Paid in cash
2	A.2 Paid in kind
3	A.3 Unpaid
	B. Employed by someone else
4	B.1 Paid in cash
5	B.2 Paid in kind
6	B.3 Unpaid
	C. Self-employed
7	C.1 No employees
8	C.2 1-4 employees
9	C.3 5 or more employees
10	D. Never worked

PART III DESCRIPTION OF THE TABULATION PLAN

GENERAL COMMENTS

The tables proposed here are to be derived from the Core Questionnaires. It is recommended that each country produce *all* these tables using, as far as possible, the indicated categorizations of variables. It is recognized that there may not be sufficient numbers of observations in all the cells of all the tables, and that some of the classifications could be too detailed for certain countries. These are problems to be considered later, at the time of preparing the country report, and naturally some amount of regrouping and amalgamation will have to be carried out. *In published form, the first report is not expected to contain all these tables exactly as they appear herein.* The choice of tables, and their form for inclusion in the report, depends on the specific country situation.

Some tables in this report will have a modified base population in countries which include all women rather than just ever-married women. The general rule is to follow the questionnaire; in most tables, the base population consists of all women who received codes other than "Not Applicable" for each variable in the table. When a format is repeated on a second base population, it is generally the one of major relevance to family planning policies - for example, those women currently in a union. For detailed recommendations please see Appendix IV.

CONVENTIONS IN THE SPECIFICATION OF THE TABLES

The pro-forma tables are presented in sets with code numbers in the upper left corner of the page. The first digit indicates the major group or substantive area under which the table is classified. The second digit identifies the dependent variable of the table. A dependent variable may be operationalized in more than one way. For example, age at first marriage may appear as a frequency distribution or as a *mean* age at marriage within a sub-population. The third digit in the code indicates the number of the table appearing in the sub-group. Three-way and four-way tables involve panels or layers. For such tables the labels of the panels are provided. For each table an indication is also given of the number of interior cells, i.e., the number of cells excluding the margins and also excluding any cells which are vacant *a priori*. This number can be used to estimate the average frequency in the cells of the tables, which should not be allowed to become too small. Sometimes a single format is used for a number of tables. Each "Title" statement then indicates a distinct table or, if the variable name "Background Variable" is employed, a *set* of tables, as this term is replaced successively by variables listed as Background Variables. When two or more tables are indicated for the same table number, they are to be distinguished by the letters "a", "b", "c", etc., following the number.

In most tables the cell entry is a percentage based on the row total. For these tables the columns define the dependent variable; rows and panels define the so-called independent variables. The analyst wishes to compare the distributions of the dependent variable within levels of the independent variable(s), and does this by comparing the percentage distributions in the rows. There is no reason for the analyst to use the actual cell frequencies; of course, since the total row frequency is to be provided, cell frequencies can be estimated from the row percentages. Thus, we do not advise publication of cell frequencies.

In many countries there will be the complication that differential sampling proportions or weights have been used. As a result, a *weighted* frequency will not usually be an integer and will not correspond closely to an *unweighted* frequency. The weighted row totals should be given in the right hand margin of the table, along with the total percentages in the row (100% or thereabouts, depending on the rounding error). We do not actually indicate on each of the *pro-forma* tables that these totals are to be shown, but the user should understand this to be the convention. Unweighted frequency distributions will be indicated in connection with the description of sampling error, wherein their only possible interest lies. See Appendix V for further discussion on weighting of sample and presentation of tabulation for these.

When the dependent variable is measured at the interval level (e.g., Number of Children Ever Born), there should be an additional column on the right margin which gives the mean value of the variable within each row. These means are to be computed using *full frequency distributions,* prior to any grouping or truncation. If possible, standard deviations should also be prepared in these instances, particularly for those tables in which they are explicitly indicated.

Many persons will be more accustomed to having the dependent variable in the "stub" of the table, i.e., to having rows rather than columns correspond to categories of the dependent variable. We believe that the convention chosen in this document will facilitate the printing and presentation. However, so long as an effort is made to follow consistently one style or the other, this matter is entirely discretionary for the participating countries.

Another convention concerns the treatment of Background Variables. We consistently present these as column or row variables and never as panel variables. Some countries, however, will regard Region or Type of Place of Residence or Ethnic Group as so fundamental that they should be the basis of the most remote classification. That is, if a table is large enough to require panels and involves one of these fundamental variables, then this variable should define the panels. WFS is open to such a style of presentation so long as consistency is maintained. A few countries will also wish to repeat *all* core tabulations within categories of one of the above variables. The resulting proliferation of tables and diminution of case bases is undesirable, but WFS recognizes the need to do this in a highly heterogeneous society.

In some tables the cell entry is a rate, mean, proportion, etc., calculated for the dependent variable *within* combinations of rows, columns and panels which define the independent variables. Again, in the case of a mean value, computations should be based on the full frequency distribution. It should be possible for a reader of the report to retrieve the weighted denominator on which the rate, etc., has been

based. The denominator should be given alongside the rate, etc., preferably in parentheses. This statement does not necessarily apply to the abridged tables given in the text. A table which includes both a rate and a denominator in each cell is difficult to read, and the author may choose to omit the denominators from the text tables.

In some tables, such as Age by Number of Children Ever Born, many cells will have negligible frequencies. In some others, we can identify in advance a number of cells which are logically constrained to have zero frequencies. We do not always explicitly indicate this constraint in the presentation, but it is taken into consideration in the calculation of the approximate number of cells in the table.

For example, Age and Years Since First Marriage are sometimes related to each other in a single panel, in which the entries may be either frequencies or means, proportions, etc., on a third variable. In these panels a large number of cells will be vacant, as indicated below for the case of five-year time intervals.

An asterisk (*) indicates that a cell involves marriages before age 15, which in some countries will imply a low frequency, and X indicates an empty cell.

YEARS SINCE FIRST MARRIAGE	AGE <15	15-19	20-24	25-29	30-34	35-39	40-44	45-49
<5	*							
5-9	X	*						
10-14	X	X	*					
15-19	X	X	X	*				
20-24	X	X	X	X	*			
25-29	X	X	X	X	X	*		
30+	X	X	X	X	X	X	*	

This particular table has 35 non-empty cells (7 involving marriages before age 15).

There are also a number of three-way tables involving Current Age and Years Since First Marriage. Because certain combinations of these two variables are logically impossible or have a low frequency, the panels will be of varying size. In other tables involving any two of the three variables Age, Years Since First Marriage, and Age at First Marriage, similarly vacant cells will occur.

THE PRESENTATION OF "DON'T KNOW" AND "NOT STATED" CATEGORIES

Apart from imputation of missing months in certain cases, no other imputation will be done for the First Report. Hence DK and NS (Don't Know and Not Stated) categories should be included in all tables. In accordance with the WFS Editing and Coding Manual, generally no distinction has been made between "DK" (the respondent does not know the answer) and "NS" (no answer has been recorded by the interviewer). Where the entries are cell-by-cell means or proportions, the DK/NS column (or row) will consist of all cases for which either the variable appearing in the cell (i.e., the variable defining the mean or proportion) or the variable defining the row (or column) has not been obtained.

In a small number of tables, the DK/NS category for the variable defining table panels may not be insignificant. In such cases extra panels should be introduced appropriately.

To clarify the form of presentation of DK/NS responses, consider first the simple case of a 2-way table where variables V_1 and V_2 have been cross-tabulated, the cell entries being row percentages of V_1 within categories of V_2. The four possibilities are given in Figure 1.

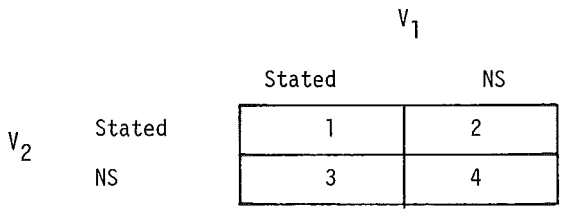


Figure 1

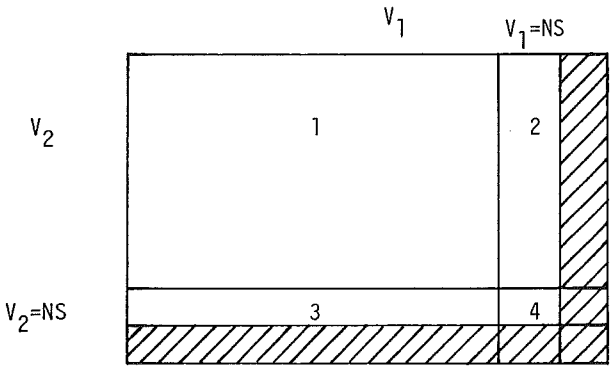


Figure 2

Figure 2 identifies the appropriate cell where a particular case belongs in the table (the hatched area represents marginal frequencies). For example, when V_2 is stated, but V_1 is not available, the entry belongs to the row V_2 and the column marked "2". When both V_1 and V_2 are not available, the case belongs to the cell marked "4". Row percentages for cells "1" are computed by excluding entries in column "2". Entries in cells "2" and "4" are given as simple frequencies. Entries in cells "3" are given as row percentages.

Consider now a table in which cell-by-cell means or percentages are provided. Let V_1 and V_2 be the column and row variables, as before, and V_3 the cell variable, i.e., the variable for which means or percentages are being computed. The eight possible situations are given in Figure 3.

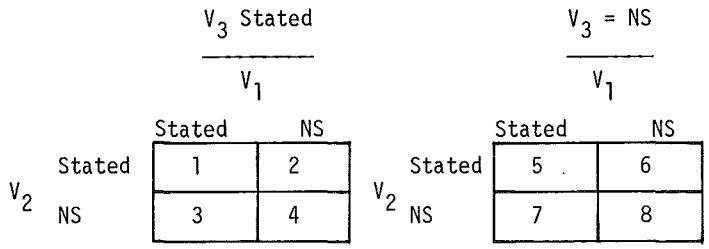


Figure 3

Figure 4 identifies the appropriate cell where a particular case belongs in the table. When V_3 is stated, "1"-"4" contain the appropriate cell means (or percentages) in addition to cell frequencies. The hatched areas represent means (or percentages) and frequencies excluding cases "5"-"8" (i.e., those with V_3 = NS). Each of the cases "5"-"8" appears in two cells in the table as indicated above. In these cells simple frequencies appear. No entries appear in the two darkened cells. The cell marked "T" gives the total frequency, *not* double counted cases "5"-"8".

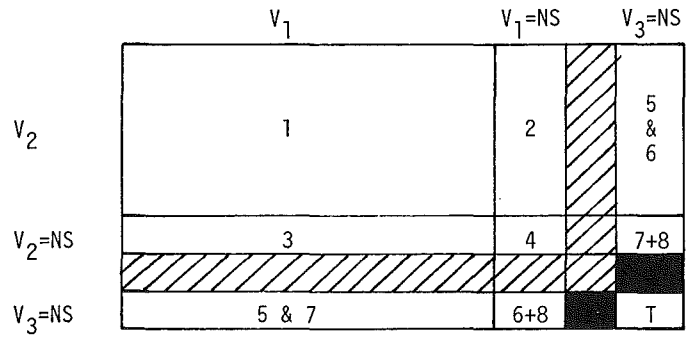


Figure 4

NOTES:

a) It will be seen that in a large proportion of the tables the variable V_2 is such that it has no NS cases. The row "V_2=NS" would therefore not appear in these tables.

b) In a small number of tables, variable V_3 is a ratio of two original variables, say V_3' and V_3''. In these, the condition V_3=NS exists when V_3' = NS OR V_3'' = NS.

c) In tables giving specific contraceptive methods, the above scheme becomes too elaborate and the simplest procedure will be to by-pass NS cases altogether. This is because each column essentially represents a separate table for a particular method of contraception.

d) Tables involving panels present no special problems. Where appropriate, an extra panel can be added.

e) If the software available is such that it cannot "double count" cases (i.e., cannot enter the same case in two cells), then Figure 4 above may be simplified by eliminating the row V_3=NS. The total frequency, T, will then appear in the remaining blackened cell in Figure 4.

LIST OF THE FIVE GROUPS OF TABLES

The cross-tabulations in Groups 1 to 5 are organized according to the dependent variable in each table. All dependent variables are cross-tabulated according to selected demographic variables, or controls, such as age. An asterisk (*) is used to indicate that the variable is also related to selected social, economic, or geographic explanatory variables.

GROUP 1: NUPTIALITY AND EXPOSURE TO CHILD-BEARING

1.1* Age at first marriage
1.2* Dissolution of first marriage
1.3* Remarriage and number of times married
1.4* Percentage of time in the married state
1.5* Current marital status
1.6* Exposure status

GROUP 2: FERTILITY

2.1* Initial fertility
2.2* Cumulative fertility
2.3 Effects of child mortality
2.4* Recent fertility

GROUP 3: PREFERENCES FOR NUMBER AND SEX OF CHILDREN

3.1* Desire to cease child-bearing
3.2* Additional number of children wanted
3.3* Total number of children desired
3.4 Preferences concerning the sex of children

GROUP 4: KNOWLEDGE AND USE OF CONTRACEPTION

4.1* Breast-feeding practice in the closed interval
4.2* Knowledge of contraception
4.3* Ever-use of contraception
4.4* Current use of contraception
4.5* Pattern of contraceptive use
4.6 Efficacy and fecundity: length of the open interval

GROUP 5: THE USE OF CONTRACEPTION AS RELATED TO FERTILITY PREFERENCES

5.1 Knowledge of contraception
5.2* Current use of contraception
5.3* Pattern of contraceptive use

SUGGESTIONS FOR THE DISCUSSION OF THE TABLES

The substantive findings of the survey are to be presented in Chapter 3 of the Country Report. As a very rough guide, this will generally occupy fifty to one hundred pages of the printed report, including text tables and figures.

The tables to be specified in detail herein will appear as an appendix to the Report, for reference, future analysis and comparative analysis. Only a relatively small number will be condensed to appear within the text itself. Analysts may also wish to represent some tables within the text in the form of graphs, charts, or figures. Those tables in which the dependent variable is Number of Children Ever Born, Number of Living Children, Number of Additional Children Wanted, or Total Number of Children Desired are especially appropriate for this form. Printing facilities will affect the number and appearance of these figures, so detailed recommendations are not possible.

The next few pages of these Guidelines are intended to assist in the preparation of this chapter of text. We provide some verbal clarifications of the tables (for full details see the Guidelines for Data Processing) and some motivations for constructing the tables. In some form, these comments may go into the Report itself. Additionally, we indicate cautions, relative emphases, and possible patterns of interpretation which may be placed upon the tables. Further comments, which are usually more specific, will be found appended to the *pro-forma* descriptions of some individual tables.

It is recommended that the chapter of text begin with a brief review of the statistical association between pairs of background variables and also between background variables, current age and years since first marriage. If there are high levels of association, then it becomes more difficult to separate the impact of two (or more) such variables upon a dependent variable. For example, in many countries women who have higher levels of education will tend to marry later and thus to have shorter marital durations. Such women may be expected to have lower fertility for this reason alone. Another example is the commonly observed association between place of residence and educational level. It would be important not to exaggerate the impact of education upon fertility in such situations.

Analysts are encouraged to make comparisons with earlier surveys in their country, so long as they are truly comparable. A figure will often be the easiest way of showing changes over time. Analysts are also encouraged to introduce commentary based on the relevant international demographic literature, so long as the report remains readable by its intended audience and is not delayed. However, references to the findings in WFS surveys in other countries, even within the same geographical region, should be omitted. Comparative analysis will be done later.

The chapter on substantive findings will differ from one country to another in content, organization, and style. The following pages are intended to clarify and to orientate, and not to serve as a recipe for a successful analysis.

GROUP 1: NUPTIALITY AND EXPOSURE TO CHILD-BEARING

In many countries, fertility occurs almost exclusively within the context of marriage, and in nearly all other countries it occurs much more frequently within a socially recognized union than otherwise. Thus, differences in age at marriage, marital stability, etc., are often the primary factor behind differences in fertility.

Since the present interest in marital status is based on its relationship to fertility, the operational definitions of "married" and "marriage" will vary somewhat from one country to another. This flexibility occurs in the adaptation of the Core Questionnaire. For example, if consensual unions are common, the date of first marriage will refer to the date when the woman first "lived as married".

In writing the Country Report it is essential to provide definitions of the different types of unions and to state the nature of any modifications of the WFS Core Questionnaire which are specific to the country. Any difficulties in applying the definitions should also be mentioned.

In the remainder of the report, many tables include the classifying variable "Years Since First Marriage". The reason is that this variable is usually a good indicator of the woman's total duration of regular sexual activity, i.e., exposure to the risk of conception. It will be deficient if the woman has experienced prolonged intervals between marriages, and it can suffer as an indicator of exposure for many other reasons as well. For example, there are variations from one couple to another in frequency of sexual activity. But it is generally superior to any other easily obtained indicator, such as age, which does not even take into account whether the woman has ever been married at all.

The second reason for using this variable is that women sharing similar values were married at about the same time, i.e., they comprise a "marriage cohort". There are certain kinds of critical events that they will all have experienced at about the same stage in their married lives. For example, for one cohort the intra-uterine device may have been available, in some sense at least, for the whole of their married life. For another cohort it may have become available after ten years of marriage; for another cohort, after twenty years of marriage. For each cohort, this availability would have a different meaning and a different function, related to the stage of family formation.

The preceding two paragraphs are simply intended to give the writer of the report a justification for the considerable emphasis on nuptiality in the tabulation plan. The interest is not in marital status itself; a thorough study of that subject would require the inclusion of all women, so that the proportions never-married could be estimated for each age and socio-economic group. Better data on current marital status may be available from a recent census. Rather, marital status, and the history of that status, are of interest because of their relationship to fertility, and the later chapters should include several references back to this one.

Several tables in this section have panels in which the Age at First Marriage is either less than 20 or at least 20. The country may well wish to repeat some or all of these tables using a pivotal age other than 20 in order to have approximately the same number of women in Panel 1 and Panel 2. The discussion in the text may also be based on the alternative. However, for international comparability, the tables as given here should be produced as well.

1.1 AGE AT FIRST MARRIAGE

Age at first marriage is taken as the initial age of exposure to the risk of conception and childbirth. It is of primary interest to know the pattern of age at marriage for the different birth cohorts of women, and how it has changed.

When the survey is limited to ever-married women, genuine changes in the age at marriage, from one birth cohort to the next, are not immediately apparent. Such a survey does not give the proportion of never-married women in an age group. (Note, however, that these women will be included in the household survey, if one is carried out.) In fact, there will be a bias in favour of selecting women who marry young. It is important that the unadjusted mean age at marriage not be reported - there is not even any need to compute it. The comment on Table 1.1.1 describes how to make the necessary adjustments.

1.2 DISSOLUTION OF FIRST MARRIAGE

This is the first section on marital stability. The current status of the marriage is related here to the number of years since it began. It would be possible, with adjustment, to use these data to prepare a type of life table in which the source of decrement was dissolution of the marriage.

1.3 REMARRIAGE AND NUMBER OF TIMES MARRIED

This is the second section on marital stability. The formats are analogous to those in Section 1.2.

1.4 PERCENTAGE OF TIME IN THE MARRIED STATE

This is the third section on marital stability; like the preceding two it consists of only two formats. Here the main control is on Current Age, rather than Years Since First Marriage. The table entries are obtained as follows: within each cell, two quantities are accumulated; the first is the total woman-months since first marriage; the second is the total woman-months spent in the married state since the date of first marriage. That is, the second is the first minus intervals between marriages. The cell entry is then the second number divided by the first number, expressed as a percentage.

If the percentage is uniformly high and does not vary substantially with the current age of the women, then the use of Years Since First Marriage as an indicator of exposure is justified. If it shows substantial variation with age, then one may choose to shift the emphasis from Years Since First Marriage as a control towards the tables with an age control.

In later sections of the report, the author will have occasion to refer back to the pattern of marital instability as a likely cause of certain fertility differentials.

1.5 CURRENT MARITAL STATUS

The two formats here are analogous to those in the first two sections on marital stability (1.2 and 1.3). Those tables referred to the status of the first marriage and these refer to the status of the most recent marriage. There will be nearly exact correspondence between this section and 1.2 if very few women marry more than once, in which case the text should largely ignore sections 1.2 and 1.3 and rely more on the present section.

In the Core Questionnaire, women who are not currently married are not asked about their fertility intentions or about current contraceptive use (except for sterilization). Current marital status is the main indicator of current exposure to the risk of conception. It will be a good indicator of future risk, as well, if there is little re-marriage. If, however, there is currently a high proportion of unmarried women *and* there is a high rate of re-marriage, then current marital status is a poor indicator of future risk. This section of the Country Report should raise that issue and respond to it.

1.6 EXPOSURE STATUS

Current marital status is only one component of exposure to the risk of conception. The other two (at the level of measurement of the survey) are current pregnancy status and fecundity. These three components are combined in the variable Exposure Status, defined earlier. (Reports on sexual activity and biological tests of fecundity are not available; hence the population actually at risk is probably smaller than reported here.) In later tables this variable serves to define the subpopulation of interest, and it is for that reason that it appears here. Virtually every category is treated in its own right elsewhere in the tabulation plan, with the exception of the final category of exposed women. The discussion of these tables is best limited to the notions of exposure and risk and to the percentage in the final category.

GROUP 2: FERTILITY

The tables on the woman's actual fertility are divided into four areas which follow an approximate temporal sequence in the woman's own life. The first (2.1) is initial fertility, extending through the first five years of married life. The second (2.2) is a discussion of cumulative fertility up to the date of the survey. This is the largest single set of tables in the tabulation plan and defines, in a sense, the core of the report.

Actual fertility is subject to child mortality, and the third topic (2.3) is the level of such mortality, measured in different ways. Finally (2.4), current fertility is described, measured directly in terms of births in the past five years and indirectly in terms of the proportion of women currently pregnant.

The tables do not specifically lead to estimates of conventional fertility rates. These will come from the tables in Appendix II, if and when those tables are produced.

2.1 INITIAL FERTILITY

These tables are based on all women whose first marriage occurred at least five years ago, and measure fertility in the five years after first marriage. Some women will have experienced dissolution of marriage or widowhood during this five-year interval, but will be included nevertheless.

Early fertility depends partly on age at first marriage, and these tables include a control on that variable. It will often be found that women who marry early are women with high fertility preferences and high initial fertility. However, this effect may be counter-balanced by two other effects. Women who marry quite early may experience adolescent sterility during the initial years of marriage. Secondly, women who marry early may be especially likely to become separated or divorced, often within the first five years. These women may therefore show lower fertility than one might expect if they had experienced a full five years of exposure while fecund.

Births before marriage are included in these tables and, if these exist, they will usually show some pattern of relationship to age at marriage.

The purpose of these tables is to determine whether there is delaying or spacing of early births, whether this is related to age at marriage and years since marriage (i.e., whether there is a trend over time), and whether it is related to background characteristics, such as whether the woman worked before marriage or early in marriage.

2.2 CUMULATIVE FERTILITY

The description of the numbers of live births to the women in the survey will be of primary interest in each report. This section uses only six different formats of tables, but a total of over one hundred panels are recommended.

The first two formats should give the complete distribution, with a separate column for each parity up to the highest parity appearing in the sample. Table 2.2.5 collapses together all parities of nine or above. Among other topics, these tables can be used for a discussion of the pattern of childlessness. In the other tables, the cell entry is the mean parity within the cell.

Here and in other sections, the columns headed "Standard Deviation" may be omitted if the tabulation program cannot conveniently provide standard deviations. The column headed "Percentage Male" may be restated, if more convenient, as "Proportion Male" or as "Sex Ratio", defined as 100 x No. of males / No. of females.

All the tables are based on the total sample of all ever-married women, except that the first four formats, which are limited to demographic controls, are repeated for the sub-population of currently married women. For descriptive purposes, it is more appropriate to consider the total sample of all women. The currently married women are also of interest because they may be presumed to have had more exposure to conception and fertility than those women who were married earlier but not at the survey date. They also constitute the sub-population for the later questions on current contraceptive use.

If the researcher wishes to go further into the relationship between length of exposure and cumulative fertility, it will be convenient to produce, at the same time as these tables, similar tables restricted to women who are currently married *and* who have been married only once. For them, years since first marriage will be an excellent estimate of years of exposure. Similarly, if desired, the last three formats may be repeated for women who are currently married, etc.

In connection with the tables on nuptiality, it was remarked that the cross-sectional nature of the survey systematically excluded women who had not married by the time of the survey. As a result, unless a correction were made, the mean age at marriage of a birth cohort of women would be underestimated by survey data.

This truncation effect extends through the entire reproductive history of the respondents. For example, by selecting for women who marry earlier we are also selecting for women who have their first child earlier, their second child earlier, etc., by comparison with the entire birth cohort. There is, in other words, a downward bias in the age at entry into each parity. Such a bias is inherent in all cross-sectional fertility surveys which systematically exclude unmarried (or non-fecund) women.

This bias is eliminated when women are classified according to marriage cohort, or years since first marriage, rather than birth cohort. Most tables in this section include this control. Nevertheless, some tables relate fertility to current age; Table 2.2.1 is such as instance. We include such tables because they do indeed reflect, without bias, the cross-sectional situation, and from a practical point of view, women are more commonly identified by their age than by their marital duration. But the user should recognize that they provide an incomplete and upwardly biased indication of the fertility of any specific birth cohort. The amount of the bias decreases with age but cannot be specified entirely. At a later point these data can be manipulated to describe the experience of an artificial or synthetic birth cohort, in the same sense that period mortality data can be employed to describe the survival of a synthetic cohort. In addition, later analysis of the detailed birth histories will permit the calculation of age and cohort-specific fertility rates.

Marriage cohorts or marriage groups, while overcoming the bias inherent in both cohorts, are themselves subject to a bias in the opposite direction. While the more recent cohorts should be representative of the corresponding cohorts for the entire female population, the earlier cohorts become progressively less representative, because of the loss of women who first married late in life and were thus aged 50 or over at the time of the survey. For instance, the cohort of marriage duration 30 or more years is confined to women who married before the age of 20.

The last two formats, which represent the bulk of the tabular production for this section, bring in socio-economic variables, one at a time and two at a time. In searching for differentials in fertility, the analyst should particularly avoid over-interpreting quantities based on small frequencies, and should attempt to use some technique such as standardization to control statistically for the main effect of marital duration. Particular caution should be exercised in the interpretation of Table 2.2.7, which uses broad ten-year marriage duration groups. For some background variables (such as educational level) which are highly associated with duration, the use of ten-year intervals may give rise to misleading results.

As elsewhere in the report, but especially in this section because so many panels are involved, it is important to combine categories and to edit heavily any tables that are to appear in the text. If a table shows no relationship, for example, between parity and a specific socio-economic variable, the author should note this conclusion verbally but should not reproduce the table in the text. The only exception would be a case in which earlier research had led to the anticipation of a relationship, so that it would be useful to document its apparent absence.

