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FAMILY PLANNING PROFILES AND THEIR SOCIO-CULTURAL CORRELATES

A SURVEY OF THE FAMILY PLANNING PATTERNS AND OUTLOOK OF 900 PORT ELIZABETH WHITE MARRIED COUPLES

EDWARD HIGGINS

CENTRE FOR APPLIED SOCIAL SCIENCES
SENTRUM VIR TOEGEPASTE MAATSKAPLIKE WETENSKAPPE

1981 - MONOGRAPH NO. 8

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ACKNOWLEDGEMENTS

Grateful acknowledgement is made of an ad hoc grant from the National Council for Social Research (now the Human Sciences Research Council), a grant from the Research Committee of Rhodes University as well as a grant from the Research Committee of the University of Natal. The views expressed in this report are the responsibility of the author alone.

The author is deeply indebted to the competent and enthusiastic group of interviewers, as well as the Port Elizabeth newspapers for their responsible coverage of the survey on which this study is based: both factors contributed greatly to harmonious and expeditious field-work.

A special measure of thanks is due to Messrs. International Computers and Tabulators (ICT) for their computerised tabulations of the raw data completely free of charge.

In particular, the writer wishes to thank most sincerely his friend and colleague, Professor Hilstan L. Watts, former Director of the Institute for Social Research at the University of Natal, and now Head of the Department of Sociology at that University, for his unflagging interest, sound suggestions and continuous encouragement; in addition, Professor Watts must be thanked for spontaneously placing the many research facilities of the Institute at the writer's disposal whenever required.*

Finally, the writer is most grateful to the late Professor J. Irving, Department of Sociology, Rhodes University, for his stimulating guidance, erudite advice and unfailing patience.

Mrs. P.J. Pretorius, Miss A. Morton and Mrs. L.P. Wickham of the Institute for Social Research typed the final version of this report, while Miss H. Mathews, Mrs. L. Winchester-Gould, Miss S. Dove, Mrs. R. Fraser and Mrs. L.P. Wickham undertook the proof-reading. The diagrams were redrawn by Miss A. Morton.*

E. Higgins

* *The Institute for Social Research has been renamed the Centre for Applied Social Sciences.*

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GLOSSARY OF TERMS USED

ACTION	See Family Planning
BIRTH	Refers to live births. In this study all births to respondents are included, even births which occurred in a previous marriage. Births occurring during previous marriage of husband are excluded.
CONTRACEPTION	Any method whatsoever of avoiding conception except sterilization and sexual abstinence.
Appliance Methods of Contraception -	Any contraceptive method employing a chemical product or a mechanical product.
Non-appliance Methods of Contraception -	Use of methods such as rhythm or withdrawal. Indicates the absence of chemical and/or mechanical contraceptives.
Mixed Methods of Contraception -	Successive rather than simultaneous use of appliance and non-appliance methods of contraception.
FAMILY PLANNING	Any attempt to limit or space the number of offspring by means of contraception. There are different levels of planning and varying degrees of success.
Action -	User couples who want their first child "as soon as possible" after marriage, and once they have achieved their goal, they resort to contraception in order either to space their remaining pregnancies or to prevent all further conception.
Motive -	Conception occurs only when contraception has been deliberately stopped in order to have a child. Marriage and contraception are co-terminous. In the well-known study by Freedman, Whelpton and Campbell (1959), this type of planning is regarded as complete planning whereas in the present study both action and motive planning are so designated.

Mixed - Some pregnancies are planned on an action basis and another or others are planned on a motive basis.

Completely Successful - (1) All pregnancies planned by discontinuing use of contraception, or (2) first one or two pregnancies wanted "as soon as possible" after marriage and then contraception adopted, or (3) first child wanted "as soon as possible" after marriage and then contraception employed in order to plan all further pregnancies by the discontinuance of contraception.

Partly Successful - Couples with one or more planned pregnancies to their credit as well as one or more unplanned and/or accidental pregnancies in their pregnancy history.

Not Successful - A user group with no planned pregnancies recorded - only unplanned and accidental pregnancies. Strictly speaking, couples in this category are only attempted planners.

FERTILITY Refers to number of children actually born.

Excess - Denotes couples whose most recent pregnancy was unwanted then or later by the respondent, her husband or both.