2.3 EFFECTS OF CHILD MORTALITY

This brief section is included for two reasons. First, it provides an indication of the country's level of infant and child mortality. Second, it provides a background for the later tables which relate contraceptive use and fertility intentions to the number of living children.

The cumulative impact of child mortality may be inferred by comparing Tables 2.3.1 and 2.3.2 with Tables 2.2.1 and 2.2.2 of the preceding section or through the cross-tabulation of number of children ever born with number still alive, Table 2.3.3. Such a comparison tells nothing about the ages of the deceased children at time of death, but does relate cumulative child mortality to the current age and marital duration of the women. The association with the woman's current age is made explicit in Table 2.3.4. The final table relates child deaths in the past few years to the age of the child and may be used to calculate standard measures.

All tables are based on the total sample, except that the first two formats are repeated for currently married women.

Countries with a particular interest in patterns and changes of mortality are advised to consult the tabulation plan for the General Mortality Module. Many of the tables suggested therein are based solely on the Core Questionnaire.

2.4 RECENT FERTILITY

Ideally, "current fertility" would probably refer to the year just prior to the survey. Unfortunately, this definition would not generate statistically stable numbers of births in a sample of 5,000 or so. For this reason, the reference period to be used is the five years (60 months) immediately preceding each woman's date of interview. (The actual calendar dates will vary slightly because the interviewing will have been spread over a few weeks).

All these tables have a control on the current age of the woman, given in five year intervals. Thus it is a simple matter to determine her age group five years previously. The control is on current age, rather than years since first marriage, simply because current fertility is primarily a topic of practical interest, in contrast with initial and cumulative fertility which have a stronger theoretical interest. For practical purposes, women are more readily identified by their age than by their marital duration.

Exposure is introduced not in terms of the years of marriage before the interval, but in terms of exposure during the interval. Tables 2.4.1 -

2.4.4 are based on women who were first married at least five years ago, are currently married, and experienced no intervals of marital dissolution during the interval. (In many countries, the third qualification will have little impact.) The main purpose is to identify those women who, when exposed to the risk of conception, are currently most fertile. It is not intended that these tables should lead to estimates of the current birth rate or any other rates usually obtained through a vital statistics system. Estimates of that sort may be made from the tables in Appendix III.

One table on the percentage male at birth and two on the percentage of women currently pregnant are also recommended. The sample size will generally not permit a statistically reliable detection of differentials in these percentages, and the written report should give little or nothing beyond the respective overall percentages.

GROUP 3: PREFERENCES FOR NUMBER AND SEX OF CHILDREN

This part of the report turns from actual fertility behaviour to attitudes. Women were asked about their preferences for additional children, and this is reported here in two ways -- first as the proportion of women in a category who want no more children at all (3.1), and second as the mean additional number wanted (3.2). The women were also asked a rather more abstract question about the number of children they would choose to have in all (3.3). Finally (3.4), an effort is made to detect preferences for sons or daughters.

Most tables in this section involve the simultaneous use of age (or marital duration), cumulative fertility, and fertility intentions. As remarked earlier, this cross-sectional survey has selected for women who have moved into each parity early (by comparison with the entire birth cohort from which they have been sampled). Also, these women may have atypically high fertility intentions. This upward bias will continue to be present even when the measure of cumulative fertility is suppressed, i.e., not present as a control.

3.1 DESIRE TO CEASE CHILD-BEARING

This section consists basically of three tables in which the cell entries are the proportion of women wanting no more children. The question "Do you want to have a/another child sometime?" has an open reference to time; assuming that they have fully understood the question, women who answer "NO" are saying that they do not, at the time of the interview, want ever to have another child. The question therefore identifies those women who are eligible for family planning methods to terminate child-bearing. There is no analogous question to indicate eligibility for methods which would simply delay the next child.

The question was asked of all women who were currently married and either currently pregnant or believed themselves able to have (more) children. Pregnant women with N children are classified with women who have N+1 living children on the assumption that the child about to be born would have the same impact as a living child. It was not asked of sterilized women, but if the woman (or her husband) had been sterilized for contraceptive purposes, it was assumed she wanted no more children and a "NO" response was imputed. The tables in this section are then

based on all currently married women who are pregnant or believe themselves fecund, plus currently married women who have been sterilized for contraceptive purposes.

When interpreting these tables it is convenient to pay particular attention to those family sizes at which a majority of the women want to have no more children. All of the tables have a control for number of living children, given in considerable detail so that this point of transition may be better detected. There is also a control for duration of exposure (measured by age or years since first marriage) but this will usually have little impact beyond that of the number of living children.

3.2 ADDITIONAL NUMBER OF CHILDREN WANTED

All women who were currently married and who believed themselves biologically capable of having (more) children were asked "Do you want to have a/another child sometime?". If they answered "YES" they were also asked "How many more children do you want to have?". If the woman responded "NO" to the first question, the implied response of "0" was coded for the second question.

If the woman was married but she (or her husband) had been sterilized for contraceptive purposes it was assumed that she did not want any more children, and she was also coded "0" on the second question. As before, she was treated as "fecund" but as the user of an efficient contraceptive method.

The tables in this section are therefore based on all currently married "fecund" women, i.e., all the types of women mentioned above. It is generally possible to remove the sterilized women mentioned in the preceding paragraph, if so desired, by referring to the tables on current contraceptive use.

In the first two tables, the full distribution of the dependent variable is given. In the remainder, only the mean additional number is reported. This mean is based on all coded responses, including the women who want no more children. By referring to Section 3.1 one may generally remove these women, if desired, and re-calculate the mean restricted to women who want at least one more child.

There will usually be a strong inverse relationship to the number of living children: the more children a woman has, the fewer additional children she wants. For this reason, most tables have a control on number of living children. Nevertheless, if the mean additional number wanted is added to the actual number, one usually finds that the total increases with parity, rather than remaining fairly constant. It may be noted that some of the women who are given as wanting no more children may in fact want a negative additional number: they may want fewer than they have. This possibility may be partially explored by comparison with the tables in Section 3.3.

The conclusions from this section will usually closely parallel those in Section 3.1. Thus, if some category of women has a high proportion wanting no more children, the mean of the additional number wanted will usually be low. This parallel pattern is partly due to the inclusion, in the calculation of the mean, of women who want no more children; but usually the whole distribution will shift as the proportion in that

category changes. The author of the written report should focus on either Section 3.1 or 3.2, and should say considerably less about the other, in order to avoid repetition. Section 3.1 has more relevance to family planning; Section 3.2 is somewhat more related to population projection.

3.3 TOTAL NUMBER OF CHILDREN DESIRED

The tables in the section are based on responses to the question "If you could choose exactly the number of children to have in your whole life, how many children would that be?" The response is not explicitly related to the number of children the woman currently has.

It is to be expected that women who have more children will also want more, as a result of reciprocal effects. To the extent that achieved fertility is the realization of fertility preferences, women who wanted large families will have had large families. There is also an effect in the reverse direction; a woman may rationalize or justify her achieved fertility by adjusting her stated preference to correspond to it. In a context where family planning is little used, most of the association is probably due to this sort of rationalization.

Therefore, most of the tables in this section have a control for the number of living children. The analyst will pay special attention to the manner in which mean desired fertility resembles achieved fertility, particularly as the women progress to the end of child-bearing.

The first two tables give the complete distribution of responses to the question. The purpose of these tables, in part, is to determine the extent to which there is a culturally accepted norm, about which there is little variation. (We shall simply define a norm to be a commonly held value or preference.) If a good deal of dispersion is observed, it may result from a mix of heterogeneous populations having different norms, or the norm may be rapidly changing, and therefore diversely held. Another perhaps more likely interpretation would be simply that the individual woman's response is not based on any reference to a group value. Sometimes one observes a great deal of variation except that very few women say they would want no children or only one child, and this opposition to very small families emerges as the only important norm. The remaining tables use only the mean number of children wanted.

All of the tables are based on currently married women, except that some are repeated for all ever-married women. The main interest is in currently married women because they have the greatest likelihood of having more children. Nevertheless, the question of this section was asked of all women, regardless of marital status; a number of them may be between unions and may yet have more children. For the actual analysis in the first report, it is sufficient to limit the discussion to currently married women.

3.4 PREFERENCES CONCERNING THE SEX OF CHILDREN

Tables in Section 3.4 are intended to detect any possible impact of the sex of children currently alive upon future fertility intentions. Current age and marital duration are also included, because they are usually major determinants of both cumulative fertility and fertility intentions.

In the earlier discussion of preferences for children, a woman who had N living children (or live births) but was pregnant was to be classified with women who had N+1 living children (or live births). That is, it was assumed that the child who was about to be born would have the same impact on the woman's intentions as a living child.

That assumption cannot be implemented in this section, however, because the sex of the unborn child is not known. Therefore, in order to obtain as sharp a contrast as possible between those women who have mostly sons and those who have mostly daughters, *current pregnancies and currently pregnant women are excluded* altogether from this section.

The tables concern the possible impact of current sex composition on whether the woman wants more children, the preferred sex if she does want more, the mean additional number wanted, and the total number desired. The tables are all constructed so that all women on the same diagonal from the lower left to the upper right have the same total number of living children. The "main effect" of this total upon the specific preference will be very similar, though not identical (see the preceding paragraph) to that of total family size seen earlier in this chapter.

If attention is restricted to any particular one of these diagonals, the cells on the upper right will apply to women with more sons than daughters. The cells on the lower left will apply to women with more daughters than sons. The analyst compares these two parts, also examining each diagonal in succession, to reach a conclusion about the impact of sex composition on preferences.

If there is mild sex preference, then only the two extremes of the diagonals will differ much; if there is very strong sex preference, then all of the upper cells will differ from the lower cells. If there is no sex preference but, rather, a preference for balanced composition, i.e., equal numbers of sons and daughters, then the cells at both extremes will be similar but will differ from those near the middle of the diagonals.

Any sex preference will show most clearly in the tables on preferred sex of next child (3.4.3 and 3.4.4). Each of these has two parts, one to indicate the percentage preferring a boy, and one to indicate the percentage preferring a girl. An overall preference for boys will be indicated if the percentages in the table for boys tend to be larger than the corresponding percentages in the table for girls. But the sum of two corresponding percentages will often be considerably less than 100% because of a third possibility, a preference for *either* a boy or girl for the next child - more precisely, no sex preference. The size of this neutral category should be taken into account before any conclusions are reached.

If no sex preference is found in these tables (3.4.3 and 3.4.4) then the remaining tables of this section will almost certainly show none, in

which case they should be passed over in the discussion, with simply a word to the effect that there is no indication of sex preference. They should be discussed in detail only if there had been strong expectations of contrary findings.

GROUP 4: KNOWLEDGE AND USE OF CONTRACEPTION

In some countries, this section will be at least as important as the section on fertility, because of an interest in patterns and trends of contraceptive use. In other countries, however, where there is very little knowledge or use of contraception, these tables will be of little interest. In the former case, additional tables may be prepared to correspond with the results of earlier surveys or with policy needs. These tables may be included in the Country Report or elsewhere, as preferred. In the latter case, however, in which there has been little contraceptive use, the country may well choose to condense the tables and to devote very little of the text to them. But the future value of these tables in providing a benchmark should be borne in mind.

The tables are generally organized to pass from knowledge of contraceptive methods to ever-use, current use, and future use. In addition, there is an initial section on breast-feeding, because one of its physiological functions is to prolong post-partum amenorrhoea, and a final section on efficacy and fecundity.

Caution is required in the interpretation of these tables, primarily because of the self-reporting nature of the survey. "Knowledge", for example, simply means that the woman reports, before or after probing, that she has heard of a specific method. "Ever-use" may have been sporadic or incorrect use. "Current use" may, in practice, mean simply "recent" use, with a vague interpretation of "recent". However, these problems of definition may be uniform within the country, so that comparison between subgroups, or comparison with earlier, similar surveys may be valid.

The analyst has a responsibility for pointing out problems of this sort but, at the same time, should attempt to produce a discussion which has value for policy development. He or she should therefore identify those categories of the population which have the greatest and the lowest levels of knowledge, etc., and those variables which most sharply distinguish the women on knowledge, etc.

4.1 BREAST-FEEDING PRACTICE IN THE CLOSED INTERVAL

Breast-feeding has a temporary contraceptive effect, and for that reason it is included in the present section of the Report. Women are generally aware of this effect, and in some countries may prolong their breast-feeding in order to delay the next conception. The survey obtains information on the practice for both the closed and the open interval. The tables in this section are limited to the closed interval; they are also necessarily limited to women who have had at least two live births (or one birth and a current pregnancy).

All the tables except 4.1.6 are intended to show the pattern of variation in length of breast-feeding according to age, age at marriage, birth order of the child, and background variables. Table 4.1.6 is an effort

to determine whether, and to what extent, breast-feeding has affected the length of the closed interval. Current age is included as a control, since age is a major determinant of fecundity and, therefore, of birth interval length. (Note that current age is an inefficient substitute for age at the beginning of the closed interval, which would be preferred. Later studies may make the desirable refinement of using the earlier age.) This table also includes a control for contraceptive use, which is also a major determinant of interval length. (Note also that, unless the Fertility Regulation Module is used, this can only be measured as ever-use, rather than use during the interval.)

Tables 4.1.1 and 4.1.2 show pattern of breast-feeding in the closed interval for all women with such an interval, regardless of survivorship of the child or the length of the interval. The results are thus affected by involuntary termination of breast-feeding by infant death or by conception. This problem of self-censoring is taken into account in Tables 4.1.3 - 4.1.5 where the analysis is confined to women for whom the length of the closed interval was at least 33 (24+9) months and whose child survived at least two full years.

The categories of the variable Number of Months Breast-feeding owe their construction to the typical pattern of response associated with this variable. Firstly, there is usually considerable heaping of responses at multiples of 6 months, and especially at multiples of 12 months. In order that users of these data may evaluate the extent of heaping and may attempt their own adjustments, these months should be kept distinct. Secondly, it will generally be the case (although the possibility should be considered afresh for each country) that responses will have been given in terms of "nearest month" rather than the demographer's preferred "completed months" of duration. For example, if a woman's response is "5 months", she will usually mean 4.5 to 5.5 months rather than 5.0 to 6.0. The mean and any other computed quantities must reflect this orientation in their calculation. Moreover, in Tables 4.1.3 - 4.1.5 in order to have 24 completed months of observation, the responses of "24 months" must be divided into two equal parts. The first of these, titled "24(*)" in the table, represents duration of 23.5 to 24.0 months, and is to be included in calculations of the mean. The second, titled "24(**)" in the table, represents durations of 24.0 to 24.5 months, and is to be given but to be excluded from the percentage distribution and from calculation of the mean. This, and the category "25+" are included for completeness but, because of censorship in the data, are of little analytic interest. (In order to simplify the data processing countries may choose to combine these last two categories.)

Because of the patterns of response noted in the preceding paragraph, the discussion in the text should be cautious and should only make special mention of sharp differences between groups.

4.2 KNOWLEDGE OF CONTRACEPTION

A woman is classified as "knowing" a method if she voluntarily names it or if she claims to have heard of it when the interviewer names the method. She is not required to describe how the method is used. The analyst must take great care, when comparing with other surveys, to check the comparability of the questions. The country may wish to prepare additional tabulations based solely on volunteered knowledge, separating out those women who claimed knowledge only after probing.

Methods may be divided into efficient or modern ones, and inefficient or traditional ones (see the Variable List). Tables in Group 4 give priority to efficient methods. It is expected, moreover, that relatively few women will report knowledge (or use) of a traditional method but not of a modern method. Thus, tabulations which combine these methods (e.g., Table 4.2.2) would differ little from tabulations which were based solely on modern methods. If a country has a particular interest in, or a relatively high level of reported knowledge (and use) of traditional methods, it may wish to make more of a distinction between these two broad categories in tables such as 4.2.2.

Tables 4.2.1 and 4.3.1 include only two levels of the number of living children. Countries with a special interest in contraception may wish to repeat these tables with alternative categorizations to identify the family size at which there is sharpest gradation in knowledge (or use) and to evaluate the relative importance of current age and family size as predictors of knowledge (or use). Generally, the latter is more important, and for that reason it is emphasized in Tables 4.2.2 and 4.3.2, which bring in the background variables.

The tables in Sections 4.2 and 4.3 are based on all ever-married women, since knowledge and ever-use do not depend on current marital status. However, the first table in each section is repeated for the subpopulation of "fecund" women, which has been described earlier. These are the women who, so to speak, have the potential for current and future use of contraception. The "fecund" women remain after removing from the total sample of ever-married women those who are widowed, divorced, separated, or who have fecundity impairments other than contraceptive sterilization. As elsewhere, when a table is repeated on two different populations, it is recommended that the analyst focus on only one of these in the discussion. In the present case, it is suggested that the base of all ever-married women will be preferable.

4.3 EVER-USE OF CONTRACEPTION

Ever-users of contraception will include current users as well as women who have used a method long ago, and women who used a method correctly as well as those who did not. In some countries, contraceptive use will be so recent, particularly for modern, scientific methods, that the figures for ever-use will differ little from those for current use.

Many of the comments in the discussion of Section 4.2 apply also to this section, and the analyst should note the parallels in the formats for these two sections and also should expect parallels in the data. For example, it is likely that the pattern of variation in ever-use, according to demographic and background variables, will be essentially the same as for knowledge. It is not desirable to duplicate a detailed description of these patterns.

Thus, in most countries the text should deal lightly with ever-use, concentrating more on knowledge and current use. This suggestion will not apply to the extent that ever-use has a pattern of variation which is distinctly different from that of knowledge and current use.

4.4 CURRENT USE OF CONTRACEPTION

The first two formats of this section are directly comparable with the earlier tables on knowledge and ever-use, except that the first table provides less detail on age and more detail on current family size. All the tables in this section have a detailed control on number of living children, which is usually found to be the most important determinant of contraceptive use. In assessing the impact of education and other background variables, it is essential to make the comparisons between women of the same family size.

These tables are based on the sub-population of "exposed" women - i.e., women for whom the question of current use is relevant. Excluded from the denominators or base frequencies, therefore, are women who are widowed, divorced, separated, infecund for reasons other than contraceptive sterilization, or currently pregnant.

In order to make comparisons with earlier surveys, to determine trends in contraception, the analyst may prefer to have either all ever-married or all currently married women as the base population. It is possible to repeat the tables in this section for all ever-married women, and to limit the discussion in the text to those tables, so long as the present tables are also prepared. However, looking ahead to the next section (4.5), all the tables therein are based on all ever-married women, and the proportion of current users as given in those tables may well meet the above requirements.

Current age appears as the second demographic control in all tables except one (4.4.4) because it is a common reference variable in family planning programmes. Marital duration is not used, mainly because it usually shows such a strong correspondence to family size.

Tables 4.4.3 and 4.4.4 have a different character and are analogous to the earlier tables on sex preferences (Section 3.4). The discussion of these tables should indicate similarities or differences from the earlier ones.

4.5 PATTERN OF CONTRACEPTIVE USE

The categories of the variable Pattern of Contraceptive Use are indicated in the Variable List. It is a summary variable, organized according to time of most recent use and intentions for future use.

These tables are largely a repetition of earlier findings, with two major departures. First, intentions for future use are included. Second, the base population consists of all ever-married women, which may be preferred, in relation to current use, to the population of "exposed" women used in Section 4.4.

The discussion of these tables need not repeat earlier findings, except as required to integrate them. For example, there may be some useful commentary on women who are previous but not current users. If contraceptive use is of recent introduction, these women may reflect low continuation rates. Never-users who indicate interest in future use are also of particular interest.

4.6 EFFICIENCY AND FECUNDITY: LENGTH OF THE OPEN INTERVAL

This section consists of only one table. It is intended to show the extent to which the length of the open interval depends upon contraceptive use. But the table does not avoid a statistical confounding of biological fecundity and contraceptive efficacy. Note that the open interval is only defined for women who are not currently pregnant. The row variable corresponds to the constructed variable Pattern of Contraceptive Use as follows: the first row includes women with codes 7 and 8 for the Pattern Variable; the second row includes those with code 4; and the third row includes the remaining women, with codes 1, 2 and 5. (Women in categories 3 and 6 are omitted because they are not "exposed".) It should also be pointed out that the panels of the table give the woman's current age, and not her age at the time when the open interval began. The open interval tends to increase in length with a woman's age, and as a result the mean length of the interval in the table is slightly less than it would be if the panels referred to age at the beginning of the open interval.

GROUP 5: USE OF CONTRACEPTION AS RELATED TO FERTILITY PREFERENCES

This relatively short section is an extension of the preceding two. Each table includes variables related to fertility intentions or preferences and contraceptive knowledge or use. The central question of the section is this: "Do women who say they want no more children tend to implement this decision by using contraception?". As before, women who have been sterilized for contraceptive purposes are classified as wanting no more children, even though the question was not explicitly asked of them.

As with Group 4, the tables may be condensed and the discussion very brief if the level of contraceptive use is quite low.

5.1 KNOWLEDGE OF CONTRACEPTION

The two tables in this section examine the manner in which knowledge of contraception is related to a desire for more children. This desire is measured in two ways. First (Table 5.1.1), the women are divided into three categories, those who want another child, those who do not, and those who are undecided. Second (Table 5.1.2), the women are divided into three main groups (plus two residual categories), according to whether their total number of children desired is less than, equal to, or greater than their current family size. (Recall that the total number desired is asked in such a way that it need not depend upon the actual family size, but a statistical association will usually exist.) The conclusions will usually be the same for both tables and the analyst may limit the discussion to the one with which he or she feels more comfortable. Differentials between panels will probably be sharper in the first table because its measurement of intentions is less abstract.

Those women who do not want more children than they already have, and who are "fecund", define the subpopulation most highly motivated to use contraception. These tables compare their level of knowledge with that of women who are less motivated, because they do want more children. The relevance to family planning programmes is in determining the extent to which this target group has some awareness of family planning.

Knowledge of contraception will be unrelated to motivation to the extent that it is transmitted by the mass media, the schools, a comprehensive child health and maternal care programme, etc. Differentials in knowledge can basically result from three sources. First, knowledge may be more selectively supplied to women who want no more children -- i.e., in practice, to high parity women. Second, these women may themselves initiate inquiries into family planning, through health workers or even through their friends. Third, they may be more receptive to mass media efforts than are the women who still want more children. Therefore, although one expects differentials in knowledge, according to preferences, they should not be as large as the differentials in actual use of contraception.

These two tables have a control for current age because programmes usually classify women on this basis. If desired, of course, they may be repeated with other control variables such as family size, marital duration, and background variables such as region of residence, in order to be of more use to a programme.

5.2 USE OF CONTRACEPTION

Section 4.3 examined the prevalence of contraceptive use among all women who were designated as "exposed", i.e., for whom the question was relevant. The present set of four formats may be regarded as a further tightening or specification of the criterion of eligibility. These tables focus on those women who are "exposed" *and* want no more children, the women who "need" to use contraception in order to achieve their intentions.

Frequently one objective of family planning policies is to reduce the desire for additional children. The present sort of survey cannot assess this type of change (except by comparison with earlier surveys). Another objective, and in many countries the principal one, is to provide the means whereby fertility intentions, whatever they may be, can be achieved. The present section permits an assessment of current use in this target population (although the effectiveness of this use is another matter).

The first table (5.2.1) is analogous to the first table on contraceptive knowledge (5.1.1) except that the control is on family size rather than age. The "Totals" panel will be the same for this table as for Table 4.4.1. The analyst is interested in the prevalence of use in the second panel, the "target population", and in the degree by which this exceeds the level of use in the first panel. In most countries there will be little contraceptive use in the first panel. Any such use would be intended to delay the next child.

This table, in particular, may be usefully repeated with other controls (such as age) if there is a special interest in family planning.

The remaining three formats appear in two forms each, corresponding to different definitions of the base subpopulations. (The numerators are consistently defined to be current users of efficient methods.) The first title in each format corresponds to the subpopulation in Panel 2 of Table 5.2.1 - the "target population" of family planning programmes. Most of the discussion should focus on these tables. The second title in each format will generally lead to the same conclusions.

We may clarify the definitions of these subpopulations by considering a four-fold classification of the "exposed" women, within each combination of the specified control variables.

Do You Want More Children?

Are You Currently Using an Efficient Method?	Yes	No	(Total)
Yes	a	b	a + b
No	c	d	c + d
(Total)	a + c	b + d	a + b + c + d

We can briefly interpret each cell of this table in terms of the consistency between fertility intentions (represented by the column variable) and contraceptive behaviour (represented by the row variable). Lack of consistency can, of course, arise from several sources such as unavailability of efficient contraception, lack of knowledge of efficient methods, and cultural or psychological obstacles to the implementation of fertility intentions. Our purpose is simply to quantify the degree of inconsistency, regardless of its underlying sources.

Frequencies "b" and "c" are immediately evaluated as consistent. Frequency "a", which indicates the practice of contraception by women who want more children, generally reflects the use of contraception for spacing purposes. This is often considered a more sophisticated use of contraception than that represented by frequency "b", and would certainly not be classified as inconsistent. A few women who appear in frequency "a" may, in fact, be consistent to the extent that they are ambivalent in their fertility intentions. At any rate, their use of efficient contraception should not result in unwanted pregnancies.

Most inconsistency is therefore concentrated in the cell with frequency "d". If all women who want no more children were to practice contraception, then this frequency would be zero (and it would be possible to determine the other interior frequencies "a", "b", "c", just from the marginal frequencies of the fourfold classification).

The first title for each of Tables 5.2.2.-4 is based on the "b+d" women in the second column. In this column, a percentage 100b/(b+d) of the women have intentions and behaviour which are consistent with each other, and it is this percentage which is given within each combination of the specified control variables.

The second title for each of these tables gives the percentage 100b/(a+b+c+d). We revert to the same denominator of "exposed" women used in Section 4.3, but take for the numerator those "b" women who are using contraception to terminate childbearing, rather than the somewhat larger numerator "a+b" used in Section 4.3.

5.3 PATTERN OF CONTRACEPTIVE USE

These three tables all give the percentage distribution across categories of the summary variable Pattern of Contraceptive Use and they all have an age control. The first two tables apply the two measures of preference for more children used in Section 5.1. The third table applies the simpler of these measures and brings in background variables. All tables are limited to the relevant subpopulation of "fecund" women. Some

countries may wish to repeat them for all ever-married women.

The main importance of these tables is in the columns giving the proportion of women who intend or do not intend future use. Part of the inconsistency found in Section 5.2 may be temporary if many non-users in the target population have intentions for future use. Note that these tables include currently pregnant women, although Section 5.2 did not. Some of these women will now want no more children and will plan for future use, although they cannot be classed as current users.

Again, it is not desirable to repeat here the observations made on the earlier tabulations of this summary variable or its component categories.

PART IV PRO-FORMA TABULATIONS

The "Standard Set" of background variables includes Level of Education, Type of Place of Residence, Pattern of Work, and Occupation of Husband. In addition, it includes any or all of the following three variables of possible local interest: Region of Residence, Religion, and Ethnic Group. In estimating the total number of tables and panels, it has been assumed that two of these three will be included, so that the Standard Set will consist of six variables. In any particular country, however, it may range from four to seven variables.