Hypothetical Fertility Rate - The number of children or pregnancies a sub-group rather than an individual couple would have over a 30-year period. This rate is based on the couple's achievement in terms of children born alive or pregnancies, as the case may be, related to the sub-group's total marriage duration and projected into the future to cover a hypothetical period of 30 years of marriage. This rate does not, of course, make allowances for changing fecundity patterns which occur with increasing age and marriage duration, hence the term "hypothetical".

FECUND	Couples for whom there is no evidence of impaired fecundity in terms of the criteria used in this study. One of the main fecundity categories employed in this study.
Sub-fecund -	The other main fecundity category comprising couples with varying degrees of fecundity impairments classified as Probably Sterile, Definitely Sterile, and so on. This is a broad category comprising couples in whose case the presence of some impairment substantially reduces the capacity to have children. It includes those for whom further childbearing is out of the question as well as those whose ability to have children is significantly below normal.
Semi-fecund -	The first level of sub-fecundity below the fecund types. In terms of criteria discussed in the text, couples in this category do not conceive at a "normal" rate. Semi-fecund respondents fail to conceive over a relatively "long" period of time even when no steps are taken to prevent conception.
FECUNDITY	The physiological capacity to participate in reproduction.
Indeterminate -	Couples whom it is impossible to classify in terms of our stated fecundity categories. On the basis of information supplied they do not fit into any of the fecundity categories.
FOETAL DEATH	The death of a product of conception prior to its separation from the mother in birth. Still-births and miscarriages were regarded as foetal deaths for the purposes of this study.
MARRIAGE DURATION	The period a respondent has actually been married. Usually, the length of time from a once-married respondent's first marriage to the time of the interview. For women married more than once, the period of previous marriage(s) is added to the present one.

MOTIVE — See Family Planning

PREGNANCY — Refers to all the pregnancies of interviewees including those which occurred during previous marriages.

Accidental - A pregnancy occurring in spite of contraceptive measures to prevent conception.

Planned - (1) Conception occurred after use of contraception was discontinued specifically in order to have a child; (2) conception wanted "as soon as possible" after marriage and so all form of contraception avoided but couple later adopted contraception.

Unplanned - Residual category; neither accidental nor planned. In this study all pregnancies of non-users of contraception are, by definition, unplanned but some of the pregnancies of users are also classified as unplanned.

STERILE — Those couples incapable of producing offspring as a result of some defect in either wife or husband.

Definitely - A fecundity category comprising couples who cannot possibly have any (more) children. Usually it is the wife who cannot conceive because some physical reason or operation rules out conception, or because she has reached the menopause. In a few cases the husband is the sterile party.

Probably - In this fecundity category we find those couples for whom a further or future birth is considered improbable on the basis of the respondent's medical history. Apart from those women who conceive with great difficulty or after a lengthy exposure to conception, there are those who have a record of foetal deaths as well as cases where another pregnancy would constitute a grave threat to the woman's health.

USER	Couples who at some time in their marriage have tried to prevent or forestall conception by any method whatsoever.
Ever -	By the time reproductive career is finished will have used some form of contraception.
Future -	Present and past non-users who expect to make use of contraception at some later stage in their marriage.
Immediate -	Use of contraception commenced at outset of marriage.
Later -	Use of contraception first adopted after one or more pregnancies.
Never -	Non-user couples who intend to remain so for good.
Non-user -	Up to the time of the interview no form of contraception at all had been used.
Past -	No longer using contraception but were users at an earlier stage of marriage.
Present -	Couples who were using contraception at the time of the interview.

CHAPTER I.

THE STUDY.

For all practical purposes, human existence and human society are co-terminous. As far as human existence is concerned, the two most fundamental aspects are birth and death. These involve the forces of mortality and fertility. Mortality and fertility are not merely biological phenomena but are also sociologically-conditioned phenomena set within a matrix of societal forces. From time immemorial, mortality has always been the factor which finally determined the size of populations. However, recently a vital revolution has taken place in the industrialised West where the new force in shaping population size is now, relatively speaking, fertility rather than mortality. Never before in human history has population growth depended to such an extent on the decisions of married couples in regard to the number and spacing of their children and their success in carrying out their plans. As Freedman and his co-authors (1959, 2) succinctly express it, "Over most of human history neither the number nor the spacing of children has been subject to rational control or individual choice in the population at large." The possibility, acceptance and spread of family planning in large sectors of Western Society thus represents a social revolution of notable magnitude.