In order to determine the extent to which these background variables have changed over time in their distributions and are associated with one another, it is strongly encouraged that each variable in the Standard Set be cross-tabulated with each other such variable, within broad categories of age. This suggestion was also made in the discussion of the analysis of the tables. These tables are not, however, described with the *pro-forma* tabulations because of their specificity to each country.

DK/NS categories are omitted from the *pro-forma* tables. The manner in which they should be included in the actual tabulations is described in Section 3 of Part III of this document.

The following list indicates the relative emphasis attached to the various dependent variables and chapters. In estimating the number of tables, it has been assumed that when background variables are called for, there will be six in the Standard Set. In estimating the number of interior cells in a table it has been assumed, where required, that the background variables will average five categories each. Cells which are structurally constrained to be empty, as well as DK/NS categories, have been excluded from these estimates.

Table Number	Number of tables	Number of panels	Number of Cells per table
1.1.1	1	1	42
1.1.2	1	1	800
1.1.3	9	9	25
1.2.1	1	3	52
1.2.2	6	6	60
1.3.1	1	3	48
1.3.2	6	6	72
1.4.1	1	1	29
1.4.2	6	18	65
1.5.1	1	3	56
1.5.2	6	18	70
1.6.1	1	3	70
1.6.2	1	5	120
1.6.3	6	30	100
Total for Group 1:	47	107	-
2.1.1	1	4	140
2.1.2	9	36	100
2.2.1	2	2	133
2.2.2	2	2	133
2.2.3	2	2	42
2.2.4	2	2	42
2.2.5	6	48	350
2.2.6	6	30	130
2.2.7	15	60	75
2.3.1	2	2	70
2.3.2	2	2	70
2.3.3	1	5	216
2.3.4	1	1	80
2.3.5	1	1	48
2.4.1	1	1	70
2.4.2	1	1	36
2.4.3	6	6	35
2.4.4	1	1	36
2.4.5	1	1	70
2.4.6	1	1	42
Total for Group 2:	63	208	-

Table Number	Number of tables	Number of panels	Number of Cells per table
3.1.1	1	1	70
3.1.2	1	1	40
3.1.3	6	30	50
3.2.1	1	1	42
3.2.2	1	1	42
3.2.3	1	1	70
3.2.4	1	1	40
3.2.5	6	30	200
3.3.1	2	2	70
3.3.2	2	2	70
3.3.3	2	2	200
3.3.4	2	2	70
3.3.5	2	2	70
3.3.6	1	5	160
3.3.7	6	30	200
3.4.1	1	5	144
3.4.2	1	5	144
3.4.3	2	10	144
3.4.4	2	10	144
3.4.5	1	5	144
3.4.6	2	10	144
Total for Group 3:	44	156	-
4.1.1	1	1	72
4.1.2	1	1	72
4.1.3	1	1	91
4.1.4	1	1	48
4.1.5	6	18	120
4.1.6	1	3	96
4.2.1	2	6	168
4.2.2	6	30	200
4.3.1	2	6	168
4.3.2	6	30	200
4.4.1	1	5	192
4.4.2	1	1	70
4.4.3	1	5	144
4.4.4	1	4	108
4.4.5	6	30	200
4.5.1	1	1	56
4.5.2	1	6	160
4.5.3	1	1	80
4.5.4	1	5	160
4.5.5	6	30	160
4.5.6	6	24	120
4.6.1	1	5	60
Total for Group 4:	54	214	-

Table Number	Number of tables	Number of panels	Number of Cells per table
5.1.1	1	4	69
5.1.2	1	5	84
5.2.1	1	4	144
5.2.2	2	2	29
5.2.3	2	2	70
5.2.4	12	12	20
5.3.1	1	5	84
5.3.2	1	5	128
5.3.3	6	30	480
Total for Group 5:	27	69	-
TOTAL FOR GROUPS 1-5 OF CORE QUESTIONNAIRE:	235	806	

CHANGES FROM THE EARLIER TABULATION PLAN

For the most part, the following pro-forma tabulations are essentially the same as those in the previous version of the document (WFS/TECH.225). However, some re-numbering has been done in order to improve the logical sequence, and a few tables have been added. We provide a list of new and changed table numbers in order to facilitate the transition to the use of the present version.

New Number	Old Number
1.2.2	New
1.3.2	New
2.2.4	New
2.2.5	2.2.4
2.2.6	New
2.2.7	2.2.5
2.3.5	New
2.4.1	2.4.1a
2.4.2	2.4.2a
2.4.4	2.4.2b
2.4.5	2.4.1b
2.4.6	2.4.2c
3.2.1	3.3.1
3.2.2	3.3.2
3.2.3	3.3.3
3.2.4	3.3.4
3.2.5	3.3.5
3.3.1	3.4.1
3.3.2	3.4.2
3.3.3	New
3.3.4	3.4.3
3.3.5	3.4.4
3.3.6	3.4.5
3.3.7	3.4.6
3.4.1	3.2.1
3.4.2	3.2.2
3.4.3	3.2.3
3.4.4	3.2.4
3.4.5	3.2.5
3.4.6	3.2.6

New Number	Old Number
4.1.1	New
4.1.2	New
4.1.3	4.1.1
4.1.4	4.1.2
4.1.5	4.1.4
4.1.6	4.1.3
4.3.1a	4.3.1
4.3.1b	New
4.5.6	New
5.2.1	5.2.3
5.2.2	5.2.1
5.2.3	5.2.2
II.2	II.3+II.4
II.3	II.2+New
II.4	II.5
II.5	II.6
II.6	II.7
II.7	II.8a
II.8	II.8b

TABLE 1.1.1 THE PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO AGE AT FIRST MARRIAGE - BY CURRENT AGE

Current Age	Age at First Marriage							
	<15	15-17	18-19	20-21	22-24	25-29	30+	Base Frequency
<20								
20-24								
=				42 interior cells				
40-44								
45-49								
All								

(Note that some of the cells in the upper right half of the table will be vacant.)

Total of 1 table.
Total of 1 panel.

Comment: *Table 1.1.1 is subject to misinterpretation if no correction is made for censoring of the data. This term refers to the sample design's exclusion of any women who were not married by the date of the interview. To correct for this pattern of systematic exclusion, one must restrict attention to sub-samples which are homogeneous in their exposure to the risk of marriage. This will be achieved by selecting some pivotal age A and excluding, or blocking out, all women who (a) have not reached age A, or (b) were married after age A. The optimum choice of age A may vary from one country to another, but will usually be 25.0. It will be the value which excludes a minimum of the sample.*

Specifically, the following procedure is recommended. Firstly, the complete table 1.1.1 should be prepared and published. Secondly, one should select the optimum value of A, say 25.0, and block out all rows for ages less than A and all columns for age at marriage greater than A, leaving a rectangular lower-left hand portion. Trends in age at marriage should be discerned through a row-by-row comparison of percentages, based on row totals in this abbreviated table, and a row-by-row comparison of the mean age at marriage. It is this sub-table that should be described in the text.

TABLE 1.1.2 DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO CALENDAR YEAR OF BIRTH - BY AGE AT FIRST MARRIAGE IN SINGLE YEARS

Year of Birth

- - 1925 1926 - - (single years) - - 1965 - - All

Age at First Marriage

10
=
=
=
49
All

Approximately 800 interior cells

(Note that cells in the lower right triangle will be vacant. The entries in the table will be frequencies rather than percentages.)

Total of 1 table.
Total of 1 panel.

Comment: *Table 1.1.2 is one of a small number of single-year tables included in the report. Their detail will permit certain checks and calculations that are not possible with five-year data.*

This table differs from 1.1.1 in the following ways. Firstly, Age at First Marriage appears as a row rather than column variable. Secondly, Current Age is replaced by Year of Birth. These two variables are nearly (not exactly) equivalent, although they identify birth cohorts in opposite directions.

The present table is also subject to the censoring described for the former table and the user must guard against the same misinterpretation.

TABLE 1.1.3 MEAN AGE AT FIRST MARRIAGE OF THOSE WOMEN WHO FIRST MARRIED BEFORE AGE 25 - BY BACKGROUND VARIABLE AND CURRENT AGE

Background Variable

Current Age	
25-29	Number of interior cells = 5 X Number of categories of Background Variable
30-34	
=	
=	
45-49	
25-49	

Background Variables:

Standard Set
Childhood Type of Place of Residence
Work Status Before First Marriage
Occupation Before First Marriage

Total of 9 tables.
Total of 9 panels.

TABLE 1.2.1 THE PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO STATUS OF FIRST MARRIAGE - BY YEARS SINCE FIRST MARRIAGE AND AGE AT FIRST MARRIAGE

Panel 1: Age at First Marriage <20
Panel 2: Age at First Marriage ≥20
Panel 3: All Ages at First Marriage

Years Since First Marriage	First Marriage Undissolved	First Marriage Dissolved				Base Frequency
		By death of Husband	By Divorce	By Separation	Total (Percent)	
<5						
5-9						
10-14						
=		52 interior cells				
=						
25-29						
30+						
All						

Total of 1 table.
Total of 3 panels.

TABLE 1.2.2 THE PERCENTAGE OF ALL EVER-MARRIED WOMEN WHOSE FIRST MARRIAGE WAS DISSOLVED - BY BACKGROUND VARIABLE AND YEARS SINCE FIRST MARRIAGE

Background Variable

Years Since First Marriage	
	<5
	5-9
	=
	=
	25-29
	30+
	All

Number of interior cells = 12 X Number of categories of Background Variable

Background Variables:

Standard Set

Total of 6 tables.
Total of 6 panels.

TABLE 1.3.1 THE PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO THE NUMBER OF TIMES MARRIED - BY YEARS SINCE FIRST MARRIAGE AND AGE AT FIRST MARRIAGE

Panel 1: Age at first marriage <20
Panel 2: Age at first marriage ≥20
Panel 3: All ages at first marriage

Number of Times Married

Years Since First Marriage	1	2	3	4 or more	Mean	Base Frequency
<5						
5-9						
- - -						
48 interior cells						
25-29						
30+						
All						

Total of 1 table.
Total of 3 panels.

TABLE 1.3.2 OF ALL EVER-MARRIED WOMEN WHOSE FIRST MARRIAGE WAS DISSOLVED, THE PERCENTAGE WHO RE-MARRIED - BY BACKGROUND VARIABLE AND YEARS SINCE FIRST MARRIAGE

Background Variable

Years Since First Marriage	
	<5
	5-9
	-
	-
	25-29
	30+
	All

Number of interior cells = 12 X Number of categories of Background Variable

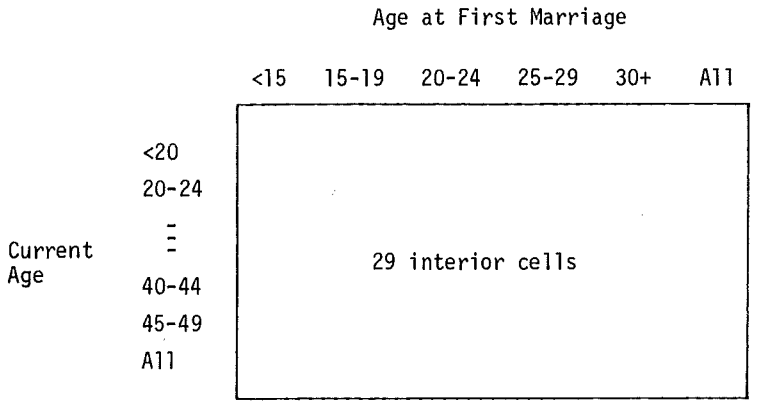
Background Variables:

Standard Set

Total of 6 tables.
Total of 6 panels.

Comment: *In a thorough analysis of re-marriage a control on Years Since Dissolution of First Marriage would be preferable to a control on Years Since First Marriage.*

TABLE 1.4.1 THE AVERAGE PERCENTAGE OF THE TIME SINCE FIRST MARRIAGE WHICH HAS BEEN SPENT IN THE MARRIED STATE BY ALL EVER-MARRIED WOMEN - BY AGE AT FIRST MARRIAGE AND CURRENT AGE



(Note that some cells in the upper right corner of the table will be vacant.)

Total of 1 table.
Total of 1 panel.

TABLE 1.4.2 THE AVERAGE PERCENTAGE OF THE TIME SINCE FIRST MARRIAGE WHICH HAS BEEN SPENT IN THE MARRIED STATE BY ALL EVER-MARRIED WOMEN - BACKGROUND VARIABLE, CURRENT AGE AND AGE AT FIRST MARRIAGE

Panel 1: Age at first marriage <20
Panel 2: Age at first marriage ≥20
Panel 3: All ages at first marriage

Background Variable

Current Age

<20
20-24
=
=
40-44
45-49
All

Number of interior cells = 13 X Number of categories of Background Variable

Background Variables:

Standard Set

Total of 6 tables.
Total of 18 panels.

TABLE 1.5.1 THE PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO CURRENT MARITAL STATUS - BY YEARS SINCE FIRST MARRIAGE AND AGE AT FIRST MARRIAGE

Panel 1: Age at First Marriage <20
Panel 2: Age at First Marriage ≥20
Panel 3: All ages at First Marriage

Current Marital Status

Years Since First Marriage	Married	Not Married				Base Frequency
		Widowed	Divorced	Separated	Total (Percent)	
<5						
5-9						
=		56 interior cells				
=						
25-29						
30+						
All						

Total of 1 table.
Total of 3 panels.

TABLE 1.5.2 THE PERCENTAGE OF ALL EVER-MARRIED WOMEN WHO ARE CURRENTLY MARRIED - BY BACKGROUND VARIABLE, YEARS SINCE FIRST MARRIAGE AND AGE AT FIRST MARRIAGE

Panel 1: Age at First Marriage <20
Panel 2: Age at First Marriage ≥20
Panel 3: All Ages at First Marriage

Background Variable

Years Since First Marriage	
	<5
	5-9
	-
	-
	25-29
	30+
	All

Number of interior cells = 14 X Number of categories of Background Variable

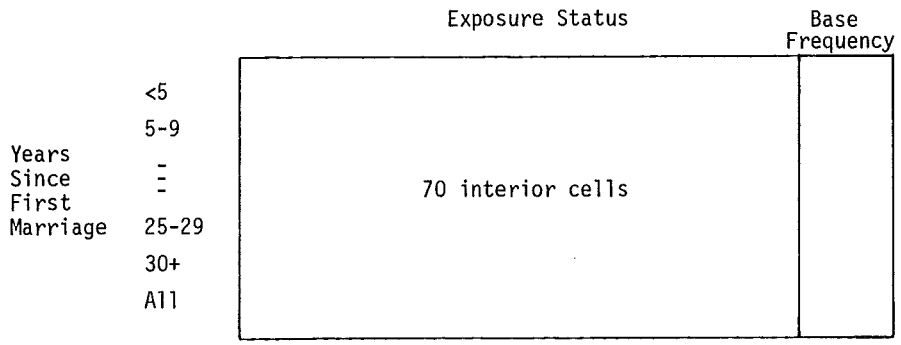
Background Variables:

Standard Set

Total of 6 tables.
Total of 18 panels.

TABLE 1.6.1 THE PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO EXPOSURE STATUS - BY YEARS SINCE FIRST MARRIAGE AND AGE AT FIRST MARRIAGE

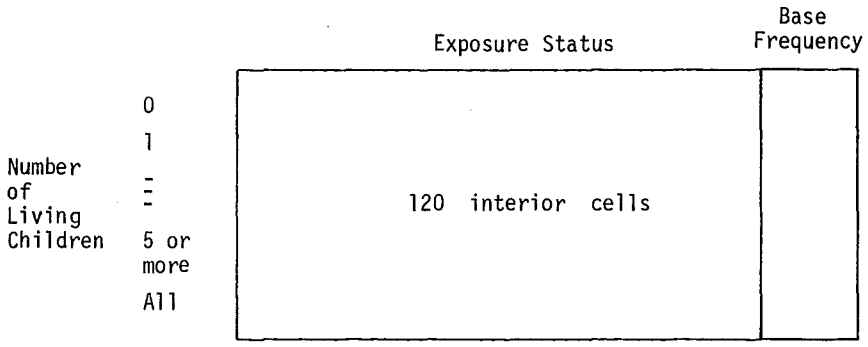
Panel 1: Age at First Marriage <20
Panel 2: Age at First Marriage ≥20
Panel 3: All Ages at First Marriage



Total of 1 table.
Total of 3 panels.

TABLE 1.6.2 THE PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO EXPOSURE STATUS - BY NUMBER OF LIVING CHILDREN AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Total of 1 table.
Total of 5 panels.

TABLE 1.6.3 THE PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO EXPOSURE STATUS - BY BACKGROUND VARIABLE AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages

Background Variable	Exposure Status	Base Frequency
	Number of interior cells = 20 X Number of categories of Background Variable	

Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

TABLE 2.1.1 THE PERCENT DISTRIBUTION OF WOMEN WHO FIRST MARRIED AT LEAST FIVE YEARS AGO ACCORDING TO THE INTERVAL BETWEEN FIRST MARRIAGE AND FIRST BIRTH - BY AGE AT FIRST MARRIAGE AND YEARS SINCE FIRST MARRIAGE

Panel 1: Years Since First Marriage 5-9
Panel 2: Years Since First Marriage 10-19
Panel 3: Years Since First Marriage 20+
Panel 4: All

Interval from Marriage to First Birth

Age at Marriage	Negative Interval	0-7 Mths.	8-11 Mths.	1 Yr.	2 Yrs.	3 Yrs.	4 Yrs.	Mean Length*	% with No Child in Five Years	Base Frequency
<15										
15-17										
18-19										
20-21			140 interior cells							
22-24										
25-29										
30+										
All										

*Note: *To be restricted to post-marital births.*

Total of 1 table.
Total of 4 panels.

Comment: *In this table, the term "Negative Interval" refers to first births which preceded marriage. The first year of marriage is divided into two parts, 0-7 months and 8-11 months; births in the first of these two parts were premaritally conceived and may reasonably be considered as anticipated by the couple at the time of the marriage. Births in the second part of the first year were more likely unanticipated. The percentages in each row have, as their denominator, the total number of women married more than five years and with the specified age at marriage and number of years since marriage.*

TABLE 2.1.2 MEAN NUMBER OF CHILDREN BORN BEFORE OR WITHIN FIRST FIVE YEARS OF FIRST MARRIAGE - BY BACKGROUND VARIABLE, AGE AT FIRST MARRIAGE AND YEARS SINCE FIRST MARRIAGE. CONFINED TO WOMEN WHO FIRST MARRIED AT LEAST FIVE YEARS AGO

Panel 1: Years Since First Marriage 5-9
Panel 2: Years Since First Marriage 10-19
Panel 3: Years Since First Marriage 20+
Panel 4: All

Background Variable

Age at First Marriage	
<15	Number of interior cells = 20 X Number of categories of Background Variable
15-17	
18-19	
20-21	
22-24	
25-29	
30+	
All	

Background Variables:

Standard Set
Childhood Type of Place of Residence
Work Status Before First Marriage
Occupation Before First Marriage

Total of 9 tables.
Total of 36 panels.

Comment: *Table 2.1.2 is based on the same subpopulation as Table 2.1.1. That is, we are considering events in the first five years of the first marriage, and women who have not experienced five years since their first marital union are excluded. Children born prior to the first marriage should be included in the calculation.*

If there is a high incidence of premarital births, then this table should be modified or enlarged to separate marital and premarital births.

TABLE 2.2.1a THE PERCENT DISTRIBUTION OF CURRENTLY MARRIED ACCORDING TO THE NUMBER OF CHILDREN EVER BORN - BY CURRENT AGE

TABLE 2.2.1b THE PERCENT DISTRIBUTION OF ALL EVER-MARRIED ACCORDING TO THE NUMBER OF CHILDREN EVER BORN - BY CURRENT AGE

Number of Children Ever Born

Current Age	0 1 --- 18 or more*	Mean	Standard Deviation	Percentage Male	Base Frequency
<20					
20-24					
⋮	133 interior cells				
40-44					
45-49					
All					

**It is intended that the distribution should extend to the maximum recorded value.*

Total of 2 tables.
Total of 2 panels.

Comment: *Tables 2.2.1 and 2.2.2 do not refer to the reproductive behaviour of a cohort of women as it grows older. Rather, they describe the cumulative fertility of women currently of varying ages and marital durations. In interpreting these tables one must take care not to imply that they indicate the process of family formation by any real cohort of women.*

The percentage male (which may be restated as a proportion or as the sex ratio, if more convenient) refers to the sex of children at birth, rather than the sex of those still living.

TABLE 2.2.2a THE PERCENT DISTRIBUTION OF CURRENTLY MARRIED ACCORDING TO THE NUMBER OF CHILDREN EVER BORN - BY YEARS SINCE FIRST MARRIAGE

TABLE 2.2.2b THE PERCENT DISTRIBUTION OF ALL EVER-MARRIED ACCORDING TO THE NUMBER OF CHILDREN EVER BORN - BY YEARS SINCE FIRST MARRIAGE

Number of Children Ever Born

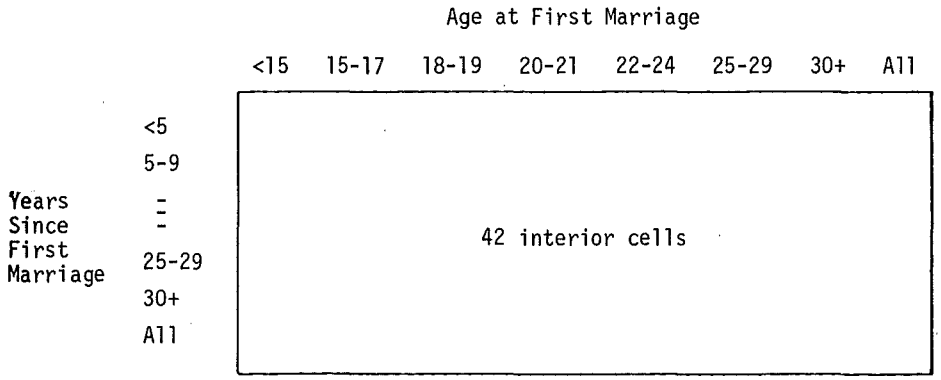
Years Since First Marriage	0 1 --- 18 or more*	Mean	Standard Deviation	Percentage Male	Base Frequency
<5					
5-9					
=					
=	133 interior cells				
25-29					
30+					
All					

**It is intended that the distribution should extend to the maximum recorded value.*

Total of 2 tables.
Total of 2 panels.

TABLE 2.2.3a MEAN NUMBER OF CHILDREN EVER BORN TO CURRENTLY MARRIED WOMEN - BY AGE AT FIRST MARRIAGE AND YEARS SINCE FIRST MARRIAGE

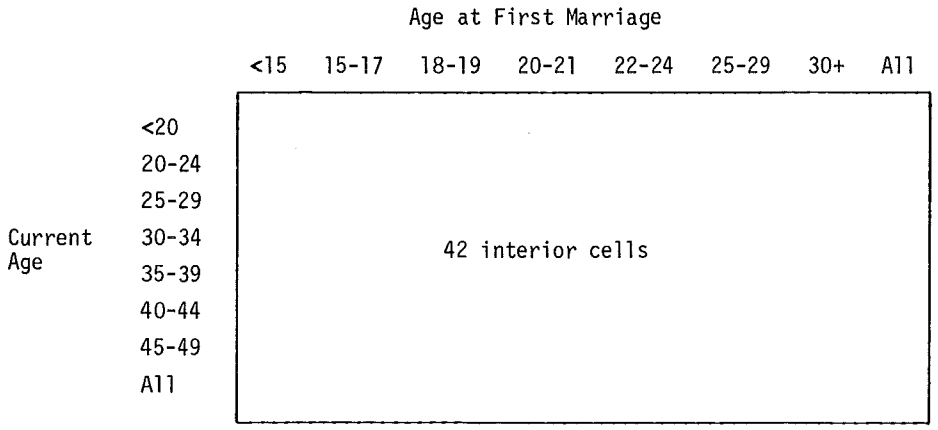
TABLE 2.2.3b MEAN NUMBER OF CHILDREN EVER BORN TO ALL EVER-MARRIED WOMEN - BY AGE AT FIRST MARRIAGE AND YEARS SINCE FIRST MARRIAGE



Total of 2 tables.
Total of 2 panels.

TABLE 2.2.4a MEAN NUMBER OF CHILDREN EVER BORN TO CURRENTLY MARRIED WOMEN - BY AGE AT FIRST MARRIAGE AND CURRENT AGE

TABLE 2.2.4b MEAN NUMBER OF CHILDREN EVER BORN TO ALL EVER-MARRIED WOMEN - BY AGE AT FIRST MARRIAGE AND CURRENT AGE



(Note that cells in the upper right will be vacant.)

Total of 2 tables.
Total of 2 panels.

TABLE 2.2.5 PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO THE NUMBER OF CHILDREN EVER BORN - BY BACKGROUND VARIABLE AND YEARS SINCE FIRST MARRIAGE

Panel 1: Years Since First Marriage <5
Panel 2: Years Since First Marriage 5-9
Panel 3: Years Since First Marriage 10-14
Panel 4: Years Since First Marriage 15-19
Panel 5: Years Since First Marriage 20-24
Panel 6: Years Since First Marriage 25-29
Panel 7: Years Since First Marriage 30+
Panel 8: All

Background Variable	Number of Children Ever Born: 0	1	---	9 or more	Mean	Standard Deviation	Base Frequency
	Number of interior cells = 70 X Number of categories of Background Variable						

Background Variables:

Standard Set

Total of 6 tables.
Total of 48 panels.

TABLE 2.2.6 MEAN NUMBER OF CHILDREN EVER BORN TO ALL EVER-MARRIED WOMEN - BY BACKGROUND VARIABLE, AGE AT FIRST MARRIAGE, AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages

Age at First Marriage	Background Variable
<15	Number of interior cells = 26 X Number of categories of Background Variable
15-17	
18-19	
20-21	
22-24	
25-29	
30+	
All	

Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

Comment: *In some countries the distributions of some background variables will depend very much on current age. Education, in particular, may be rapidly expanding and be more concentrated among younger than among older women.*

When there are rapid trends of this sort, ten-year intervals of age may be too crude; there will be a residual association within the ten-year intervals. For example, better-educated women will be concentrated at the younger end of each age interval, and for that reason alone may be expected to have lower parity. In order to avoid exaggerating the importance of education in such a situation, five-year intervals of age should be employed.

TABLE 2.2.7 MEAN NUMBER OF CHILDREN EVER BORN TO ALL EVER-MARRIED WOMEN - BY BACKGROUND VARIABLE 1, BACKGROUND VARIABLE 2 AND YEARS SINCE FIRST MARRIAGE

Panel 1: Years Since First Marriage <10
Panel 2: Years Since First Marriage 10-19
Panel 3: Years Since First Marriage 20+
Panel 4: All

Background Variable No. 1

Background Variable No. 2

Number of interior cells = 3 X Number of Categories of Background Variable No. 1 X Number of Categories of Background Variable No. 2	

Background Variables:

Standard Set

Total of 15 tables.
Total of 60 panels.

Comment: *For the reasons given in the comment to Table 2.2.6, five-year intervals of Years Since First Marriage should be used for tables involving a variable which has shown rapid time trends.*

Secondly, it should not be necessary actually to cross-tabulate all pairs of background variables. The country may choose to omit pairs of little interest in order to reduce the bulk of tabulation.

TABLE 2.3.1a PERCENT DISTRIBUTION OF CURRENTLY MARRIED WOMEN ACCORDING TO THE NUMBER OF LIVING CHILDREN - BY CURRENT AGE

TABLE 2.3.1b PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO THE NUMBER OF LIVING CHILDREN - BY CURRENT AGE

		Number of Living Children							
		0	1	---	9 or more	Mean	Standard Deviation	Percentage Male	Base Frequency
Current Age	<20								
	20-24								
	:			70 interior cells					
	40-44								
	45-49								
	All								

Total of 2 tables.
Total of 2 panels.

Comment: *In tables 2.3.1 and 2.3.2, the percentage male refers to the sex of those children still living, rather than the sex of children at birth.*

TABLE 2.3.2a PERCENT DISTRIBUTION OF CURRENTLY MARRIED WOMEN ACCORDING TO THE NUMBER OF LIVING CHILDREN - BY YEARS SINCE FIRST MARRIAGE

TABLE 2.3.2b PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO THE NUMBER OF LIVING CHILDREN - BY YEARS SINCE FIRST MARRIAGE

Years Since First Marriage	Number of Living Children: 0 1 --- 9 or more	Mean	Standard Deviation	Percentage Male	Base Frequency
<5					
5-9					
=					
=					
25-29	70 interior cells				
30+					
All					

Total of 2 tables.
Total of 2 panels.

TABLE 2.3.3 PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO THE NUMBER OF LIVING CHILDREN - BY NUMBER OF CHILDREN EVER BORN AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages

Number of Living Children

Number of Children Ever Born	0	1	---	9 or more	Mean Number	Base Frequency
0						
1						
2						
⋮			216 interior cells			
9 or more						
All						

(Note that cells in the upper right of each panel will be vacant.)

Total of 1 table.
Total of 5 panels.

TABLE 2.3.4 FOR ALL EVER-MARRIED WOMEN, THE MEAN NUMBER OF CHILDREN EVER BORN, STILL ALIVE AND DECEASED - BY CURRENT AGE IN SINGLE YEARS

Current Age of Woman	Mean Number of Living Children	Mean Number of Deceased Children	TOTAL: Mean Number of Children Ever Born	Base Frequency (Number of Women)
10				
11				
:		80 interior cells		
49				
All				

Total of 1 table.
Total of 1 panel.

TABLE 2.3.5 LIVE BIRTHS TO EVER-MARRIED WOMEN IN THE PAST SEVEN YEARS CLASSIFIED ACCORDING TO YEAR OF BIRTH, SURVIVORSHIP STATUS, AND AGE AT DEATH.

		Number of Births	Number Still Alive	Age at Death							
				Completed Months				Completed Years			
				0	1-2	3-5	6-11	0**	1	2-4	5+
Calendar Year of Child's Birth*	1970										
	1971										X
	1972										X
	1973			48 interior cells							X
	1974									X	X
	1975								X	X	X
	1976										

Illustrated for a survey conducted in 1976. "X" indicates a cell which is vacant.

***This column is the sum of the preceding four columns.*

Total of 1 table.
Total of 1 panel.

Comment: *It would be unwise to attempt to examine fully the subject of infant and child mortality, or to attempt to measure historical trends in this report. The purpose of this table is simply to enable computation of the current infant death rate from the birth history.*

The table consists of a classification of all live births in the preceding seven years according to year of birth and age at death (if applicable). To compute death rates with acceptable sampling precision, it will be necessary to aggregate over several years of births. However, to avoid truncation effects, the aggregation should be limited to calendar years whose births have been fully exposed to the ages in question.

Thus, for an infant death rate, births in the year of interview and the preceding year should be ignored. If the survey was conducted in 1976, then the survivorship data for births in 1970-1974 could be aggregated. Any discussion of the infant death rate in the text should be accompanied by a warning of the possibility of under-reporting of births which resulted in early deaths and a consequent underestimation of mortality.

TABLE 2.4.1 MEAN NUMBER OF CHILDREN BORN IN THE PAST FIVE YEARS TO WOMEN WHO HAVE BEEN CONTINUOUSLY IN THE MARRIED STATE FOR THE PAST FIVE YEARS - BY NUMBER OF LIVING CHILDREN FIVE YEARS AGO AND CURRENT AGE

Age of Woman		Number of Living Children Five Years Ago				
Currently	Five Years Ago	0	1	---	9 or more	All
<20	<15					
20-24	15-19					
⋮	⋮			70 interior cells		
40-44	35-39					
45-49	40-44					
All	-					

Total of 1 table.
Total of 1 panel.

Comment: *The row and column variables for this table permit us to "backdate" the women to their age and family size five years ago. The cell entries describe the fertility since then of women continuously exposed to the risk of conception and birth.*

TABLE 2.4.2 MEAN NUMBER OF CHILDREN BORN IN THE PAST FIVE YEARS TO WOMEN WHO HAVE BEEN CONTINUOUSLY IN THE MARRIED STATE FOR THE PAST FIVE YEARS - BY AGE AT FIRST MARRIAGE AND CURRENT AGE

Age of Woman		Age at First Marriage							
Currently	Five Years Ago	<15	15-17	18-19	20-21	22-24	25-29	30+	All
<20	<15								
20-24	15-19								
⋮	⋮			36 interior cells					
40-44	35-39								
45-49	40-44								
All	-								

(Note that some cells in the upper right corner will be vacant.)

Total of 1 table.
Total of 1 panel.

TABLE 2.4.3 MEAN NUMBER OF CHILDREN BORN IN THE PAST FIVE YEARS TO WOMEN WHO HAVE BEEN CONTINUOUSLY IN THE MARRIED STATE FOR THE PAST FIVE YEARS - BY BACKGROUND VARIABLE AND CURRENT AGE

Age of Woman		Background Variable
Currently	Five Years Ago	
<20	<15	Number of interior cells = 7 X Number of categories of Background Variable
20-24	15-19	
⋮	⋮	
40-44	35-39	
45-49	40-44	
All	-	

Background Variables:

Standard Set

Total of 6 tables.
Total of 6 panels.

TABLE 2.4.4 PERCENTAGE MALE, OF CHILDREN BORN IN THE PAST FIVE YEARS TO WOMEN WHO HAVE BEEN CONTINUOUSLY IN THE MARRIED STATE FOR THE PAST FIVE YEARS - BY AGE AT FIRST MARRIAGE AND CURRENT AGE

Age of Woman		Age at First Marriage							
Currently	Five Years Ago	<15	15-17	18-19	20-21	22-24	25-29	30+	All
<20	<15								
20-24	15-19								
=	=			36 interior cells					
40-44	35-39								
45-49	40-44								
All	-								

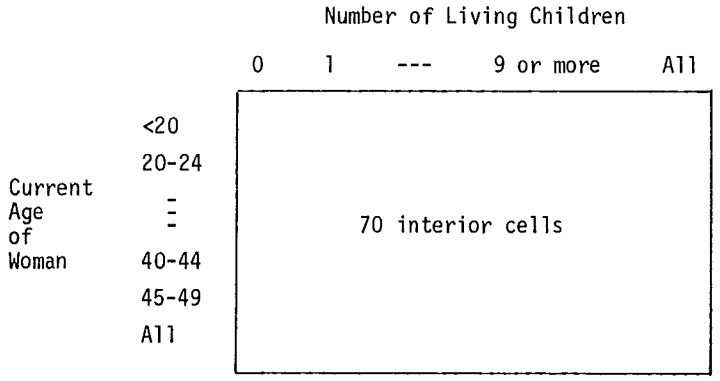
(Note that some cells in the upper right corner will be vacant.)

Total of 1 table.
Total of 1 panel.

Comment: *This table refers, in corresponding cells, to the births in Table 2.4.2. It is of secondary interest and may be combined with Table 2.4.2 as an extra entry in each cell. There is no recommendation for a table on the sex ratio analogous to Table 2.4.1. It is possible that the sex of a child is related to birth order, but the column variable of Table 2.4.1 is an inadequate indicator of birth order.*

The reference is to the sex of children at birth, rather than to the sex of those currently living.

TABLE 2.4.5 THE PERCENTAGE OF CURRENTLY MARRIED WOMEN REPORTING A CURRENT PREGNANCY - BY NUMBER OF LIVING CHILDREN AND CURRENT AGE



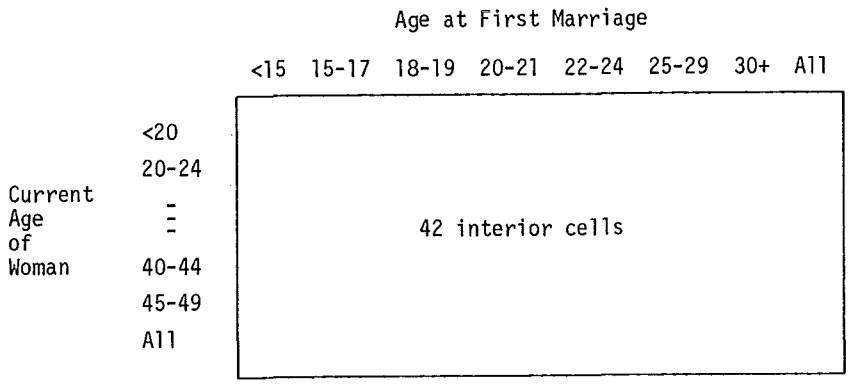
(Note that some cells in the upper right corner will be vacant.)

Total of 1 table.
Total of 1 panel.

Comment: *Tables 2.4.5 and 2.4.6, which describe the percentage of women reporting a current pregnancy, are by no means to be taken at face value. Definitions of the pregnant state have quasi-medical components and even where these are absent, a woman may be uncertain about, or reluctant to report, a pregnancy in early stages. The percentages will be small, often statistically unstable, and subject to considerable random variation. In some countries, however, the percentage pregnant may eventually provide a ready index, after adjustment, to the level of current fertility.*

Users who would prefer to have all ever-married women in the denominator are referred to Section 1.6, on Exposure Status. One category of that variable consists of currently pregnant women.

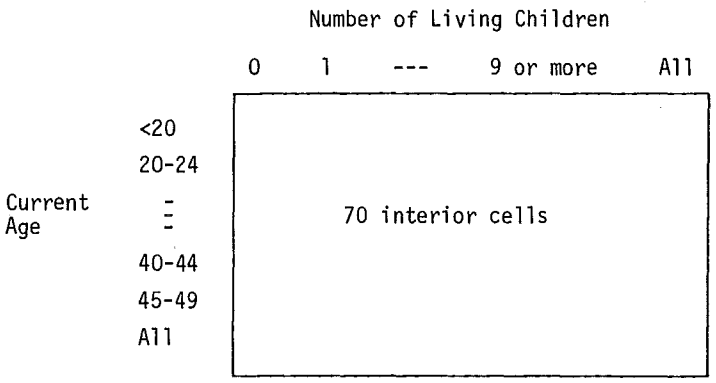
TABLE 2.4.6 PERCENTAGE OF CURRENTLY MARRIED WOMEN REPORTING A CURRENT PREGNANCY - BY AGE AT FIRST MARRIAGE AND CURRENT AGE



(Note that some cells in the upper right corner will be vacant.)

Total of 1 table.
Total of 1 panel.

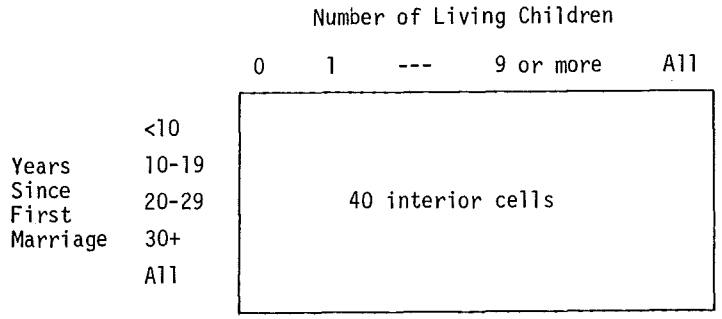
TABLE 3.1.1 THE PERCENTAGE OF CURRENTLY MARRIED "FECUND"* WOMEN WHO WANT NO MORE CHILDREN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY) AND CURRENT AGE



Total of 1 table.
Total of 1 panel.

Here, and subsequently, 'currently married "fecund" women' refers to women who are currently married and (a) pregnant, or (b) sterilized for contraceptive purposes, or (c) believe themselves physiologically capable of having (more) children. Please see the discussion of the variable Exposure Status in the Variable List.

TABLE 3.1.2 THE PERCENTAGE OF CURRENTLY MARRIED "FECUND" WOMEN WHO WANT NO MORE CHILDREN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY), AND YEARS SINCE FIRST MARRIAGE



Total of 1 table.
Total of 1 panel.

TABLE 3.1.3 THE PERCENTAGE OF CURRENTLY MARRIED "FECUND" WOMEN WHO WANT NO MORE CHILDREN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY), BACKGROUND VARIABLE AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages

Background Variable	Number of Living Children: 0	1	---	9 or more	All
	Number of interior cells = 10 X Number of categories of Background Variable				

Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

TABLE 3.2.1 PERCENT DISTRIBUTION OF CURRENTLY MARRIED "FECUND" WOMEN ACCORDING TO THE NUMBER OF ADDITIONAL CHILDREN WANTED - BY CURRENT AGE

Additional Number of Children Wanted

Current Age	0 1 2 3 4 5+	Other Response Categories	Mean*	Standard Deviation*	Base Frequency
<20					
20-24					
⋮	42 interior cells*				
40-44					
45-49					
All					

Based on numerical responses only.

Total of 1 table.
Total of 1 panel.

Comment: *This table includes columns for any non-numerical response categories which may have been employed, even after probing (for example, "As many as God wills"). Numerical calculations necessarily have as their base those women who gave numerical responses. Similar comments apply to 3.2.2, 3.3.1 and 3.3.2.*

TABLE 3.2.2 PERCENT DISTRIBUTION OF CURRENTLY MARRIED "FECUND" WOMEN ACCORDING TO THE NUMBER OF ADDITIONAL CHILDREN WANTED - BY YEARS SINCE FIRST MARRIAGE

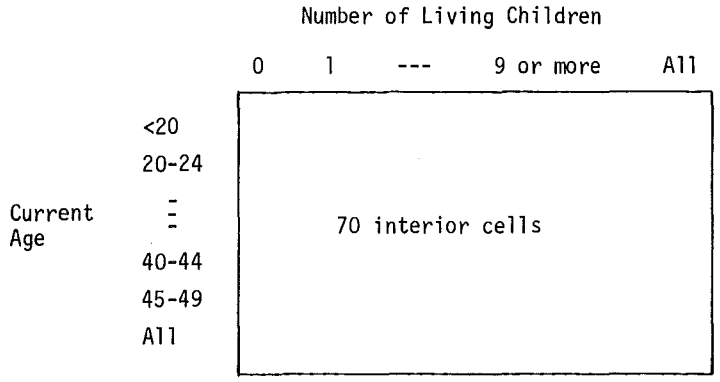
Additional Number of Children Wanted

Years Since First Marriage	0 1 2 3 4 5+	Other Response Categories	Mean*	Standard Deviation*	Base Frequency
<5					
5-9					
:	42 interior cells*				
25-29					
30+					
All					

Based on numerical responses only.

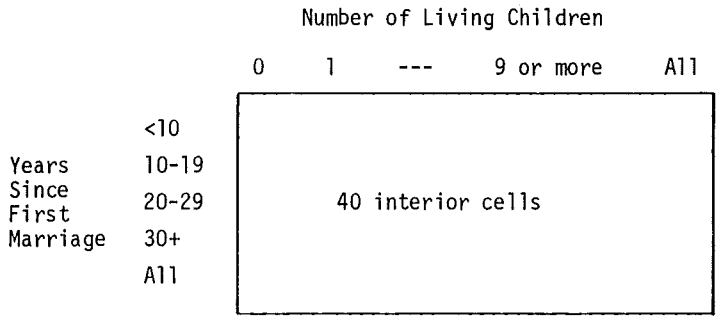
Total of 1 table.
Total of 1 panel.

TABLE 3.2.3 MEAN ADDITIONAL NUMBER OF CHILDREN WANTED BY CURRENTLY MARRIED "FECUND" WOMEN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY) AND CURRENT AGE



Total of 1 table.
Total of 1 panel.

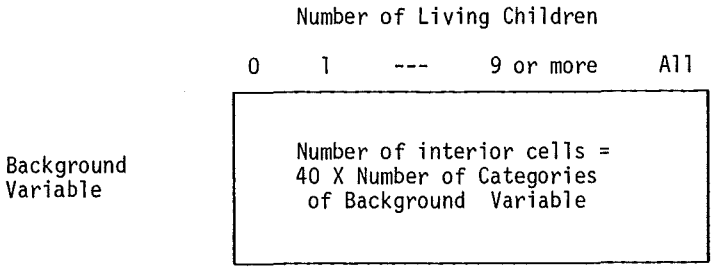
TABLE 3.2.4 MEAN ADDITIONAL NUMBER OF CHILDREN WANTED BY CURRENTLY MARRIED "FECUND" WOMEN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY) AND YEARS SINCE FIRST MARRIAGE



Total of 1 table.
Total of 1 panel.

TABLE 3.2.5 MEAN ADDITIONAL NUMBER OF CHILDREN WANTED BY CURRENTLY MARRIED "FECUND" WOMEN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY), BACKGROUND VARIABLE, AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

TABLE 3.3.1a PERCENT DISTRIBUTION OF CURRENTLY MARRIED WOMEN ACCORDING TO TOTAL NUMBER OF CHILDREN DESIRED - BY CURRENT AGE

TABLE 3.3.1b PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO TOTAL NUMBER OF CHILDREN DESIRED - BY CURRENT AGE

Total Number of Children Desired

Current Age	0 1 --- 9 or more	Other Response Categories)	Mean *	Standard Deviation*	Base Frequency
<20					
20-24					
:	70 interior cells*				
40-44					
45-49					
All					

Based on numerical responses only.

Total of 2 tables.
Total of 2 panels.

TABLE 3.3.2a PERCENT DISTRIBUTION OF CURRENTLY MARRIED WOMEN ACCORDING TO TOTAL NUMBER OF CHILDREN DESIRED - BY YEARS SINCE FIRST MARRIAGE

TABLE 3.3.2b PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO TOTAL NUMBER OF CHILDREN DESIRED - BY YEARS SINCE FIRST MARRIAGE

Total Number of Children Desired

Years Since First Marriage	0 1 --- 9 or more	(Other Response Categories)	Mean *	Standard Deviation*	Base Frequency
<5					
5-9					
-					
-	70 interior cells*				
25-29					
30+					
All					

Based on numerical responses only.

Total of 2 tables.
Total of 2 panels.

TABLE 3.3.3a PERCENT DISTRIBUTION OF CURRENTLY MARRIED WOMEN ACCORDING TO TOTAL NUMBER OF CHILDREN DESIRED - BY NUMBER OF LIVING CHILDREN

TABLE 3.3.3b PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO TOTAL NUMBER OF CHILDREN DESIRED - BY NUMBER OF LIVING CHILDREN

Total Number of Children Desired

Number of Living Children	0 1 --- 9 or more**	Not Stated	(Other Response Categories)	Mean *	Standard Deviation*	Base Frequency
0						
1						
- -	Approximately 200 interior cells*					
18** or more						
All						

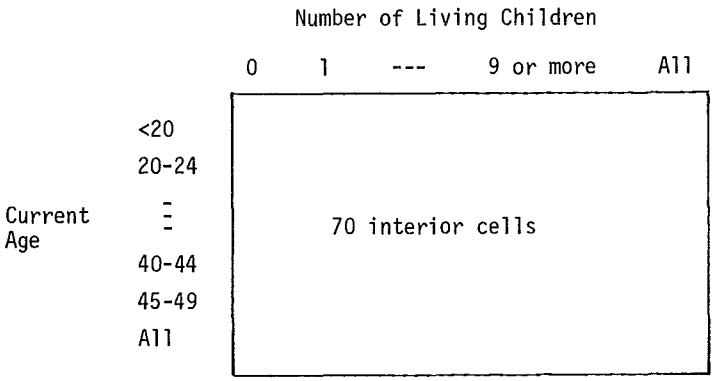
Based on numerical responses only.

***It is intended that the distribution should extend to the maximum recorded value, so that the proportions of women whose achieved family size is greater than, equal to and less than desired size may be computed.*

Total of 2 tables.
Total of 2 panels.

TABLE 3.3.4a. MEAN TOTAL NUMBER OF CHILDREN DESIRED BY CURRENTLY MARRIED WOMEN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY) AND CURRENT AGE

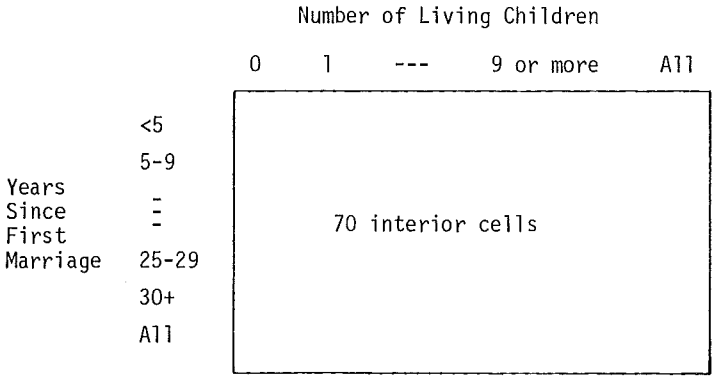
TABLE 3.3.4b MEAN TOTAL NUMBER OF CHILDREN DESIRED BY ALL EVER-MARRIED WOMEN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY) AND CURRENT AGE



Total of 2 tables.
Total of 2 panels.

TABLE 3.3.5a MEAN TOTAL NUMBER OF CHILDREN DESIRED BY CURRENTLY MARRIED WOMEN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY) AND YEARS SINCE FIRST MARRIAGE

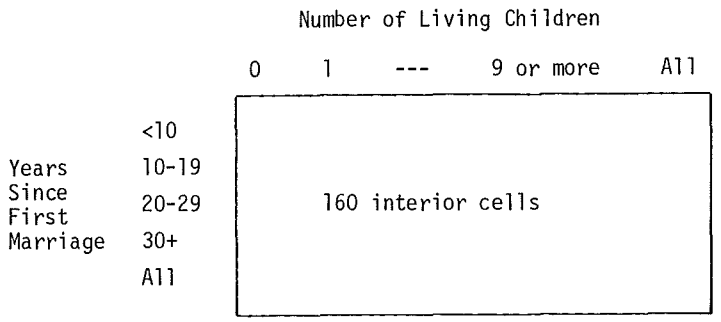
TABLE 3.3.5b MEAN TOTAL NUMBER OF CHILDREN DESIRED BY ALL EVER-MARRIED WOMEN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY) AND YEARS SINCE FIRST MARRIAGE



Total of 2 tables.
Total of 2 panels.

TABLE 3.3.6 MEAN TOTAL NUMBER OF CHILDREN DESIRED BY CURRENTLY MARRIED WOMEN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY), YEARS SINCE FIRST MARRIAGE AND AGE AT FIRST MARRIAGE

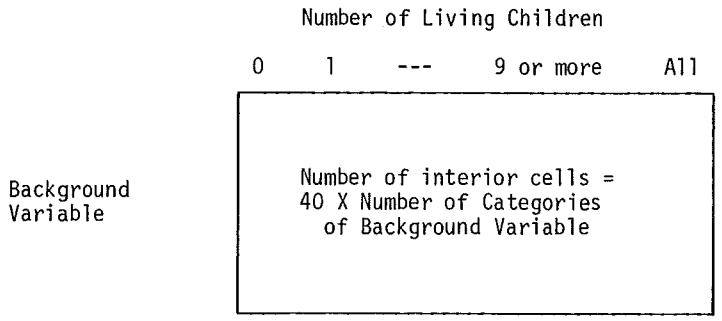
Panel 1: Age at First Marriage <15
Panel 2: Age at First Marriage 15-19
Panel 3: Age at First Marriage 20-24
Panel 4: Age at First Marriage 25-29
Panel 5: Age at First Marriage 30+
Panel 6: All Ages



Total of 1 table.
Total of 5 panels.

TABLE 3.3.7 MEAN TOTAL NUMBER OF CHILDREN DESIRED BY CURRENTLY MARRIED WOMEN - BY NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY), BACKGROUND VARIABLE AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



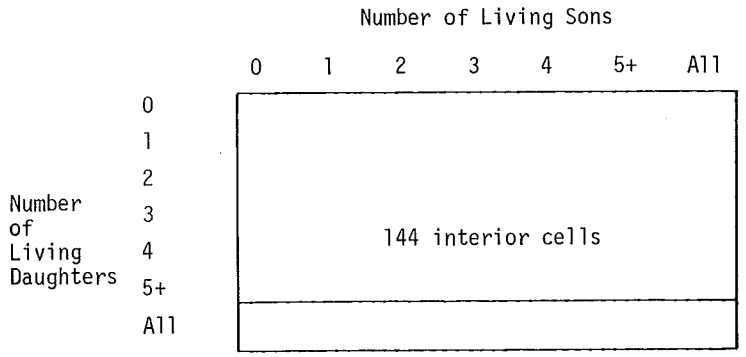
Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

TABLE 3.4.1 THE PERCENTAGE OF CURRENTLY MARRIED "FECUND" NON-PREGNANT WOMEN WHO WANT NO MORE CHILDREN - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND CURRENT AGE

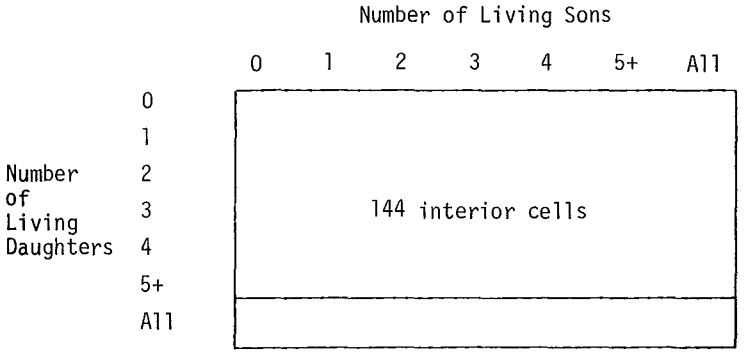
Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Total of 1 table.
Total of 5 panels.

TABLE 3.4.2 THE PERCENTAGE OF CURRENTLY MARRIED "FECUND" NON-PREGNANT WOMEN WHO WANT NO MORE CHILDREN - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND YEARS SINCE FIRST MARRIAGE

Panel 1: Years Since First Marriage <5
Panel 2: Years Since First Marriage 5-9
Panel 3: Years Since First Marriage 10-19
Panel 4: Years Since First Marriage 20+
Panel 5: All

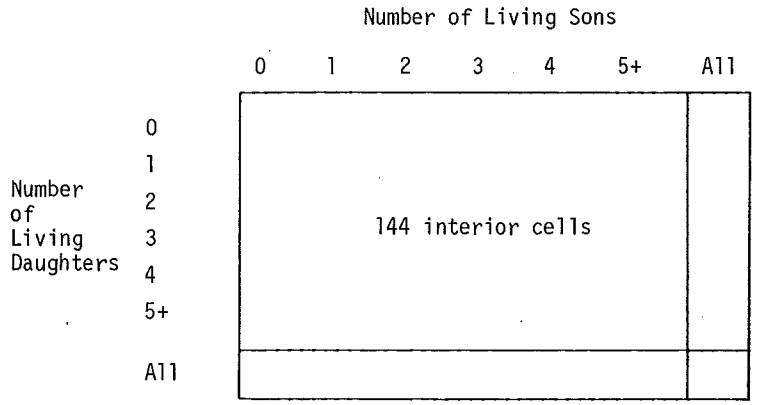


Total of 1 table.
Total of 5 panels.

TABLE 3.4.3a OF CURRENTLY MARRIED "FECUND" NON-PREGNANT WOMEN WHO WANT ANOTHER CHILD, THE PERCENTAGE PREFERRING A BOY - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND CURRENT AGE

TABLE 3.4.3b OF CURRENTLY MARRIED "FECUND" NON-PREGNANT WOMEN WHO WANT ANOTHER CHILD, THE PERCENTAGE PREFERRING A GIRL - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Total of 2 tables.
Total of 10 panels.

Comment: *The question on sex preference for the next birth includes these categories: "Boy", "Girl", "Either" and "Not Stated". Women who are classified as "Not Stated" (normally a quite small proportion) are excluded from Tables 3.4.3 and 3.4.4.*

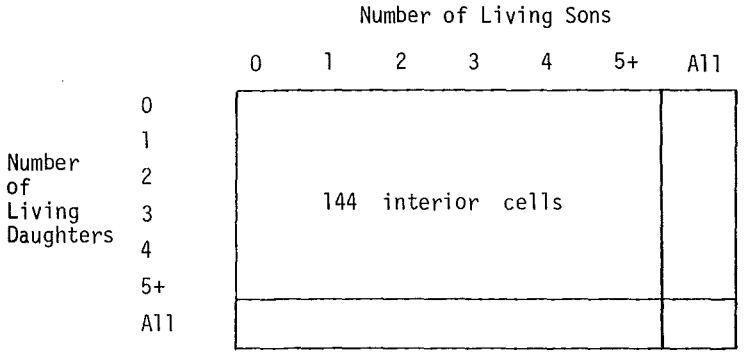
Tables 3.4.3a and 3.4.3b, respectively, give the percentages wanting a boy next and wanting a girl next. From these two tables it is easy to determine the percentage who is indifferent, i.e., who responded "Either". This will be 100% less the sum of the corresponding entries in Tables 3.4.3a and 3.4.3b.

Similar remarks apply to Tables 3.4.4a and 3.4.4b.

TABLE 3.4.4a OF CURRENTLY MARRIED "FECUND" NON-PREGNANT WOMEN WHO WANT ANOTHER CHILD, THE PERCENTAGE PREFERRING A BOY - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND YEARS SINCE FIRST MARRIAGE

TABLE 3.4.4b OF CURRENTLY MARRIED "FECUND" NON-PREGNANT WOMEN WHO WANT ANOTHER CHILD, THE PERCENTAGE PREFERRING A GIRL - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND YEARS SINCE FIRST MARRIAGE

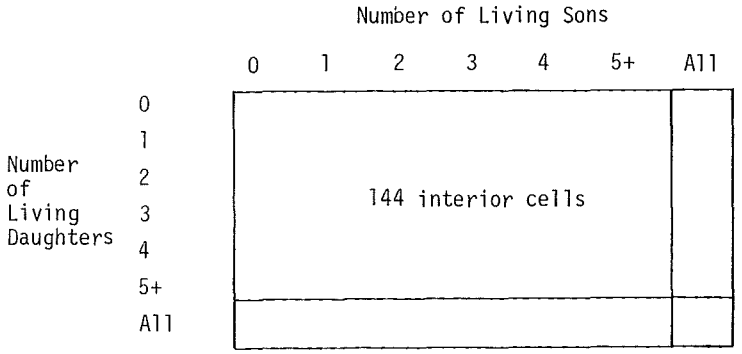
Panel 1: Years Since First Marriage <5
Panel 2: Years Since First Marriage 5-9
Panel 3: Years Since First Marriage 10-19
Panel 4: Years Since First Marriage 20+
Panel 5: All



Total of 2 tables.
Total of 10 panels.

TABLE 3.4.5 MEAN ADDITIONAL NUMBER OF CHILDREN WANTED BY CURRENTLY MARRIED "FECUND" NON-PREGNANT WOMEN - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages

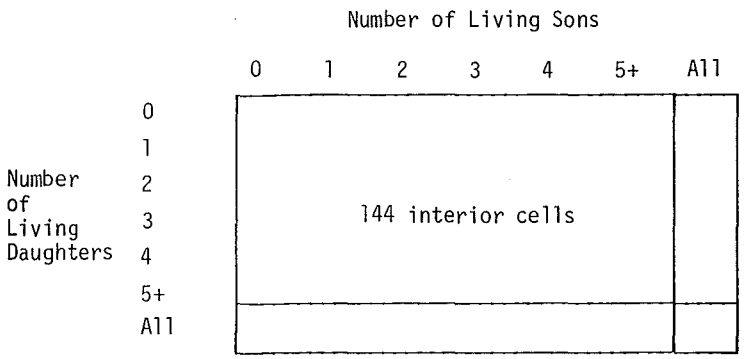


Total of 1 table.
Total of 5 panels.

TABLE 3.4.6a MEAN TOTAL NUMBER OF CHILDREN DESIRED BY CURRENTLY MARRIED NON-PREGNANT WOMEN - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND CURRENT AGE

TABLE 3.4.6b MEAN TOTAL NUMBER OF CHILDREN DESIRED BY ALL EVER-MARRIED NON-PREGNANT WOMEN - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Total of 2 tables.
Total of 10 panels.

TABLE 4.1.1 THE PERCENT DISTRIBUTION OF WOMEN ACCORDING TO LENGTH OF BREAST-FEEDING IN THE LAST CLOSED INTERVAL - BY CURRENT AGE. CONFINED TO EVER-MARRIED WOMEN WITH AT LEAST TWO LIVE BIRTHS (INCLUDING ANY CURRENT PREGNANCY)

Current Age	Number of Months Breast-Feeding																		
	Did Not Breast-feed	<3	3-5	6	7-8	9-11	12	13-17	18	19-23	24	25-29	30	31-35	36	37-47	48	49+	Mean	Base Frequency
<25																				
25-34																				
35-44		A total of 72 interior cells																		
45+																				
All																				

Total of 1 table.
Total of 1 panel.

Comment: *Tables 4.1.1 and 4.1.2 are of descriptive rather than analytical interest. They do not take account, in any way, of the survival of the child or of the length of the closed interval, both of which act to censor the duration of breast-feeding.*

TABLE 4.1.2 THE PERCENT DISTRIBUTION OF WOMEN ACCORDING TO LENGTH OF BREAST-FEEDING IN THE LAST CLOSED INTERVAL - BY NUMBER OF CHILDREN EVER BORN (INCLUDING ANY CURRENT PREGNANCY). CONFINED TO WOMEN EVER-MARRIED WOMEN WITH AT LEAST TWO LIVE BIRTHS (INCLUDING ANY CURRENT PREGNANCY)

Number of Children Ever Born	Birth Order of Child	Number of Months Breast-Feeding																			
		Did Not Breast-feed	<3	3-5	6	7-8	9-11	12	13-17	18	19-23	24	25-29	30	31-35	36	37-47	48	49+	Mean	Base Frequency
2	1																				
3	2																				
4	3								72 interior cells												
5+	4+																				
All	All																				

Total of 1 table.
Total of 1 panel.

TABLE 4.1.3 THE PERCENT DISTRIBUTION OF WOMEN ACCORDING TO LENGTH OF BREAST-FEEDING IN THE LAST CLOSED INTERVAL - BY CURRENT AGE. CONFINED TO EVER-MARRIED WOMEN WITH AT LEAST TWO LIVE BIRTHS (INCLUDING ANY CURRENT PREGNANCY) WHOSE LAST CLOSED INTERVAL EXCEEDED 32 MONTHS AND WHOSE CHILD SURVIVED AT LEAST 24 MONTHS

Current Age	Number of Months Breast-feeding															
	Did not Breast-feed	<3	3-5	6	7-8	9-11	12	13-17	18	19-23	24 (*)	0-24	Mean	Base Frequency	24 (**)	25+
<25												100%				
25-34												100%				
35-44						91 interior cells						100%				
45+												100%				
All												100%				

(Note: The bottom row of the first panel will be vacant.)

Total of 1 table.
Total of 1 panel.

Comment: *The dependent variable in Tables 4.1.3, 4, and 5 is the duration of breast-feeding in the last closed interval. In order to avoid self-censoring in the data, only closed intervals of at least 33 (=24+9) months are included. The maximum duration of breast-feeding is taken as two years rather than three years. The reason for this discrepancy is that the closed interval is defined to end with the birth of a child, rather than the conception. Conception implies that ovulation has recommenced, and lactation is nearly always incompatible with ovulation. Therefore a shorter closed interval would bias downwards the duration of breast-feeding. We further limit the table to women whose children survived at least two full years and to women for whom the breast-feeding variable is defined. The numbers in the column in this table and in Tables 4.1.4 and 4.1.5 are each half of the total number reporting exactly 24 months. For further comments on these columns please see Part III of this document.*

TABLE 4.1.4 THE PERCENT DISTRIBUTION OF WOMEN ACCORDING TO THE LENGTH OF BREAST-FEEDING IN THE LAST CLOSED INTERVAL - BY NUMBER OF CHILDREN EVER BORN (INCLUDING ANY CURRENT PREGNANCY). CONFINED TO EVER-MARRIED WOMEN WITH AT LEAST TWO LIVE BIRTHS (INCLUDING ANY CURRENT PREGNANCY) WHOSE LAST CLOSED INTERVAL EXCEEDED 32 MONTHS AND WHOSE CHILD SURVIVED AT LEAST 24 MONTHS

Number of Children Ever Born	Birth Order of Child	Number of Months Breast-feeding															
		Did not Breast-feed	<3	3-5	6	7-8	9-11	12	13-17	18	19-23	24 (*)	0-24	Mean	Base Frequency	24 (**)	25+
2	1												100%				
3	2												100%				
4	3					48 interior cells							100%				
5+	4+												100%				
All	All												100%				

Total of 1 table.
Total of 1 panel.

TABLE 4.1.5 THE PERCENT DISTRIBUTION OF WOMEN ACCORDING TO LENGTH OF BREAST-FEEDING IN THE LAST CLOSED INTERVAL - BY BACKGROUND VARIABLE AND NUMBER OF CHILDREN EVER BORN (INCLUDING ANY CURRENT PREGNANCY). CONFINED TO EVER-MARRIED WOMEN WITH AT LEAST TWO LIVE BIRTHS (INCLUDING ANY CURRENT PREGNANCY) WHOSE LAST CLOSED INTERVAL EXCEEDED 32 MONTHS AND WHOSE CHILD SURVIVED AT LEAST 24 MONTHS

Panel 1: Less than 4 Children Ever Born (Birth Orders 1-2)
Panel 2: 4 or More Children Ever Born (Birth Orders 3 or More)
Panel 3: All

Background Variable	Number of Months Breast-feeding															
	Did not Breast-feed	<3	3-5	6	7-8	9-11	12	13-17	18	19-23	24 (*)	0-24	Mean	Base Frequency	24 (**)	25+
			Number of interior cells = 24 X Number of categories of Background Variable									100% 100% 100%				

Background Variables:

Standard Set

Total of 6 tables.
Total of 18 panels.

TABLE 4.1.6 MEAN LENGTH OF THE LAST CLOSED INTERVAL - BY NUMBER OF MONTHS BREAST-FEEDING DURING THAT INTERVAL, CURRENT AGE AND WHETHER THE WOMAN HAS EVER USED CONTRACEPTION. CONFINED TO EVER-MARRIED WOMEN WITH AT LEAST TWO LIVE BIRTHS (INCLUDING ANY CURRENT PREGNANCY) WHOSE LAST CLOSED INTERVAL DID NOT EXCEED FIVE YEARS

Panel 1: Ever Used a Contraceptive Method
Panel 2: Never Used a Contraceptive Method
Panel 3: All

Current Age	Number of Months Breast-feeding												
	Did not Breast-feed	<3	3-5	6	7-8	9-11	12	13-17	18	19-23	24	25+	All
<25 25-34 35-44 45+						96 interior cells							
All													

Total of 1 table.
Total of 3 panels.

Comment: *In order to prevent a few extremely long intervals from affecting these entries, any closed birth interval exceeding 5 years is excluded. It must also be recalled that birth intervals are defined to include a gestation interval of approximately nine months. Therefore, in order to convert to "mean interval to conception" one should subtract this amount from each entry of the table.*

TABLE 4.2.1a PERCENTAGE OF ALL EVER-MARRIED WOMEN WHO HAVE HEARD OF SPECIFIED CONTRACEPTIVE METHODS, INCLUDING STERILIZATION - BY CURRENT AGE AND NUMBER OF LIVING CHILDREN

TABLE 4.2.1b PERCENTAGE OF CURRENTLY MARRIED "FECUND" WOMEN WHO HAVE HEARD OF SPECIFIED CONTRACEPTIVE METHODS, INCLUDING STERILIZATION - BY CURRENT AGE AND NUMBER OF LIVING CHILDREN

Panel 1: Less than 4 Living Children
Panel 2: 4 or More Living Children
Panel 3: All

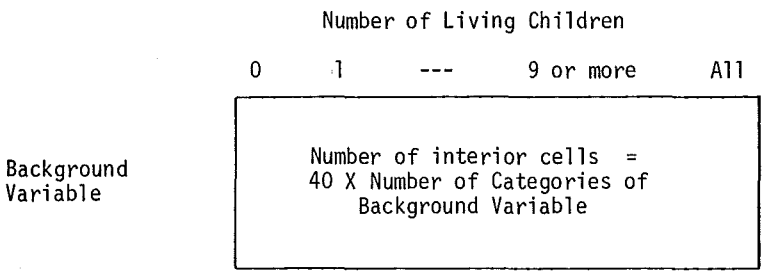
Current Age	Known Contraceptive Methods						
	No Method At All	Inefficient Method(s) only	Any Efficient Method	Specific Method	Sterilization for Contraceptive Purposes		Base Frequency
				1 ---- 9	Husband	Wife	
<20							
20-24			168 interior cells				
⋮							
40-44							
45-49							
All							

Total of 2 tables.
Total of 6 panels.

Comment: *In Tables 4.2.1 and 4.3.1, any woman who does not appear in the first column may appear in any combination of the other columns. Such will occur if she knows of (Table 4.2.1) or has ever used (Table 4.3.1) more than one contraceptive method. These tables give no indication of the degree of overlap in knowledge or use of various methods, except for the percentage knowing no method at all and the percentages knowing "efficient" or "inefficient" methods.*

TABLE 4.2.2 PERCENTAGE OF ALL EVER-MARRIED WOMEN WHO HAVE HEARD OF ANY CONTRACEPTIVE METHODS, INCLUDING STERILIZATION - BY NUMBER OF LIVING CHILDREN, BACKGROUND VARIABLE AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

TABLE 4.3.1a PERCENTAGE OF ALL EVER-MARRIED WOMEN WHO EVER USED SPECIFIED CONTRACEPTIVE METHODS, INCLUDING STERILIZATION - BY CURRENT AGE AND NUMBER OF LIVING CHILDREN

TABLE 4.3.1b PERCENTAGE OF CURRENTLY MARRIED "FECUND" WOMEN WHO EVER USED SPECIFIED CONTRACEPTIVE METHODS, INCLUDING STERILIZATION - BY CURRENT AGE AND NUMBER OF LIVING CHILDREN

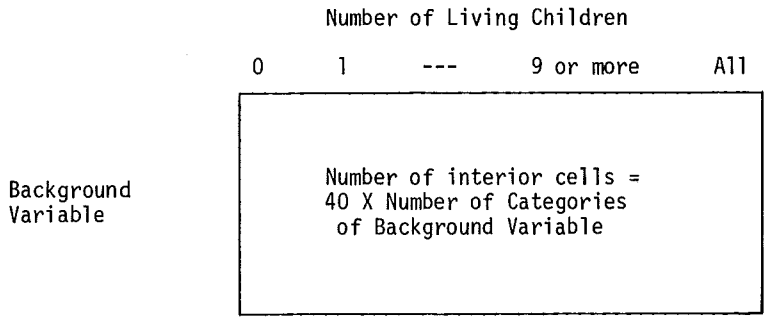
Panel 1: Less than 4 Living Children
Panel 2: 4 or More Living Children
Panel 3: All

Current Age	Contraceptive Methods Ever Used						
	None Ever Used	Used Inefficient Method(s) Only	Used an Efficient Method	Specific Method Ever Used	Sterilization for Contraceptive Purposes		Base Frequency
				1 --- 9	Husband	Wife	
<20 20-24 = 40-44 45-49 All			168 interior cells				

Total of 2 tables.
Total of 6 panels.

TABLE 4.3.2 PERCENTAGE OF ALL EVER-MARRIED WOMEN WHO EVER USED ANY CONTRACEPTIVE METHOD, INCLUDING STERILIZATION - BY NUMBER OF LIVING CHILDREN, BACKGROUND VARIABLE AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

TABLE 4.4.1 PERCENT DISTRIBUTION OF "EXPOSED" WOMEN ACCORDING TO CURRENT USE OF SPECIFIED CONTRACEPTIVE METHODS, INCLUDING STERILIZATION - BY NUMBER OF LIVING CHILDREN AND CURRENT AGE

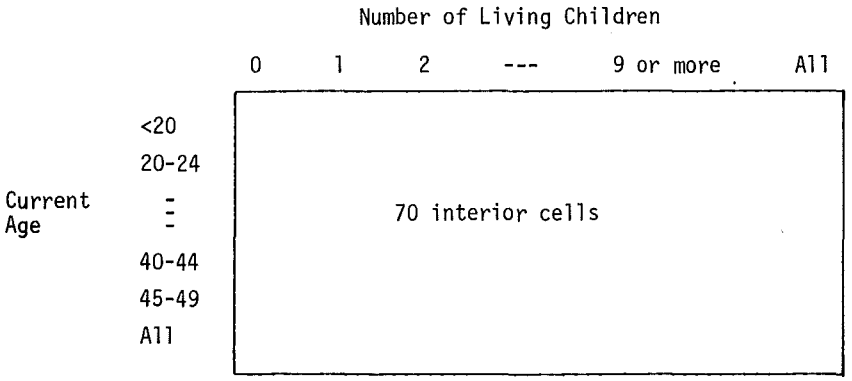
Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages

Number of Living Children	Current Contraceptive Method						
	None Now Used	Using Inefficient Method(s) Only	Using an Efficient Method	Specific Method now Used	Sterilization for Contraceptive Purposes		Base Frequency
				1 --- 9	Husband	Wife	
2 or less							
3							
4			192 interior cells				
5 or more							
All							

Total of 1 table.
Total of 5 panels.

**Here, and subsequently, "exposed" women consists of women who are currently married and a) sterilized for contraceptive purposes or b) believe themselves physiologically capable of having (more) children. Alternatively put, it consists of all currently married women except those who believe themselves sterile but not for contraceptive reasons. Please see the discussion of the variable Exposure Status in the Variable List.*

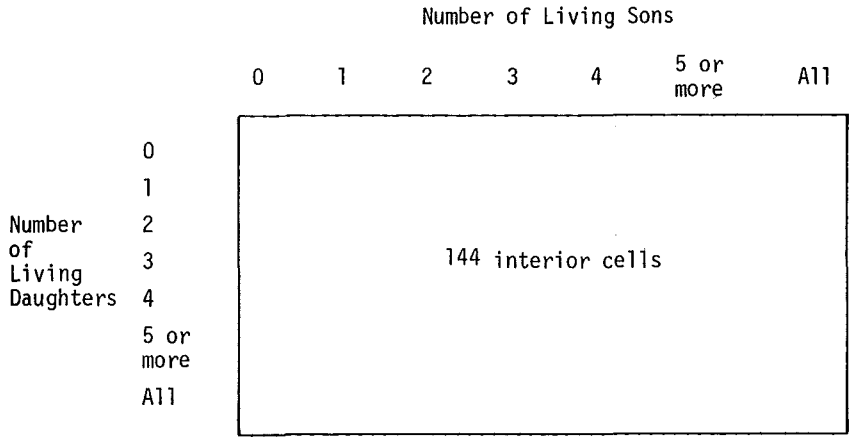
TABLE 4.4.2 PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING CONTRACEPTION, INCLUDING STERILIZATION - BY NUMBER OF LIVING CHILDREN AND CURRENT AGE



Total of 1 table.
Total of 1 panel.

TABLE 4.4.3 PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING CONTRACEPTION, INCLUDING STERILIZATION - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND CURRENT AGE

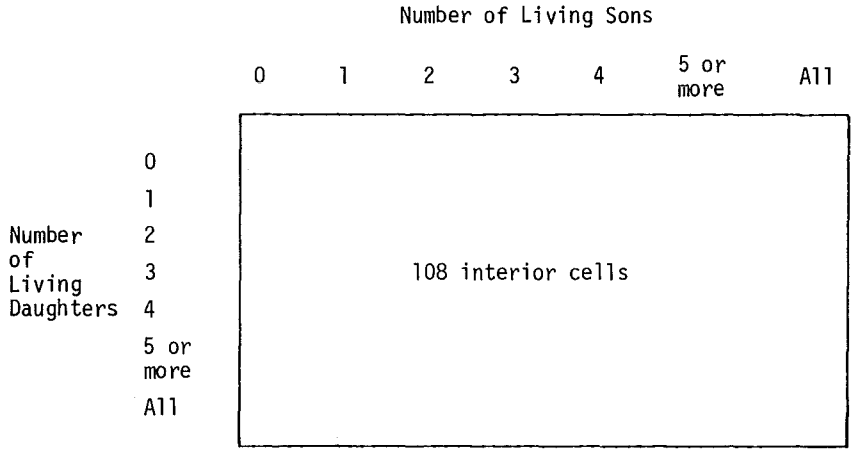
Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Total of 1 table.
Total of 5 panels.

TABLE 4.4.4 PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING CONTRACEPTION, INCLUDING STERILIZATION - BY NUMBER OF LIVING SONS, NUMBER OF LIVING DAUGHTERS AND YEARS SINCE FIRST MARRIAGE

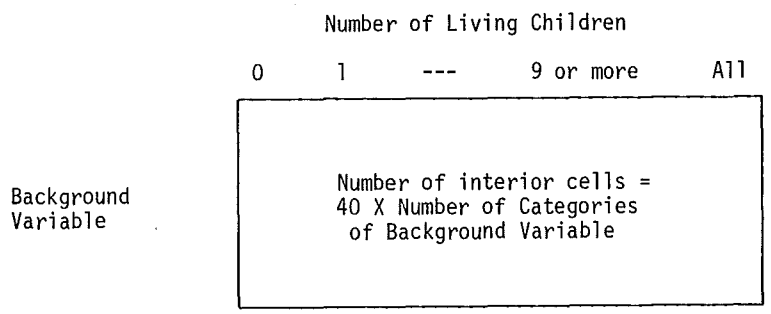
Panel 1: Years Since First Marriage <10
Panel 2: Years Since First Marriage 10-19
Panel 3: Years Since First Marriage 20+
Panel 4: All



Total of 1 table.
Total of 4 panels

TABLE 4.4.5 PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING CONTRACEPTION, INCLUDING STERILIZATION - BY NUMBER OF LIVING CHILDREN, BACKGROUND VARIABLE AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

TABLE 4.5.1 PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE - BY CURRENT AGE

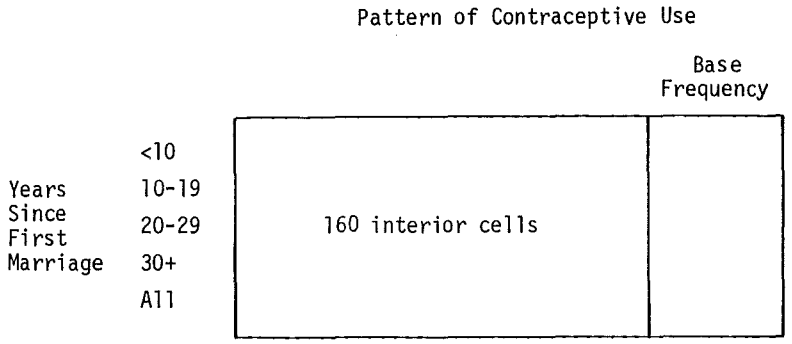
Pattern of Contraceptive Use

Current Age	56 interior cells	Base Frequency
<20		
20-24		
= =		
40-44		
45-49		
All		

Total of 1 table.
Total of 1 panel.

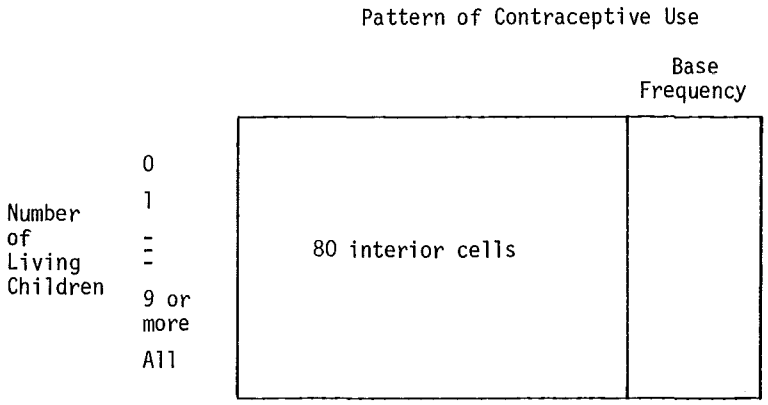
TABLE 4.5.2 PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE - BY YEARS SINCE FIRST MARRIAGE AND AGE AT FIRST MARRIAGE

Panel 1: Age at First Marriage <15
Panel 2: Age at First Marriage 15-19
Panel 3: Age at First Marriage 20-24
Panel 4: Age at First Marriage 25-29
Panel 5: Age at First Marriage 30+
Panel 6: All Ages at First Marriage



Total of 1 table.
Total of 6 panels.

TABLE 4.5.3 PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE - BY NUMBER OF LIVING CHILDREN



Total of 1 table.
Total of 1 panel.

TABLE 4.5.4 PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE - BY EXPOSURE STATUS AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages

Pattern of Contraceptive Use

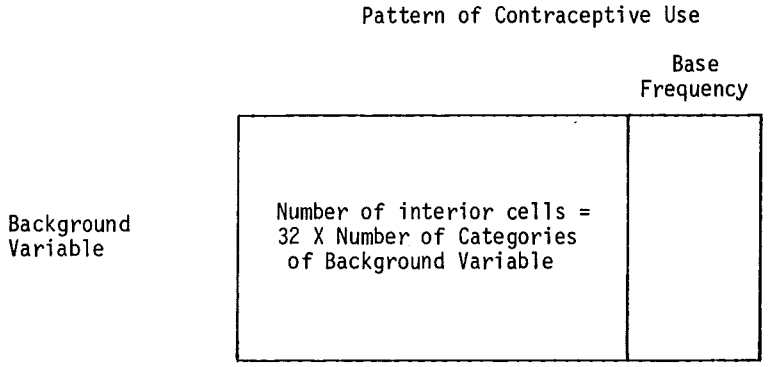
Exposure Status	160 interior cells	Base Frequency

(Note: Certain cells in each panel will be vacant. For example, pregnant women cannot be current users of contraception.)

Total of 1 table.
Total of 5 panels.

TABLE 4.5.5 PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE - BY BACKGROUND VARIABLE AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

TABLE 4.5.6 PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE - BY BACKGROUND VARIABLE AND NUMBER OF LIVING CHILDREN

Panel 1: Number of Living Children <4
Panel 2: Number of Living Children 4-6
Panel 3: Number of Living Children 7+
Panel 4: All

Pattern of Contraceptive Use

Background Variable	Number of interior cells = 24 X Number of Categories of Background Variable	Base Frequency

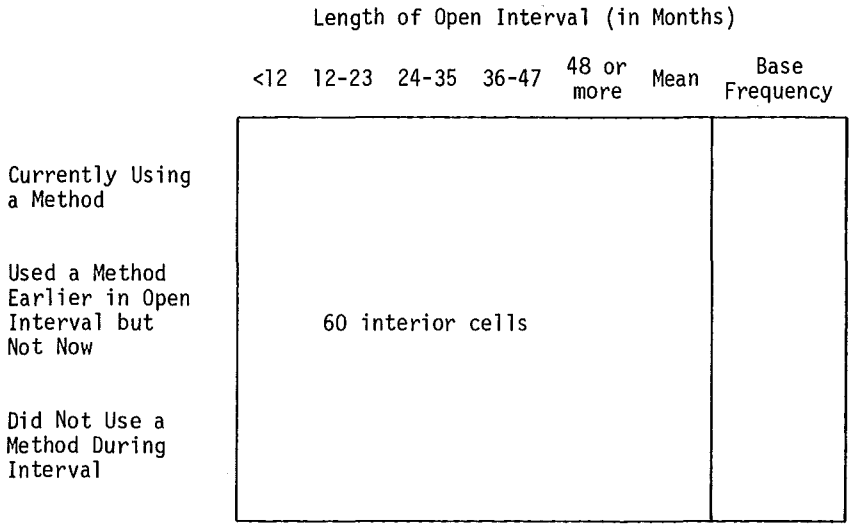
Background Variables:

Standard Set

Total of 6 tables.
Total of 24 panels.

TABLE 4.6.1 PERCENT DISTRIBUTION OF WOMEN ACCORDING TO THE LENGTH OF THE OPEN INTERVAL - BY CONTRACEPTIVE USE (EXCLUDING STERILIZATION) IN THE OPEN INTERVAL AND CURRENT AGE. CONFINED TO "EXPOSED" WOMEN WITH ONE OR MORE LIVE BIRTHS

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Total of 1 table.
Total of 5 panels.

TABLE 5.1.1 THE PERCENT DISTRIBUTION OF CURRENTLY MARRIED, "FECUND" WOMEN ACCORDING TO LEVEL OF CONTRACEPTIVE KNOWLEDGE - BY CURRENT AGE AND DESIRE FOR MORE CHILDREN

Panel 1: More Children Wanted
Panel 2: No More Children Wanted
Panel 3: "Undecided"
Panel 4: All

Current Age	Knowledge of Contraceptive Methods				
	Knows no Method At All	Knows of Inefficient Methods(s) only	Knows at least one Efficient Method	All	Base Frequency
<20				100%	
20-24				-	
25-29				-	
30-34		69 interior cells		-	
35-39				-	
40-44				-	
45+				-	
All				100%	

Total of 1 table.
Total of 4 panels.

TABLE 5.1.2 THE PERCENT DISTRIBUTION OF CURRENTLY MARRIED, "FECUND" WOMEN ACCORDING TO LEVEL OF CONTRACEPTIVE KNOWLEDGE - BY CURRENT AGE AND BY WHETHER TOTAL NUMBER OF CHILDREN DESIRED EXCEEDS NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY)

Panel 1: Total Number of Children Desired is Less Than the Number of Living Children*
Panel 2: Total Number of Children Desired is Equal to Number of Living Children
Panel 3: Total Number of Children Desired is Greater Than the Number of Living Children
Panel 4: "Undecided" about Number Desired
Panel 5: All

Current Age	Knowledge of Contraceptive Methods				
	Knows No Method At All	Knows of Inefficient Method(s) only	Knows at least one Efficient Method	All	Base Frequency
<20				100%	
20-24				-	
25-29				-	
30-34		84 interior cells		-	
35-39				-	
40-44				-	
45-49				-	
All				100%	

For currently pregnant women, the pregnancy is added into the Number of Living Children

Total of 1 table.
Total of 5 panels.

Comment: *Table 5.1.2 is analogous to 5.1.1 and has nearly the same title as that table. "Preference for more children" is indicated here by the nature of any inequality between the number of living children and the number of children the woman would choose to have if, in essence, she could recommence her reproductive career.*

TABLE 5.2.1 THE PERCENT DISTRIBUTION OF "EXPOSED" WOMEN ACCORDING TO CURRENT USE OF SPECIFIED CONTRACEPTIVE METHODS (INCLUDING STERILIZATION) - BY NUMBER OF LIVING CHILDREN AND DESIRE FOR MORE CHILDREN

Panel 1: More Children Wanted
Panel 2: No More Children Wanted
Panel 3: "Undecided"
Panel 4: All

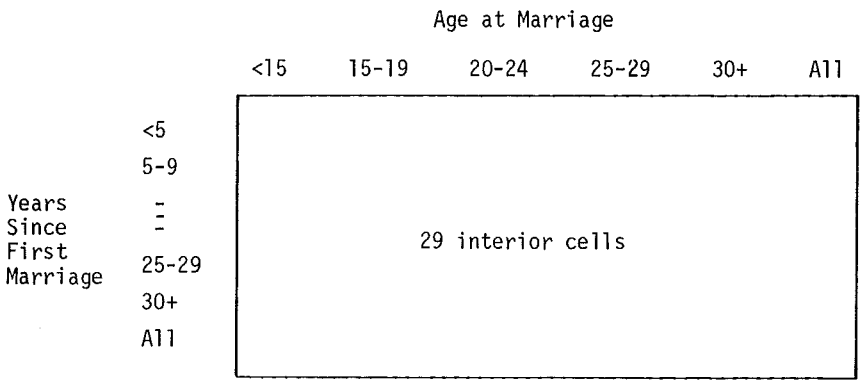
Number of Living Children	Current Contraceptive Method						
	None Now Used	Using Inefficient Method(s) only	Using an Efficient Method	Specific Method Now Used	Sterilization for Contraceptive Purposes		Base Frequency
				1 --- 9	Husband	Wife	
2 or less							
3							
4							
5 or more							
All							

144 interior cells

Total of 1 table.
Total of 4 panels.

TABLE 5.2.2a THE PERCENTAGE OF WOMEN WHO ARE CURRENTLY USING AN EFFICIENT CONTRACEPTIVE (INCLUDING STERILIZATION) - BY AGE AT FIRST MARRIAGE AND YEARS SINCE FIRST MARRIAGE. CONFINED TO "EXPOSED" WOMEN WHO WANT NO MORE CHILDREN

TABLE 5.2.2b THE PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING AN EFFICIENT METHOD OF CONTRACEPTION (INCLUDING STERILIZATION) AND WANT NO MORE CHILDREN - BY AGE AT FIRST MARRIAGE AND YEARS SINCE FIRST MARRIAGE

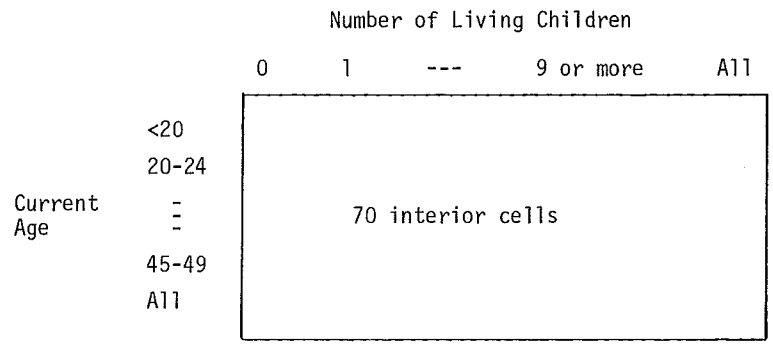


(Note: Six cells in the lower right corner of the table will be vacant.)

Total of 2 tables.
Total of 2 panels.

TABLE 5.2.3a THE PERCENTAGE OF WOMEN WHO ARE CURRENTLY USING AN EFFICIENT CONTRACEPTIVE (INCLUDING STERILIZATION) - BY NUMBER OF LIVING CHILDREN AND CURRENT AGE. CONFINED TO "EXPOSED" WOMEN WHO WANT NO MORE CHILDREN

TABLE 5.2.3b THE PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING AN EFFICIENT METHOD OF CONTRACEPTION (INCLUDING STERILIZATION) AND WANT NO MORE CHILDREN - BY NUMBER OF LIVING CHILDREN AND CURRENT AGE



Total of 2 tables.
Total of 2 panels.

TABLE 5.2.4a THE PERCENTAGE OF WOMEN WHO ARE CURRENTLY USING AN EFFICIENT CONTRACEPTIVE (INCLUDING STERILIZATION) - BY BACKGROUND VARIABLE AND CURRENT AGE. CONFINED TO "EXPOSED" WOMEN WHO WANT NO MORE CHILDREN

TABLE 5.2.4b THE PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING AN EFFICIENT METHOD OF CONTRACEPTION (INCLUDING STERILIZATION) AND WANT NO MORE CHILDREN - BY BACKGROUND VARIABLE AND CURRENT AGE

Background Variable

Current Age	
	<25
	25-34
	35-44
	45+
	All

Number of interior cells = 4 X Number of Categories of Background Variable

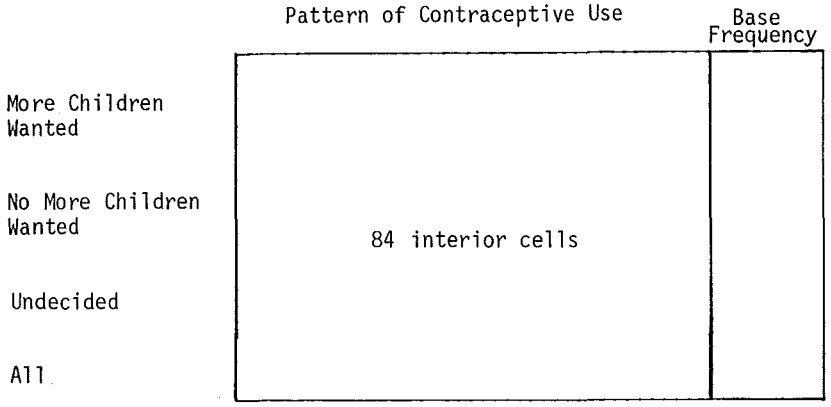
Background Variables:

Standard Set

Total of 12 tables.
Total of 12 panels.

TABLE 5.3.1 PERCENT DISTRIBUTION OF CURRENTLY MARRIED "FECUND" WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE - BY DESIRE FOR MORE CHILDREN AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages

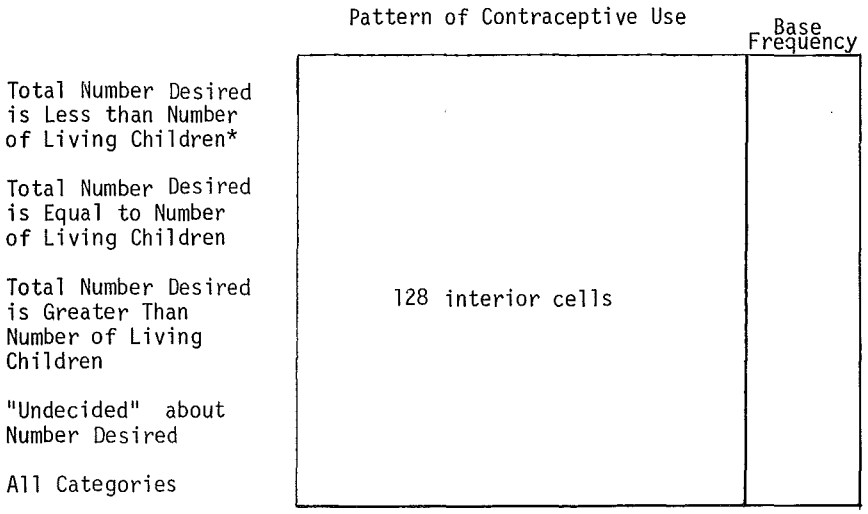


Total of 1 table.
Total of 5 panels.

Comment: *Categories 3 and 6 of the variable Pattern of Contraceptive Use will be vacant and may be omitted from the tabulations in this section.*

TABLE 5.3.2 PERCENT DISTRIBUTION OF CURRENTLY MARRIED "FECUND" WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE - BY WHETHER TOTAL NUMBER OF CHILDREN DESIRED EXCEEDS NUMBER OF LIVING CHILDREN (INCLUDING ANY CURRENT PREGNANCY) AND BY CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Total of 1 table.
Total of 5 panels.

**For currently pregnant women, the pregnancy is added into the Number of Living Children.*

TABLE 5.3.3 PERCENT DISTRIBUTION OF CURRENTLY MARRIED "FECUND" WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE - BY DESIRE FOR MORE CHILDREN, BACKGROUND VARIABLE AND CURRENT AGE

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages

Background Variable		Pattern of Contraceptive Use		Total	Base Frequency
Level 1	Do You Want a Future Birth?	Yes		100%	
		No		100%	
		Undecided		100%	
Level 2		Yes		100%	
		No		100%	
		Undecided		100%	
Level 3		Yes		100%	
		No		100%	
		Undecided		100%	
:		:		:	
All		Yes		100%	
		No		100%	
		Undecided		100%	

Number of interior cells = 96 X Number of Categories of Background Variable.

Background Variables:

Standard Set

Total of 6 tables.
Total of 30 panels.

Appendix I

ADDITIONS AND MODIFICATIONS IF THE FERTILITY REGULATION MODULE IS ADOPTED

Some participating countries will choose to substitute the Fertility Regulation Module for Section 5 of the Core Questionnaire, for ever-married women. This appendix describes the ensuing changes in the tabulation plan when this substitution is made. Some new variables will become available, related in particular to the closed birth interval. Even the minimum tabular analysis will require that some additional variables be extracted from other sections of the questionnaire as well. The indicated tables would be presented in the main body of the Report.

Any country using this module will presumably perform considerable additional tabulation and analysis, as would be the case with any WFS module. We are not suggesting here the shape of such an analysis; we only indicate the minimum desirable integration with the main Report.

LIST OF VARIABLES

SECTIONS 1-4: No changes

SECTION 5 : FERTILITY PLANNING

Changes and Additions

5.1 Preferences for Children

DID YOU WANT YOUR LAST BIRTH OR CURRENT PREGNANCY?

ADDITIONAL NUMBER OF CHILDREN WANTED

As before, except variable with equal

-1 if "NO" to DID YOU WANT YOUR LAST BIRTH OR CURRENT PREGNANCY?

5.2 Contraception in the Open Interval (Defined only for women not currently pregnant)

DID YOU STOP TO BECOME PREGNANT?

5.3 Future Use of Contraception

No change.

5.4 Sterilization

DATE HUSBAND STERILIZED
DATE WOMAN STERILIZED

5.5 Contraception in the Closed Interval

DID YOU USE A METHOD IN THE CLOSED INTERVAL?
WHAT WAS THE LAST METHOD YOU USED IN THE CLOSED INTERVAL?
DID YOU USE AN EFFICIENT METHOD IN THE CLOSED INTERVAL?
DID YOU BECOME PREGNANT DURING USE?
DID YOU STOP TO BECOME PREGNANT?

5.6 Past Preference for Children (Applies only to women who have stated that they cannot have any more children)

DID YOU WANT TO HAVE (MORE) CHILDREN?

SUMMARY VARIABLE

This section (and part of Section 3) can be summarized by the following variable. The only difference from the Core is that Core category 5 is represented here by two categories, 5 and 6 (which alters the subsequent numbering as well).

PATTERN OF CONTRACEPTIVE USE

Category No.	Description
	A. Never Used
	A.1 Currently married and fecund
1	A.1.a Intends future use
2	A.1.b Does not intend future use, or undecided
3	A.2 Not married or not fecund
	B. Past User but not Current User
4	B.1 Used in open interval
5	B.2 Most recent use was in last closed interval
6	B.3 Most recent use was in an earlier closed interval
	C. Current User
7.	C.1 Wife or husband sterilized for contraceptive purposes
8.	C.2 Other methods

Columns based on this variable would be labelled approximately as follows:

PATTERN OF CONTRACEPTIVE USE

Never Used				Past User but Not Current User				Current User		
Intends Future Use	Does Not Intend Future Use	Not Married or Not Fecund	Total	In Open Interval	In last Closed Interval	Earlier in Some Closed Interval	Total	Sterilized for Contraceptive Purposes	Other Methods	Total

TABULATIONS

CHANGES

Any table involving a variable which has been re-defined in this Appendix would be modified accordingly.

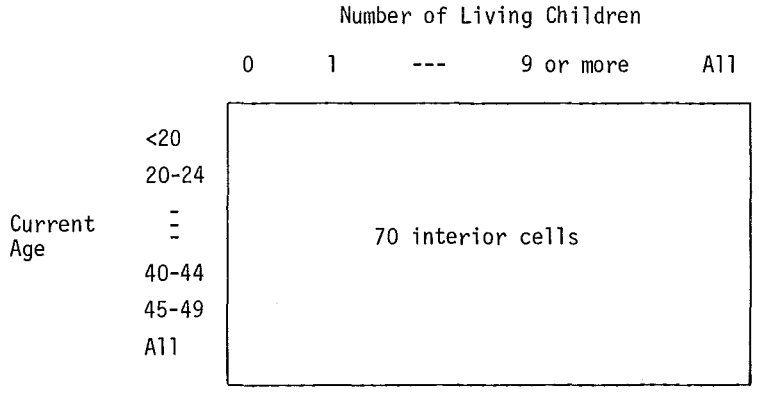
The panels for Table 4.1.3 will be changed to

Panel 1: Used a Contraceptive Method in the Closed Interval
Panel 2: Did Not Use a Contraceptive Method in the Closed Interval
Panel 3: All

ADDITIONS

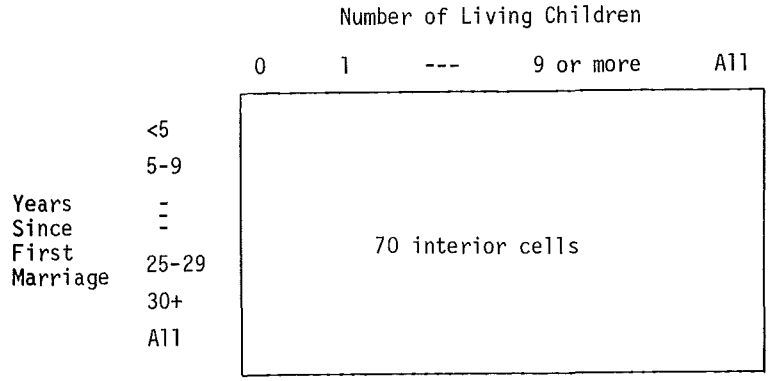
The following four tables represent the minimal incorporation into the First Report of data from the Fertility Regulation Module.

TABLE 3.1.4 THE PERCENTAGE OF WOMEN WHO DID NOT WANT LAST (OR CURRENT) PREGNANCY - BY NUMBER OF LIVING CHILDREN AND CURRENT AGE. CONFINED TO CURRENTLY MARRIED WOMEN WITH AT LEAST ONE LIVE BIRTH (OR A CURRENT PREGNANCY)



Total of 1 table.
Total of 1 panel.

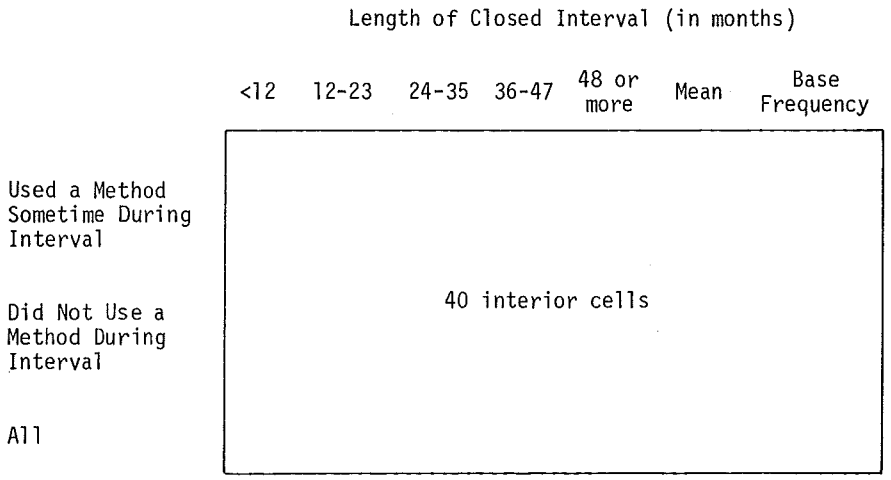
TABLE 3.1.5 THE PERCENTAGE OF WOMEN WHO DID NOT WANT LAST (OR CURRENT) PREGNANCY - BY NUMBER OF LIVING CHILDREN AND YEARS SINCE FIRST MARRIAGE. CONFINED TO CURRENTLY MARRIED WOMEN WITH AT LEAST ONE LIVE BIRTH (OR A CURRENT PREGNANCY)



Total of 1 table.
Total of 1 panel.

TABLE 4.6.2 THE PERCENT DISTRIBUTION OF WOMEN ACCORDING TO LENGTH OF THE LAST CLOSED INTERVAL - BY CONTRACEPTIVE USE IN THE INTERVAL AND CURRENT AGE. CONFINED TO WOMEN WITH AT LEAST TWO LIVE BIRTHS (OR ONE LIVE BIRTH AND A CURRENT PREGNANCY)

Panel 1: Current Age <25
Panel 2: Current Age 25-34
Panel 3: Current Age 35-44
Panel 4: Current Age 45+
Panel 5: All Ages



Total of 1 table.
Total of 5 panels.

TABLE 5.2.5 THE PERCENT DISTRIBUTION OF WOMEN ACCORDING TO SPECIFIED CONTRACEPTIVE METHODS USED IN THE LAST CLOSED INTERVAL - BY NUMBER OF LIVING CHILDREN AT THE BEGINNING OF THE INTERVAL AND WHETHER LAST (OR CURRENT) PREGNANCY WAS WANTED. CONFINED TO EVER-MARRIED WOMEN WITH AT LEAST ONE LIVE BIRTH (OR A CURRENT PREGNANCY)

Panel 1: Last (or current) pregnancy was wanted
Panel 2: Last (or current) pregnancy was not wanted
Panel 3: All

Number of Living Children at Beginning of Interval*	Methods Used in Last Closed Interval				
	No Method At All	Inefficient Method(s) only	Any Efficient Method	Specific Method 1 --- 9	Base Frequency
2 or less 3 4 5 or more All		72 interior cells			

Estimated by the number of living children if the woman is currently pregnant, and by one less than this number if she is not (but not less than zero).

Total of 1 table.
Total of 3 panels.

Appendix II

TABLES FROM THE HOUSEHOLD SCHEDULE

In those countries conducting a Household Survey in conjunction with the survey of ever-married women, the following tables can be prepared and are of particular interest. Because the Household Survey will involve a larger number of persons, the following tables often involve relatively detailed subdivision. Some of the tables are limited to ever-married women and are directly comparable with tables in the main report.

One use of the Household Survey is to select women for the individual interview. This selection will be based on either the *de facto* or *de jure* household population, according to the particular country. The tables in this Appendix should follow the same decision, except that table II.1 should be prepared twice, once for the *de facto* and once for the *de jure* household population.

If the Household Survey is conducted but has the same sample size as the survey of ever-married women, then the household and individual interviews will usually be conducted during the same visit. To avoid repetition, the fertility questions will be excluded from the household questionnaire and it will be impossible to prepare some of the following tables. Moreover, if the surveys are of the same size, some of the following tables will be made redundant -- either in whole or in part -- by tables in the main report; any such redundancies should be excluded from the tables.

We emphasize that we are describing here a minimal set of tables. Countries are encouraged to prepare additional ones, particularly making use of variables which are unique to the Household Schedule, such as the items on household possessions and on the fertility of women over 49. However, if the short version of the Household Schedule is used (with no information on fertility or education) only tables II.1, II.2, II.3, II.4, II.12, and II.13 can be produced. Mainly because of the greater complexity of these tables, Background Variables are usually indicated as panel variables rather than as row or column variables. We point out that the panel "All Categories Combined" needs to be presented only once in any given set of tables, and preferably at the beginning of the set.

We dispense with a description of the variables. Virtually all of them either have obvious definitions or are discretionary with the participating country. The only variables which should be different in character from those already described are (a) a scale based on types of household amenities and modern objects and (b) a classification of household or family type (e.g., nuclear, vertically extended, etc.). If these variables are prepared then the country may choose to include them among the Background Variables in Table II.5 and some other tables described here. Some tables require special data processing to link husbands' and wives' information, or wives' and childrens' information.

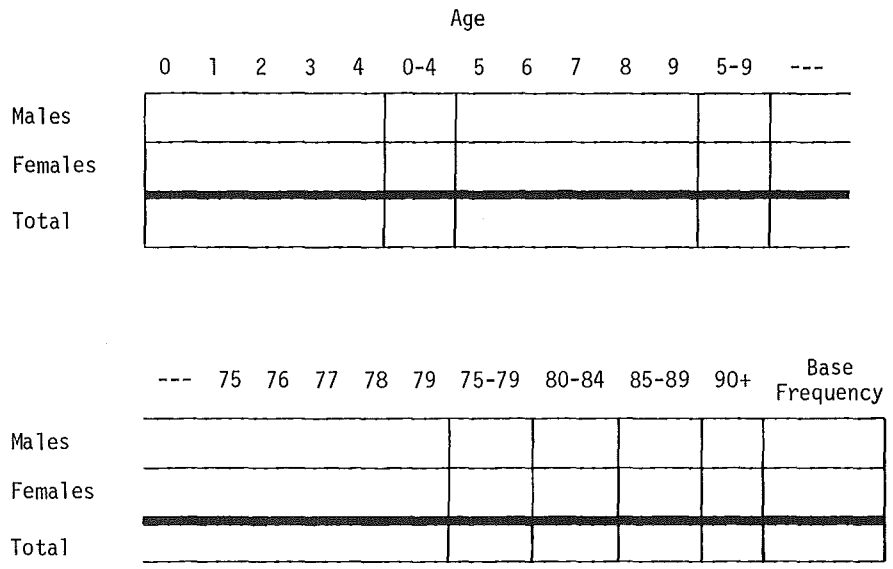
The number of tables, panels, and cells for these tabulations are given below.

Table Number	Number of Tables	Number of Panels	Estimated Number of Cells per Table*
II.1	2	2	168
II.2	1	3	700
II.3	4	12	150
II.4	4	21	1,125
II.5	8	41	450
II.6	8	41	760
II.7	4	21	400
II.8	4	21	400
II.9	4	21	560
II.10	4	21	600
II.11	4	21	360
II.12	4	21	750
II.13	3	3	75
TOTAL	54	249	-

* *The large number of cells for some of the tables appearing above results from the need to have very detailed classifications for certain variables (e.g., age by single years). However, these tables are based on the population of sample households, which will be relatively large. We have estimated that, on the average, a Background Variable will have five categories; the number of panels and the number of cells per table will be reduced if this estimate is too high.*

TABLE II.1a THE PERCENT DISTRIBUTION OF THE DE FACTO HOUSEHOLD SAMPLE ACCORDING TO AGE - BY SEX

TABLE II.1b THE PERCENT DISTRIBUTION OF THE DE JURE HOUSEHOLD SAMPLE ACCORDING TO AGE - BY SEX



Approximately 168 interior cells

Total of 2 tables.
Total of 2 panels.

TABLE II.2 THE PERCENT DISTRIBUTION OF THE HOUSEHOLD SAMPLE ACCORDING TO CURRENT MARITAL STATUS - BY AGE AND SEX

Panel 1: Males
Panel 2: Females
Panel 3: Both Sexes

Current Marital Status

Current Age	Never-Married	Married	Widowed	Divorced	Separated	Base Frequency
10						
:						
79		700 interior cells				
80+						
All						

Total of 1 table.
Total of 3 panels.

TABLE II.3 PERCENT DISTRIBUTION OF THE HOUSEHOLD SAMPLE ACCORDING TO BACKGROUND VARIABLE - BY AGE AND SEX

Panel 1: Males
Panel 2: Females
Panel 3: Both Sexes

Background Variable

Current Age		Base Frequency
	10-14	
	15-19	
	-	Number of interior cells = 30 X Number of Categories of Background Variable
	-	
	75-79	
	80+	
	All	

Background Variables:

Level of Education;
Type of Place of Residence;
Region, Religion, or Ethnic Group

Total of 4 tables.
Total of about 12 panels.

TABLE II.4 PERCENT DISTRIBUTION OF ALL CURRENTLY MARRIED WOMEN IN THE HOUSEHOLD SAMPLE ACCORDING TO AGE OF HUSBAND - BY CURRENT AGE OF WOMAN AND BACKGROUND VARIABLE

Panel 1: First Category of Background Variable
Panel 2: Second Category of Background Variable
⋮ ⋮
Panel P: Last Category of Background Variable
Panel P+1: All Categories Combined

		Age of Husband					
		10-14	15-19	---	75-79	80+	Base Frequency
Age of Woman	10-14 ⋮ 75-79	Number of interior cells = 225 X Number of Categories of Background Variable					
	80+						
	All						

Background Variables:

Level of Education;
Type of Place of Residence;
Region, Religion, or Ethnic Group

Total of 4 tables.
Total of about 21 panels.

TABLE II.5 FOR ALL EVER-MARRIED WOMEN IN THE HOUSEHOLD SAMPLE, THE MEAN NUMBER OF CHILDREN EVER BORN, STILL ALIVE AND DECEASED - BY CURRENT AGE OF WOMAN AND BACKGROUND VARIABLE

Panel 1: First Category of Background Variable
Panel 2: Second Category of Background Variable
⋮ ⋮
Panel P: Last Category of Background Variable
Panel P+1: All Categories Combined

Current Age of Woman	Living Children									Deceased Children			All Children Ever Born			Base Frequency (Number of Women)
	In Household			Not in Household			Total Alive									
	S	D	T	S	D	T	S	D	T	S	D	T	S	D	T	
10-14																
15-19																
⋮	Number of interior cells = 90 X Number of Categories of Background Variable															
75-79																
80+																
All																

(Note: S, D and T refer to sons, daughters, and totals, respectively)

Background Variables:

Level of Education;
Type of Place of Residence;
Current Marital Status;
Education of Husband;
Presence of Husband Last Night;
Type of House;
Region, Religion, or Ethnic Group.

Total of 8 tables.
Total of about 41 panels.

Comment: Countries are encouraged to add to the list of background variables a) a scale based on household amenities and modern objects and b) a classification of household type. If there are sharp urban/rural differences in these variables or, say, in Type of House, then they should incorporate an urban/rural sub-classification.

TABLE II.6 THE PERCENT DISTRIBUTION OF ALL WOMEN IN THE HOUSEHOLD SAMPLE ACCORDING TO THE NUMBER OF CHILDREN EVER BORN - BY CURRENT AGE AND BACKGROUND VARIABLE

Panel 1: First Category of Background Variable
Panel 2: Second Category of Background Variable
⋮ ⋮
Panel P: Last Category of Background Variable
Panel P+1: All Categories Combined

Number of Children Ever Born

Current Age	0	1	---	18 or more*	Mean	Standard Deviation	Base Frequency
<15							
15-19							
⋮	760 interior cells						
40-44							
45-49							
All							

It is intended that the distribution should extend to the maximum recorded value.

Background Variables:

Level of Education;
Type of Place of Residence;
Current Marital Status;
Education of Husband;
Presence of Husband Last Night;
Type of House;
Region, Religion, or Ethnic Group.

Total of 8 tables.
Total of about 41 panels.

TABLE II.7 PERCENT DISTRIBUTION OF WOMEN IN THE HOUSEHOLD SURVEY ACCORDING TO LENGTH OF THE OPEN INTERVAL - BY CURRENT AGE AND BACKGROUND VARIABLE. CONFINED TO WOMEN WITH ONE OR MORE LIVE BIRTHS

Panel 1: First Category of Background Variable
Panel 2: Second Category of Background Variable

⋮ ⋮

Panel P: Last Category of Background Variable
Panel P+1: All Categories Combined

Time Elapsed Since Last Live Birth

Current Age of Woman	0-5 mos.	6-11 mos.	12-17 mos.	18-23 mos.	2 yrs.	3 yrs.	4 yrs.	5-9 yrs.	10-14 yrs.	15+ yrs.	Base Frequency
10-14											
15-19											
⋮											
45-49											
All											

Number of interior cells = 80 X Number of Categories of Background Variable.

Background Variables:

Level of Education;
Type of Place of Residence;
Region, Religion, or Ethnic Group

Total of 4 tables.
Total of about 21 panels.

TABLE II.8 THE PERCENTAGE OF WOMEN IN THE HOUSEHOLD SAMPLE WHOSE LAST CHILD IS STILL ALIVE - BY LENGTH OF THE OPEN INTERVAL, CURRENT AGE AND BACKGROUND VARIABLE. CONFINED TO WOMEN WITH ONE OR MORE LIVE BIRTHS.

Panel 1: First Category of Background Variable
Panel 2: Second Category of Background Variable

⋮ ⋮

Panel P: Last Category of Background Variable
Panel P+1: All Categories Combined

Time Elapsed Since Last Live Birth

Current Age of Woman	0-5 mos.	6-11 mos.	12-17 mos.	18-23 mos.	2 yrs.	3 yrs.	4 yrs.	5-9 yrs.	10-14 yrs.	15+ yrs.
10-14			Number of interior cells = 80 X Number of Categories of Background Variable.							
15-19										
⋮										
45-49										
All										

Background Variables:

Level of Education;
Type of Place of Residence;
Region, Religion, or Ethnic Group.

Total of 4 tables.
Total of about 21 panels.

TABLE II.9 PERCENT DISTRIBUTION OF WOMEN IN THE HOUSEHOLD SURVEY ACCORDING TO LENGTH OF THE OPEN INTERVAL - BY CURRENT AGE AND BACKGROUND VARIABLE. CONFINED TO WOMEN WITH A LIVE BIRTH IN THE PAST 24 MONTHS.

Panel 1: First Category of Background Variable
Panel 2: Second Category of Background Variable
⋮ ⋮
Panel P: Last Category of Background Variable
Panel P+1: All Categories Combined

Completed Months Since Last Live Birth

Current Age of Woman	0 1 --- 23	Base Frequency
10-14 15-19 ⋮ 45-49 All	Number of interior cells = 112 X Number of Categories of Background Variable.	

Background Variables:

Level of Education;
Type of Place of Residence;
Region, Religion, or Ethnic Group.

Total of 4 tables.
Total of about 21 panels.

Comment: *This table is analogous to Table II.7 but provides more detail on births in the past 24 months and has different base frequencies for the percentage distributions.*

TABLE II.10 THE PERCENTAGE OF CURRENTLY MARRIED WOMEN UNDER 49 IN THE HOUSEHOLD SAMPLE WHO HAD A BIRTH IN THE PAST YEAR - BY AGE OF HUSBAND, CURRENT AGE, AND BACKGROUND VARIABLE

Panel 1: First Category of Background Variable
Panel 2: Second Category of Background Variable
⋮ ⋮
Panel P: Last Category of Background Variable
Panel P+1: All Categories Combined

		Age of Husband					
		10-14	15-19	---	75-79	80+	All
Age of Wife	10-14	Number of interior cells = 120 X Number of Categories of Background Variable					
	15-19						
	⋮						
	45-49						
	All						

Background Variables:

Level of Education;
Type of Place of Residence;
Region, Religion, or Ethnic Group.

Total of 4 tables.
Total of about 21 panels.

TABLE II.11 THE PERCENTAGE OF CURRENTLY MARRIED WOMEN UNDER 49 IN THE HOUSEHOLD SAMPLE WHO HAD A LIVE BIRTH IN THE PAST YEAR (FIRST ENTRY) AND THE PERCENTAGE NOT STATING THE DATE OF LAST LIVE BIRTH (SECOND ENTRY) - BY NUMBER OF CHILDREN EVER BORN, CURRENT AGE, AND BACKGROUND VARIABLE

Panel 1: First Category of Background Variable
Panel 2: Second Category of Background Variable
⋮ ⋮
Panel P: Last Category of Background Variable
Panel P+1: All Categories Combined

Number of Children Ever Born

Age of Woman	1	2	---	9 or more	All
<15					
15-19					
⋮					
45-49					
All					

Two entries per cell.
Number of interior cells = 72 X Number of Categories of Background Variable.

Background Variables:

Level of Education;
Type of Place of Residence;
Region, Religion, or Ethnic Group.

Total of 4 tables.
Total of about 21 panels.

Comment: *The denominators for each cell are given by Table II.6 and may be omitted from the present table.*

TABLE II.12 THE MEAN NUMBER OF CHILDREN AGED 0, 1, ---, 14 REPORTED IN THE HOUSEHOLD BY EVER-MARRIED WOMEN IN THE HOUSEHOLD SAMPLE - BY CURRENT AGE OF WOMAN AND BACKGROUND VARIABLE

Panel 1: First Category of Background Variable
Panel 2: Second Category of Background Variable
⋮ ⋮
Panel P: Last Category of Background Variable
Panel P+1: All Categories Combined

Current Age of Child

Current Age of Woman	0	1	---	13	14	All	Base Frequency
10							
11							
⋮	Number of interior cells = approximately 150 X Number of Categories of Background Variable.						
59							
All							

(Note: Cells in the upper right hand corner of the table will be vacant.)

Background Variables:

Level of Education;
Type of Place of Residence;
Region, Religion, or Ethnic Group.

Total of 4 tables
Total of about 21 panels.

Comment: *Table II.12 can be used to estimate recent fertility using the "own children" technique. It is recommended that the data be presented as shown, with single years of age, for the panel "All Categories Combined". For the other panels, Current Age of Woman may be given in five-year intervals in order to avoid statistically unstable estimates.*

Table II.13 is also required for the "own children" estimates of recent fertility.

TABLE II.13 THE PERCENT DISTRIBUTION OF PERSONS AGED 0-14 IN THE HOUSEHOLD SAMPLE, ACCORDING TO CURRENT AGE - BY BACKGROUND VARIABLE.

Background Variable	Current Age of Child: 0	1	---	13	14	Base Frequency
	Number of interior cells = 15 X Number of Categories of Background Variable					

Background Variables:

Type of Place of Residence;
Region, Religion, or Ethnic Group.

Total of 3 tables.
Total of 3 panels.

Appendix III

MINIMUM TABLES FROM THE BIRTH HISTORY

After the birth history has been prepared for analysis, a large amount of additional tabulation becomes possible. We present here the minimum tables which can lead to an analysis of fertility trends. All of the tables in this appendix have frequencies as their cell entries, in contrast with the bulk of the tables in the tabulation plan.

The tables in Appendix III may be used, in part, for the estimation of age- and period-specific fertility rates. Ideally, such rates are provided by a vital registration system (giving the number of births), together with census data (giving estimates of the population of women of specified ages). Cross-sectional data which include retrospective information on births may be used for this purpose, but potential shortcomings must be noted. First, a random sample of women alive and aged x at the time of the survey may not be a random sample of women who were, say, alive t years earlier and aged x-t. The main (although not the only) source of discrepancy will be mortality, since the attrition of each cohort by deaths is likely to have a greater effect upon women of higher parity. Second, retrospective recall of births involves a downward bias, even if small, because births in the distant past which resulted in infant and child deaths may have been forgotten by the respondent. Each of these effects implies an under-estimate of age- and period-specific fertility, particularly for the early ages and periods. If the survey is limited to ever-married women, then any fertility to never-married women will also be omitted. Other and more subtle effects such as digit preference and cumulative errors of spacing in the birth history may also be present. And, of course, if the birth histories include an excessive level of missing dates then analysis may be deferred or dropped altogether.

The preceding paragraph is intended to convey that rates computed from a retrospective cross-sectional survey must be interpreted conservatively and cautiously. They must be evaluated in relation to the indicated quality of the birth histories.

Moreover, sampling errors are sufficiently large for these rates that it is not advisable to prepare them separately within subgroups. Comparison of the fertility of subgroups should be based on other measures of fertility; because of the sample size, *statistically significant* differences between subgroups are unlikely to show up in the age- and period-specific rates. Later documentation will describe these various limitations in greater detail.

Two tabulations lead to these rates, although a third one is involved indirectly. These are Table III.1 and Table III.2.

1. PREPARATION OF TABLE III.1

This table estimates the sizes of the female populations of given ages, during given years, which serve as the denominators of the rates. More precisely, the cell entries are woman-years of exposure to these ages

and years. No condition is placed on the marital status of the woman, either at the ages and times being considered, or at the time of the survey. (Marital fertility rates could be estimated, but with more difficulty.)

The population described in Table III.1 is the total female population (aged 10-49) of the country, with the same sampling fraction as applied to the female population sampled for the Individual Questionnaire. Suppose, for example, that the Household Schedule is used to identify women eligible for the Individual Questionnaire. In this case, *all* of the women recorded on the Household Schedules (and aged 10-49) will provide the basis for Table III.1. Suppose, on the other hand, that a larger Household Survey is taken. In this case, only a fraction (say $\frac{1}{2}$) of *all* the women will form the basis for Table III.1.

Precise computation from the household schedule of women-years of exposure is not possible because month and year of each woman's birth is not obtained. However, an approximation can be reached by the simple method of back-counting, using the single year age distribution from the Schedule. The assumption of this approach is that a woman aged AI at the time of interview contributes a full woman-year of exposure at age AI-1 in the calendar year preceding the survey, a full woman-year at age AI-2 in the next preceding year and so on. When summed across for all women for each age from 10 to 49 and for each calendar year, these totals form the cells of Table III-1. It should be noted that the error inherent in this method is greatest when interviewing takes place at the beginning or the end of a calendar year and that all data relating to the calendar year of interview should be ignored in the computation of age-specific rates.

As age-specific rates will be presented in terms of five year intervals of age and time, the procedure described above will probably provide a sufficient degree of precision for most countries. However, we describe below a more accurate but more complicated procedure which may be preferable for countries where the quality and completeness of reporting of dates in the individual interview is thought to be very high. In this method, the entries in Table III.1 are estimated through a series of steps, which are essentially these: a) calculate the exposure, to each age and year, of each woman in the Individual Survey; b) inflate these contributions, as necessary, according to the factor by which a woman in this survey "represents" women in the Household Survey; c) add over all women.

We shall employ these definitions for women responding to the Individual Questionnaire:

AI: Age, in completed years, at date of interview
YI: Year of interview
MI: Month of interview
YB: Year of birth
MB: Month of birth

Each woman in the Individual Survey contributes "exposure" to each age from 10 to AI, and in general, for each age (A) she contributes to two calendar years (Y) in the table. Specifically, she contributes to year YB + A and to year YB + A + 1.

We shall assume that the date of birth is the midpoint of month MB. Then (since months are numbered 1, ..., 12) a woman will contribute, for each age A,

(1) $1 - \frac{MB - \frac{1}{2}}{12} = (25 - 2 \cdot MB)/24$ of a year of exposure to year YB + A; and

(2) $\frac{MB - \frac{1}{2}}{12} = (2 \cdot MB - 1)/24$ of a year of exposure to year YB + A + 1.

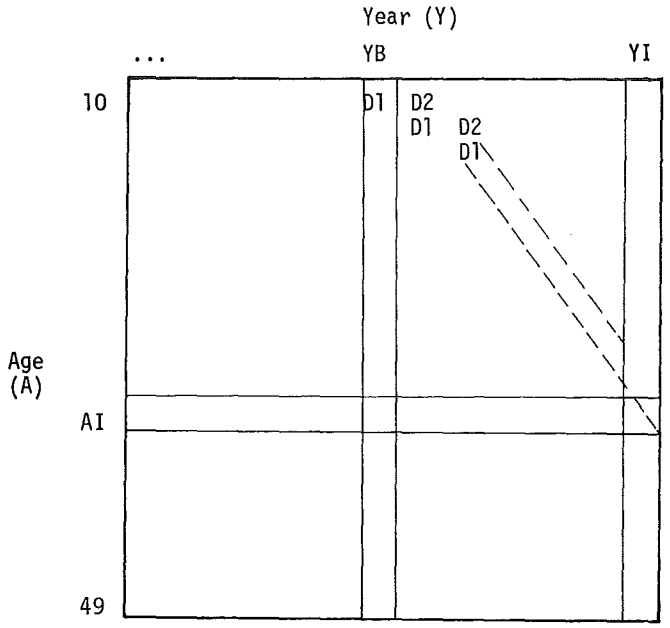
These contributions of exposure, which do not depend upon current age AI, will be termed D1 and D2 respectively; D1 + D2 = 1.

For example, if a woman was born in September, 1950 (MB - 9, YB = 1950), then she will have been aged 20 (A - 20) during the last part of 1970 (YB + A = 1950 + 20) and during the first part of 1971 (YB + A + 1 = 1950 + 20 + 1). The contribution to 1970 will have been D1 = 7/24 of a year (i.e., $3\frac{1}{2}$ months) and the contribution to 1971 will have been 17/24 of a year (i.e., $8\frac{1}{2}$ months).

The last age for which the woman makes a non-zero contribution of exposure is her current age, AI. There are two possibilities: (1) if MB $\leq$ MI, then the woman had her last birthday (i.e., achieved her current age) during the current year, YI, so all of her exposure to age AI has occurred within year YI. The amount of this exposure will be (MI - MB)/12. (2) if, on the other hand, MB > MI, then she will have contributed a fraction D1 of a year of exposure to year YI - 1, as above, and a fraction (2·MI - 1)/24 of a year of exposure to the current year, YI.

Return to the woman born in September, 1950. If she was interviewed in November of 1975, then her final contribution would be (MI - MB)/12 = 2/12 of a year, or 2 months of exposure to age 25 in 1975. But if her interview occurred in May, 1975, then she would not yet have reached her 25th birthday. Her final contribution would have been (2·MI - 1)/24 = 9/24 of a year, or $4\frac{1}{2}$ months of exposure to age 24 in 1975.

These contributions lie along two adjacent diagonals of Table III.1, as illustrated below. (The contributions of current age and the year of interview are not shown because they can take either of two forms, as described above.) There are no diagonal contributions.

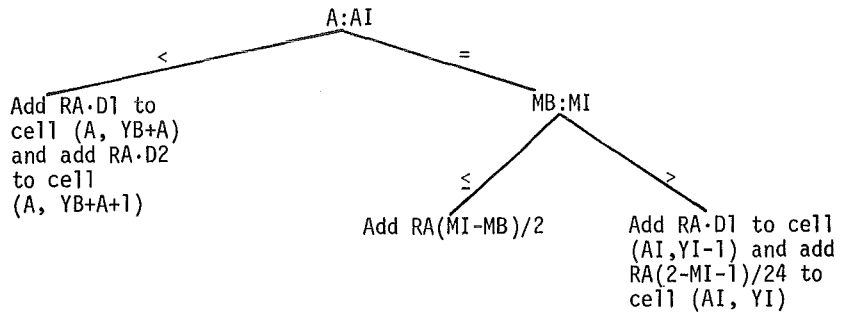


To this point we have described the contributions of the women in the Individual Survey, for whom the month of birth is known. If this survey is restricted to ever-married women, then these contributions must be inflated to represent *all* women regardless of marital status. Referring to Table II.3 for the ages 10 through 49, we define the age-specific ratios

$$RA \equiv \frac{\text{Number of women of age A}}{\text{Number of ever-married women of age A}}$$

These inflation factors may be referred to as R10, R11, ..., R49. The only assumption made in the use of these factors is that the distribution of month of birth (within year of birth) is the same for all women as it is for ever-married women. For a woman of age AI, all the contributions described above would be multiplied by RA. These contributions would be added over all women to yield Table III.1 (Revised).

The following chart is a summary, with RA as defined above for all women of current age AI, and with D1 and D2 as defined above for each woman. Each woman contributes for ages A = 10, ..., AI, and these contributions are added. For any possibility *not* described by the chart, there is no contribution.



2. PREPARATION OF TABLE III.2

To the preceding definitions, add

YJ: year of birth of child J (J = 1, ...)
MJ: month of birth of child J(J = 1, ...)

Again, assume that within a month, all events occur at the midpoint. Then the age of the mother at the birth of the child will be

(1) YJ - YB if MB ≤ MJ; and

(2) JY - YB + 1 if MB > MJ

Each woman's birth history is to be reviewed; birth J contributes one unit to row YJ - YB and column YJ if MB ≤ MJ or to row YJ - YB + 1 and column YJ if MB > MJ. These contributions are cumulated over all women in the Individual Survey.

3. CALCULATION OF THE DESIRED RATES

Table III.1 and Table III.2 require identical aggregation into five-year intervals of age and time. The rows should be grouped into categories 10-14, 15-19, ..., 45-49. The columns should be grouped into categories 1935-39, 1940-44, ..., 1975-79. The final category may extend up to the interview date, in order that some use will be made of the most recent dates. For reasons of comparability, it is desirable to begin each interval with a year which is a multiple of five.

The desired rates are obtained when the entries of the collapsed form of Table III.2 are divided by the corresponding entries of the collapsed form of Table III.1. It is conventional to multiply these ratios by 1000 and to describe a given rate as the number of live births per 1,000 women-year of exposure to the specified interval of age and time. Various

possible manipulations of these rates are described in the demographic literature and in other WFS documentation.

The table of five-year age- and period-specific rates should be presented and discussed in the section of Chapter 3 of the Country Report which deals with fertility.

The number of tables, panels and cells for these tabulations are given below

Table Number	Number of Tables	Number of Panels	Estimated Number of Cells per Table*
III.1	1	1	800
III.2	1	1	800
III.3	1	1	800
III.4	1	1	800
III.5	1	1	800
III.6	1	1	800
TOTAL	6	6	-

**The rather large number of cells in the following tables are due to the presentation of data for single years. The data will be suitably aggregated before the actual calculation of rates.*

TABLE III.1 THE TOTAL PERSON-YEARS LIVED DURING AGE A AND YEAR Y, BY ALL WOMEN IN THE HOUSEHOLD SURVEY

		Year (Y)			
		---	1935 --- (single years) ---	1975	All
Age (A)	10	Approximately 800 interior cells			
	11				
	-				
	-				
	-				
	49				
	All				

Total of 1 table.
Total of 1 panel.

Comment: *When the entries in Table III.2 are divided by the corresponding entries in the present table, one obtains conventional age- and periodic-specific birth rates. Some aggregation must precede the actual calculation of rates because of the small frequencies in these tables.*

TABLE III.2 FOR EVERY CHILD EVER BORN TO A WOMAN IN THE SAMPLE, THE YEAR OF BIRTH OF THAT CHILD AND THE AGE OF THE MOTHER AT THE BIRTH OF THAT CHILD

Year of Birth of Child

--- 1935 --- (single years) --- 1975 --- All

Age of Mother at Birth of Child

10
11
-
-
-
49
All

Approximately 800 interior cells

(Note: Cells in the lower left will be vacant.)

Total of 1 table.
Total of 1 panel.

TABLE III.3 FOR EVERY CHILD EVER BORN TO A WOMAN IN THE SAMPLE *AND STILL ALIVE*, THE YEAR OF BIRTH OF THAT CHILD AND THE AGE OF THE MOTHER *AT THE BEGINNING OF THE YEAR* OF THE CHILD'S BIRTH

Age of Mother at Beginning of Year of Birth of Child	Year of Birth of Living Child: --- 1935 --- (single years) --- 1975 --- All
10	
11	
-	
-	Approximately 800 interior cells
-	
49	
All	

(Note: Cells in the lower left will be vacant.)

Total of 1 table.
Total of 1 panel.

Comment: *Table III.3, in conjunction with certain others, permits indirect estimation of age-specific fertility rates using the "own children" technique. In many countries the reporting of the birth history is inaccurate in that older women are somewhat likely not to report births many years earlier which resulted in a child death. The reporting error is substantially less if attention is restricted to children who are still living, as in the present table.*

TABLE III.4 FOR EVERY CHILD EVER BORN TO A WOMAN IN THE SAMPLE, THE YEAR OF BIRTH OF THAT CHILD AND THE AGE OF THE MOTHER *AT THE BEGINNING OF THE YEAR* OF THE CHILD'S BIRTH

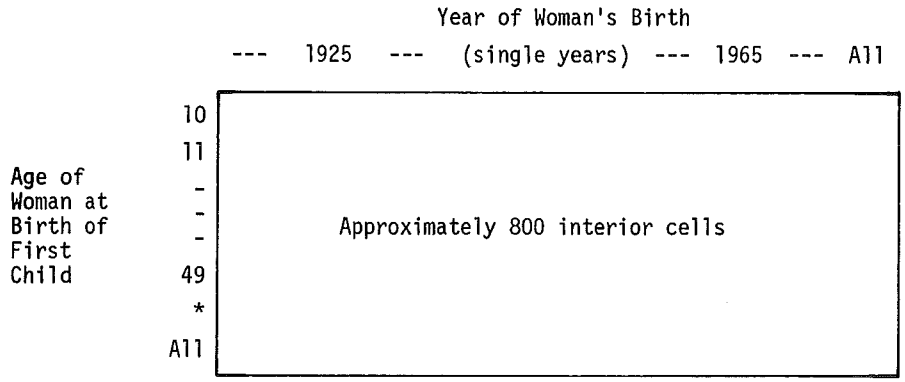
Age of Mother at Beginning of Year of Birth of Child	Year of Birth of Child: --- 1935 --- (single years) --- 1975 --- All
10	Approximately 800 interior cells
11	
-	
-	
-	
49	
All	

(Note: Cells in the lower left will be vacant.)

Total of 1 table.
Ttotal of 1 panel.

Comment: *This table differs only slightly from Table III.2. Children are the units being classified in both of these tables. If the child's birthday occurs earlier in the calendar year than the mother's birthday, then the child will appear in the same cell in both tables. If the child's birthday occurs later in the calendar year, and the child appears in Row A, Column Y of Table III.2, then it will appear in Row A-1, Column Y of Table III.4.*

TABLE III.5 ALL EVER-MARRIED WOMEN IN THE SAMPLE, CLASSIFIED ACCORDING TO THEIR YEAR OF BIRTH AND THEIR AGE AT THE BIRTH OF THEIR FIRST CHILD



Category for women with no live births.

(Note: Cells in the lower right will be vacant.)

Total of 1 table.
Total of 1 panel.

TABLE III.6 FOR EVERY CHILD EVER BORN TO A WOMAN IN THE SAMPLE, THE YEAR OF THE MOTHER'S BIRTH AND THE AGE OF THE MOTHER AT THE BIRTH OF THAT CHILD

Age of Woman at Birth of Child	Year of Woman's Birth: --- 1925 --- (single years) --- 1965 --- All
10	
11	
-	Approximately 800 interior cells
-	
-	
49	
All	
Number of Women	

(Note: Cells in the lower right will be vacant.)

Total of 1 table.
Total of 1 panel.

Comment: *Tables 1.1.2, III.5 and III.6 describe, for each single-year birth cohort of ever-married women, the following critical events: the age at marriage, the age at first birth, and the maternal age distribution of all births.*

These tables provide basic data from the survey, in a single-year format. However, they reflect the biases referred to earlier, in that women who marry late (i.e., are unmarried by the survey date) are systematically excluded. These tables must not be interpreted in terms of entire birth cohorts.

The three tables can easily be rearranged into an alternative format which meets some uses more directly. The row variable would be unchanged and the column variable would consist of the present diagonals (lower left to upper right), representing the year in which the woman reached the exact age given by the row variable. The resulting table will have vacant cells in the lower left rather than the lower right.

Appendix IV

ADDITIONS AND MODIFICATIONS IF COVERAGE IS DEFINED BY AGE ALONE

In some countries marital status does not bear a particularly close association with fertility, and in order to study fertility comprehensively it is necessary to include women who have never been in a marital union. The purpose of this appendix is to describe modifications to the tabulation plan which will result from this enlargement of the study population. The modifications are intended to maximize the value of the tables to the country concerned, besides ensuring comparability with other surveys limited to ever-married women.

Most countries which enlarge the study population in this way will wish to do separate analyses of changes in union status and the extent of fertility outside of unions, etc. The following modifications are minimal and do not relate to these specialised analyses.

LIST OF VARIABLES

SECTION 1-3: No changes

SECTION 4 : Marriage History

As appropriate, all variables in this section will have an additional category, "Never Married". In practice, the only variables in the Tabulation Plan for which these categories will ever appear explicitly are AGE AT FIRST MARRIAGE, YEARS SINCE FIRST MARRIAGE, and CURRENT MARITAL STATUS. When never-married women are to be excluded from a table involving these variables, these categories should be omitted rather than printed out with zero frequencies.

Never-married women should be placed in a new category 6 of EXPOSURE STATUS, but this category will not in fact appear in any of the main tabulations. The definitions of "exposed" and "fecund" in the discussion of that variable will be unchanged.

SECTION 5-6: No changes

SECTION 7 : Current (last) Husband's Background

A never-married woman will receive a "Not applicable" code for each variable in this section (as well as for many variables in other sections). This will affect her placement in tabulations involving the background variable OCCUPATION OF HUSBAND.

TABULATIONS

Changes and Additions

1. In some tables in which "ever-married women" or "currently married women" appear in the title these expressions should be replaced by "women". The never-married women should appear in extra rows or columns:

1.1.1	(one extra column)
1.1.2	(one extra row)
2.2.6	(one extra row)
2.4.6	(two extra columns)
4.2.2	(two extra columns)
4.3.2	(two extra columns)

The new column headings for Table 1.1.1 are given below:

Age at First Marriage							Never Married	Median*	Base Frequency
<15	15-	18-19	20-21	22-24	25-29	30+			

*That age (in tenths of a year) by which 50% of the women in the age groups were married.

The new column headings for Table 2.4.6 are given below:

Currently married							Widowed, divorced, separated	Never Married
Age at First Marriage								
<15	15-17	18-19	20-21	22-24	25-29	30+		

The new column headings for Tables 4.2.2 and 4.3.2 are given below:

Ever-Married Women				Never-Married Women		
Number of Living Children				Number of Living Children		ALL
0	1	...	9 or more	0	1 or more*	

*If this group is large, it may be subdivided.

2. In some tables in which "ever-married women" appear in the title these expressions should be replaced by "women", with a subsequent change in the denominators of all rates or percentages in the table:

   2.3.3
   2.3.4
   2.3.5

3. Tables which should be *repeated* for "all women" (with a "c" added to the table number):

   2.2.1
   2.3.1
   3.3.1
   3.3.3
   3.3.4
   3.4.6
   4.2.1
   4.3.1

4. Additional tables:

Table 1.1.3 should be repeated, as Table 1.1.4, with the addition of rows for ages <20 and 20-24, and this title:

TABLE 1.1.4 MEDIAN* AGE AT FIRST MARRIAGE - BY BACKGROUND VARIABLE AND CURRENT AGE

*That age (in tenths of a year) by which 50% of the women in the age group were married.

5. For country specific decision:

It may be decided to add Table 3.3.7 to part 3 above if there is sufficient interest in the effect of background variables upon the desired fertility of all women, including the never-married.

If there is a great deal of fertility outside of unions, then age should receive more emphasis as a control variable and marital duration less emphasis. In this case, Tables 2.2.5 and 2.2.7, despite their length, should perhaps be repeated with marital duration replaced by age. The discussion and the choice of published tables would reflect this change in emphasis.

Appendix V

WEIGHTING OF SAMPLE DATA

This appendix deals with four questions about weighting in relation to the World Fertility Survey: (1) Why weight? (2) How to weight? (3) When to weight? and (4) Presentation of weighted results. A brief note on computation of sample weights is also included.

A5.1.1 WHY WEIGHT?

Weights are introduced in order to ensure an unbiased estimate from a biased sample.* A biased sample may result from three main causes:

a. Unequal sampling fractions may be deliberately used. For example, we may decide to double the sampling fraction for urban areas in order to ensure adequate sampling precision for the urban sector. This would bias the sample in favour of urban areas and the bias may be corrected by applying a weight of ½ to all the urban data. Bangladesh and Sri Lanka are cases of this kind in the WFS. Another common example would be the case in which one or a few of the final clusters turn out to be excessively large, requiring an unacceptable amount of field work; it is therefore decided (perhaps only at the last moment) to select a smaller sampling fraction than usual in these clusters. Occasionally, contrary to WFS recommendations, a non-self-weighting design may be deliberately adopted for a supposed organizational advantage; for example, it may be decided to select a fixed number of households in each ultimate area unit.

   The sampling fractions may be equal in principle but may turn out unequal in practice, due to rounding. For example, in the survey in Nepal it was decided to cover all households in each selected ward; as a self-weighting sample of households was desired, this implied that the sample of wards itself would have to be self-weighting. The sample stage prior to the ward was the panchayat. However, the parameters were such that the number of wards to be selected in each selected panchayat had to average about 1.4 for self-weighting, but in practice they had to be 1, 2 or 3 in every case. Obviously, this implied rounding error. For example, if the number of wards needed for self-weighting was 1.49 in a certain panchayat, then 1 would be selected, and to correct the error a weight of 1.49 should be applied. If the number needed was 1.51 then 2 would be selected and one would weight by 1.51/2. Thus the correct weights could vary over a range up to 2-to-1.

c. The sample *as designed* may be self-weighting but defects of execution may introduce bias. It is useful to distinguish two ways in which this may happen: (i) a certain number of households and individuals sprinkled throughout the target sample may be omitted due to refusal or non-contact; (ii) whole areas may be omitted due to floods, civil disturbance, inaccessibility

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* *The term "biased sample" is not officially recognized in statistics but its meaning in the present context is obvious. A sample which is unbiased needs no weighting and is thus called "self-weighting".*

or whatever. In case (ii) it is sometimes reasonable to redefine the domain of the survey so that the omission is thereafter presented as a *modification of survey objectives* rather than as an error of execution.* No correction is then required, so that no problem of weighting arises.

In each of the above situations, weighting *could* be used to "de-bias" the survey estimates. Whether it *should* be so used is another question -- for example it may be too expensive or not worth the trouble. This question will be discussed in the sections below.

A5.1.2 HOW TO WEIGHT

Weighting is normally done by the computer. COCENTS and most other survey packages have a weighting facility which presents no special problems. Of course all the weights have first to be computed, then punched, with appropriate identification, and all this has to be carefully verified, but the total volume of this work is not very great.

For reasons that will become clearer in Section A5.1.4 below, the weights should be multiplied by a constant chosen so that the sum of the weights of all individuals in the data file is equal to the number of persons actually interviewed in the sample. (See Section A5.1.5 for details of computation.)

When weighting is used, one will not compute and punch a separate weight for each individual; always the weights will be computed for a group of individuals.** Most commonly each weight will apply to one last-stage unit (called the "ultimate area unit" or UAU in the WFS Manual on Sample Design), or occasionally to one ethnic group in one UAU. Where oversampling of urban areas is used, there may be only two distinct weights in the whole sample, one for the urban sector and one for the rural.

COCENTS will automatically give weighted results in all the tables if desired. It is important to note, however, that the chi-square test must not be applied to weighted data: the test assumes that the cell entries are true frequencies. (The sample applies to the binomial, multinomial and Poisson variance formulae, though these are unlikely to be used in WFS analyses.) The analyst may therefore sometimes require unweighted data as well as weighted.

See WFS Manual of Sample Design, pp.64-65. For example, if most of the sample area in the Northern Province were omitted one might decide to drop this province altogether and report the survey results as representative of the country excluding the Northern Province.

***This statement relates to the computation of the weights and their input into the computer. Once this has been executed, the computer may assign the appropriate weight to each individual and will carry these individual weights into every computation.*

Occasionally weighting is best performed not by computation but by duplication of data. This method is likely to be used if an area is omitted: it may then be "replaced" by duplicating another area. Again, if an area turns out to be unexpectedly large and as a result it is decided, exceptionally, to apply a smaller sampling fraction than normal when selecting households within that area, then the weighting to correct for this may often be achieved by duplication of the data obtained. The duplication method of weighting will generally be used only where nearly all of the sample is *not* to be weighted, i.e., where the introduction of weights is very exceptional. Note that duplication spuriously reduces the variance and this effect may be particularly important if a whole area is replaced by duplicating another area: for example, if only two area units were selected in some stratum and one was omitted for some reason and was then replaced by duplicating the data from the other, then the variance estimate for that stratum will be zero. This should be borne in mind when variances are computed.

A5.1.3 WHEN TO WEIGHT

In the situation where weighting is theoretically required in order to ensure an unbiased estimate, then a decision *not* to weight implies the assumption that there are no systematic differences between those groups which ought to have received different weights. Similarly, in weighting for non-response, if all persons in a group are assigned the same weight then it is implicitly assumed that, *within* that group, respondents and non-respondents do not differ systematically. In practice one has to judge whether such systematic differences are likely or not.

The decision whether to weight or not depends on an assessment of two opposing factors: (a) the additional cost, complexity and risk of error involved in introducing the weights; and (b) the importance of the debiasing effect which will result. Few firm rules for such an assessment can be given but we offer below some rough indications which may be useful.

a. When unequal sampling fractions have deliberately been introduced for different strata (e.g., oversampling for the urban sector), weighting to "correct" for this is essential.

b. Weighting to correct for any ad hoc change in a sampling fraction introduced in a particular small area should be regarded as essential but will normally be performed by duplication of data rather than by computation. The same applies to weighting to "replace" an omitted sample area.

c. If sampling fractions vary due to a sample design which is not quite self-weighting, in most cases the correct weights will not vary widely. Moreover these variations will generally not be correlated with any significant characteristic, so that it is rather unlikely that use of the corrected weighting will make much difference. Nevertheless, one cannot be *sure* of this and to ignore the weighting completely in these circumstances is hardly good scientific procedure. Perhaps a reasonable compromise

solution would be to present the main data for Report No.1 unweighted, but to compute the weights and apply them to a few of the main tables either in an appendix to Report No.1 or in a later report. If, as is most probable, the weighting is shown to make no important difference one will then be in a stronger position to ignore it for the remaining tabulations.

d. The question of weighting to correct for refusal and non-contact (collectively called "non-response") is also difficult. Non-responses are spread throughout the sample. If the overall non-response is below, say, 10 per cent, it is most unlikely that there will be any serious bias resulting from ignoring it. The most likely sources of bias are two: non-response may be higher in the urban sector and among working women. The former effect can be detected as soon as the field records are in; the latter cannot be detected at all unless existing WFS methodology is changed (for example, by asking for more information on the *reasons* for non-contact).

It is recommended that the response rates by region and urban/rural (and by ethnic group if available) be worked out at about the time when coding and manual editing are in process and then examined immediately to see whether there are significant differentials. If response rates do not differ from one group to another by more than about 5 per cent, the likelihood of serious bias is so small that the problem can thereafter be ignored. If the differentials are larger than this it may well be worth weighting to correct them. A decision should be based on the size of the differentials and the amount of trouble which weighting would involve.

A5.1.4 PRESENTATION OF WEIGHTED RESULTS

In this section the raw sample numbers will be represented by the symbol n and the weighted number by n'. As mentioned above, n' will have been computed with a constant factor chosen so that, for the sample as a whole, n' equals the number who have been interviewed. This will minimise the difference between weighted and unweighted frequencies for any component of the sample.*

The reader of the survey report may have a good reason for wanting to know both n and n' (i.e., unweighted and weighted frequencies) in principle for any cell of any table. He wants to know n, the actual number of observations, in order to judge how seriously the data should be taken. Obviously a result based on 2 observations does not deserve the same attention as one based on 200. Essentially this is a matter of sampling error, but also of possible freak non-sampling errors.

**In situations where any duplication or deletion of records has been done for reasons described earlier, we take the "interviewed" sample sizes referred to above to be <u>after</u> such alterations.*

He wants to know n' for quite a different reason: he may wish to regroup the data reported in a way more convenient to him than that chosen by the author of the report.

We now consider policy for presentation of weighted and unweighted frequencies for various situations.

a. If there is *no weighting*, then n = n' for all cells of all tables. In this case the computer print-out, as well as the published tables, should show the value of n for every cell except where n can be computed directly from the data shown in the same table (see Examples 1 and 2 below).

b. If the weighting is *weighting to correct for non-response*, then n and n' will never be very different. Referring back to the reasons mentioned above for wishing to know n or n', it will be seen that the reader who wants to know n does not need an accurate figure, while the user of n' needs reasonable accuracy. Thus, in the present case values of n' alone should be obtained and published. Once again, they should be shown for all cells except those in which they can be directly inferred. In the publication it should be explained that the values shown represent weighted sample numbers.

   The basis for the weighting should be stated. It should also be explained that the weighting is adjusted so that *for the sample as a whole* the weighted number is the same as the actual number of interviews, but that *within any subgroup of the sample* the number of interviews will in general differ somewhat from the weighted figure shown.

c. *In all other cases*, n and n' may differ substantially. Therefore, *both* should be obtained in the computer print-out, *for all cells of every table*. Note that, in a table like Example 1 giving percentage breakdowns, the values of n' can be deduced from the marginal values (the percentage bases) but this is not true of values of n. This is why n is needed for every cell. One also needs to *compare* n and n' in every cell (for the purpose mentioned at ii) below) and for this reason one obtains n' for every cell to save the trouble of hand computation. Armed with this information one will be in a position to decide on a policy regarding publication. Obviously, publication of three figures (the subtantive data and the values of n and n') in every cell throughout the report is to be avoided if possible. A reasonable policy would be i) to give the values of n' wherever they cannot be inferred directly and ii) to give values of n only where they deviate substantially from n' (say, by more than +30%), explaining in a note that this is the policy followed.

   In all cases one further rule should be applied: results based on less than 20 cases (n < 20) should be replaced by an asterisk in the report. However in case b) above, where the values of n are not obtained, this criterion may reasonably be applied in terms of n' instead of n.

Many survey reports are published without giving values of n'. Either they are omitted altogether or they have to be inferred by the reader from other tables with no help from the author. The former is unacceptable, and the latter inconsiderate to the reader. The WFS recommends as a strict publication policy that every published table should provide either the value of n' for every cell or sufficient data *within the table* to enable n' to be computed for every cell.

EXAMPLE 1: Table 1.2.1 of WFS "Guidelines for the Country Report No.1"

THE PERCENTAGE DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO STATUS OF FIRST MARRIAGE - BY YEARS SINCE FIRST MARRIAGE AND AGE AT FIRST MARRIAGE

Panel 1: Age at first marriage <20

		First marriage undissolved	First marriage dissolved			TOTAL
			By death of husband	By divorce or separation	Total	
Years since first marriage	<5	92.4	0.3	7.3	7.6	100.0 (1070)
	5-9	90.0	0.7	9.3	10.0	100.0 (958)
	10-14	88.2	2.8	9.0	11.8	100.0 (848)
	=	=	=	=	=	=
	ALL					100.0 (4928)

In this example, the values of n are shown for the extreme right-hand total column only since they can be directly computed for all other cells, assuming no weighting has been used.

EXAMPLE 2: Table 2.2.3b of WFS "Guidelines for the Country Report No.1"

MEAN NUMBER OF CHILDREN EVER BORN TO ALL EVER-MARRIED WOMEN - BY AGE AT FIRST MARRIAGE AND YEARS SINCE FIRST MARRIAGE

		Age at first marriage					TOTAL
		<15	15-17	18-19	---	---	
Years since first marriage	<5	1.1 (8)	1.0 (268)	0.9 (341)	--- ---	--- ---	1.0 (1070)
	5-9	2.5 (27)	2.6 (267)	2.6 (283)	--- ---	--- ---	2.6 (958)
	10-14	3.6 (85)	3.9 (313)	4.0 (217)	--- ---	--- ---	3.9 (848)
	=	=	=	=	--- ---	--- ---	=
	ALL	5.8 (665)	4.2 (1560)	3.3 (1219)			3.8 (4928)

In this example, the values of n must be shown for every non-marginal cell since they cannot otherwise be inferred. They can also be shown in the total column and "ALL" row for convenience, although this is not strictly necessary.

A5.1.5 NOTE ON COMPUTATION OF WEIGHTS

As was mentioned above, sample weights should be computed such that n = n' where n is the unweighted number of cases interviewed and n' is the weighted sum for these cases. In this section the procedure to compute weights to satisfy the above equality is described.

As an illustration of the procedure, consider the following hypothetical example:

A sample of 100 households has been selected from 3 strata comprising, say, metropolitan areas, other urban areas and rural areas. The relative probabilities of selection of households are 3.0:1.5:1.0 for the three strata respectively. In each stratum, two clusters have been selected. It has been decided to weight up each cluster appropriately to compensate for differential non-response. All households in each cluster get the same weight. Breakdown of the sample is as follows:

TABLE A

k	p_k	d'_k	m_k	d_k	m'_k
1	3.0	1	40	0.5	20
2	1.5	2	20	1.0	20
3	1.0	3	40	1.5	60
ALL	-	-	100	-	100

The above table gives for the three strata, k=1, 2 and 3, the following:

p_k the relative probabilities for selection of households;

d'_k relative weights originally determined as the inverse of the probabilities of selections;

m_k number of sample households selected;

m total number sample households selected;

d_k weights "normalised" such that the weighted sample size equals the unweighted sample size; that is,

$$\sum_k d_k . m_k = m, \quad \text{or}$$

$$d_k = \frac{d'_k m}{\sum_k d'_k . m_k} = d'_k \cdot \frac{100}{40+40+120} = d'_k/2 \text{ in the above example}$$

m'_k the weighted sample sizes $m'_k = d_k . m_k$, so that

$$\sum_k m'_k = \sum_k d_k m_k = m = 100 \text{ in the above example}$$

Table B gives the assumed response rates by sample clusters, i:

TABLE B

k	i	m_{ki}	n_{ki}	R/R_{ki}	w_{ki}	n'_{ki}
1	1	20	10	1.6	0.8	8
	2	20	16	1.0	0.5	8
2	1	10	8	1.0	1.0	8
	2	10	6	1.33	1.33	8
3	1	20	20	0.8	1.2	24
	2	20	20	0.8	1.2	24
All	-	100	80	-	-	80

m_{ki} is the assumed sample size for cluster i in stratum k

n_{ki} is the number interviewed in the cluster

R_{ki} is the response rate = n_{ki}/m_{ki}

R is the overall response rate

$$= \sum_{k,i} n_{ki} \Big/ \sum_{k,i} m_{ki} = n/m = \frac{\text{Total No. interviewed}}{\text{Total No. selected}}$$

$= 80/100 = 0.8$ in the above example.

R/R_{ki} is the weighting to compensate for differential non-response

w_{ki} is the final set of weights, to compensate both for different probabilities of selection and for differential response rates

$$w_{ki} = d_k(R/R_{ki})$$

n'_{ki} is the weighted number interviewed $= w_{ki} \cdot n_{ki}$

The above procedure gives the weighted and unweighted sizes of the interviewed sample to be the same. The proof is as follows:

$$n' = \sum_{k,i} n'_{ki} = \sum_{k,i} w_{ki}\, n_{ki} = \sum_{k,i} d_k \cdot \frac{R}{R_{ki}}\, n_{ki}$$

$$= \frac{n}{m} \sum_k d_k \sum_i m_{ki} = \frac{n}{m} \sum_k d_k . m_k = n,$$

since the "design weights" d_k have been adjusted so that

$$\sum_k d_k\, m_k = m.$$

From the above, the procedure for computing weights may be summarized as follows:

(a) For each of the parts of the sample selected with different probabilities, determine relative weight as reciprocal of the selection probability. Multiply the sample size of the part by that relative weight and add the results for the whole sample. Divide the original weights by this summation, and multiply by the unweighted sample size. This gives the required "normalised sample design weights".

(b) For each part of the sample to which a uniform weight to compensate for non-response is to be applied, calculate the response rate by dividing the number of interviews completed by the number selected. Similarly, calculate the overall rate for the whole sample. The overall response rate divided by the rate for the part gives the required "normalised sample implementation weights". The final weights are multiplication of (a) and (b).

It is not necessary that both sets of weights be involved for any sample. It is also not necessary that parts referred to in (b) form sub-parts of those referred to in (a), though usually that will be the case. The smaller of the two defines the largest part of the sample in which all individual units receive the same weight.

The following practical points should be noted in relation to the calculation of weights.

1) To avoid rounding errors from becoming noticable, d_{ki} and R_{ki} should be calculated to 3 decimal places, and R should be calculated to 4 decimal places.

2) In evaluating response rates, distinction should be made between

   a) whether the data to be weighted relates to household or individuals, or

   b) whether dwellings or households are the ultimate area units.

   Suppose there is a part of the sample to which uniform weights are applied and denote the "area" by k_i.

   DS=number of dwellings selected for a sample of dwellings.
   DC=out of DS the number in which households were listed after field visits. DC includes any dwellings found to be vacant.
   HS=number of households listed in the DC dwellings, or number of households selected, for a sample of households.
   HC=number of household interviews completed.
   IS=number of eligible women selected out of HC households.
   IC=number of individual interviews completed.

From the above compute n_{ki} and m_{ki} as follows:

	Sample of		
	Dwellings		Households
Data relating to:	n_{ki}	HC	HC
Households	m_{ki}	DS(HS/DC)	HS
Individuals	n_{ki}	IC	IC
	m_{ki}	$DS.\left(\frac{IS}{HC}\right).\left(\frac{HS}{DC}\right)$	$HS\left(\frac{IS}{HC}\right)$

m_{ki} is the "effective" number of units of analysis selected. The units of analysis may differ from ultimate units. For example units of analysis may be individuals; ultimate sampling units may be dwellings. As before, response rate for area k_i is computed as

$$R_{ki} = n_{ki}/m_{ki}.$$

The overall response rate is given by

$$R = \sum_{k,i} n_{ki} / \sum_{k,i} m_{ki} .$$

The final weights are given by

$$w_{ki} = (\text{design weights, } d_k) \times (R/R_{ki}) \ .$$

This procedure may not always give n' equal to n exactly. The design weights were normalised in relation to DS or HS, and not m_{ki}, as computed in the above table. However, the above approximation is not significant unless from area to area very large differences exist between values of d_k as well as of $\frac{IS}{HC}$ or $\left(\frac{HS}{DC}\right)$.

3) In any case one should always check the calculation of w_{ki}. This is done by computing the weighted sizes

$$n_{ki}' = n_{ki} \cdot w_{ki}$$

and verifying that

$$n' = \sum_{k,i} n'_{ki} = n$$

If due to k,i approximation mentioned in 2) above or due to rounding errors, n' and n differ significantly, for example ¼%, the weight w_{ki} should be finally adjusted by multiplying those by the factor n/n'.