Family planning and, by implication, contraceptive techniques and the spacing of children, are widely accepted and practised in many parts of the Western world. One might even talk of a new norm in this regard. This new type of fertility control continues to gain acceptance throughout the Western world and is also making inroads upon some of the more traditionalist and familialist societies of the world.

Contraception has been defined by Kingsley Davis (1950, 559-60) as a purely deliberate method of permitting the enjoyment of intercourse without the penalty of pregnancy. In the Western world contraception is regarded as the major technique of family planning. To a demographer anything that deliberately prevents conception is a contraceptive whether it be abstinence from sexual intercourse or the latest anti-ovulatory

tablet. As has been pointed out, (e.g. by Johnson (1947), Stix & Notestein (1940, 1) and Bertrand Russell (1938, 97), the great importance and significance of contraception for family planning lies in the fact that contraception transfers reproduction from the biological to the cultural sphere more effectively than does anything else. Consequently Sauvy (1961, 149) the eminent demographer, refers to contraception as the 'demographic solution'.

Family planning has largely been made possible by the ever-increasing availability of contraceptive devices, Modern Man, especially in the West, has learnt to control fertility as he earlier learned to control disease and pestilence. However, in many parts of the non-Western world fertility control has not even begun to match 'death' control and in many quarters the 'population explosion' is discussed both in learned journals and the popular press.

To the student of social history the spread of contraception and family planning is neither a surprising nor an intrusive phenomenon. Reproduction has come to be viewed as a natural process capable of rational control rather than a sacred mystery immune from human interference. In many societies family planning is both commonplace and respectable. However, as Guttmacher and Mears (19, 13) stress, it would be inaccurate to maintain that family planning by way of contraception is universally accepted in the Western world. Differential rejection of family planning is just as interesting, sociologically speaking, as is differential acceptance of family planning and the use of contraceptive devices.

The fact and incidence of contraception and family planning underscore an important sociological reality: culture patterns, although generally inclined to be conservative and resistant to change, are neither static nor cement-like; they do change. Family planning is an adjustive response to a crucial problem; this response involves changes in the role-view and role-performance of marriage partners. Of particular interest, is the differential rate of acceptance and the stages of adoption of family planning on the part of married couples.

It is against this background that we turn to South Africa: 'White' South Africa is part of Western culture, and therefore one anticipates that the whites in the Republic are influenced by the social revolution of family planning. As yet, very little has been attempted in this country in the line of the study of human reproductive behaviour, fertility control and the associated norms and values. Indeed, there are serious gaps in our general demographic knowledge of the country, and until fairly recently (1960) even the official census left much to be desired. Field studies are needed to make good the present deficiencies in our knowledge.

The present investigation is a sample field survey of family planning amongst the Whites in South Africa. It examines a sample of White married women in Port Elizabeth, one of the cities in the Republic, and the only major seaport on the eastern seaboard between Table Bay (Cape Town) and the Bay of Natal (Durban). Founded in 1820, it is the Republic's fifth largest city, and today (1971) covers the previously separate municipalities of Walmer and Port Elizabeth, to give an area of over 119 square miles. In 1960 the census population of the city was 274,180 persons. Thirty-five per cent were Whites (94,804), twenty-two per cent Coloureds (White-Black hybrids) (61,460), two per cent Asians (4,083), and the remaining forty-two per cent (113,833) Blacks. (Source: Republic of South Africa (1963)).

It is calculated from the census figures that during 1951-60 the total population of Port Elizabeth increased by 44.7 per cent, while the White population increased by almost one-fifth. (Republic of South Africa, 1963, 20). It is estimated that the White population increased fivefold during the period 1911 - 1964. Thus the city is growing, and is attracting migrants.

The many White rural dwellers who have been attracted to Port Elizabeth over the last few decades have been predominantly Afrikaans-speaking. They have been primarily drawn to this urban area by the great industrial expansion which has taken place more particularly in the past two decades. Port Elizabeth is well known

for its rapid industrial expansion[1], and over one-third of the Whites in this urban area were engaged in manufacturing industry at the time of the 1960 Census as compared to one-fifth for all Whites in South Africa as a whole. (Republic of South Africa (1962), (1966)).

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1. Undoubtedly, Port Elizabeth's industrial and commercial growth has been phenomenal especially since the end of World War II. As reported in a brochure in 1963 by the Port Elizabeth Publicity Association, at the end of the war, private industry employed 8,000 persons while the 1965 enrolment was 45,000. Forty-five years ago (1925-6) Port Elizabeth had 200 factories; by 1965 the number had risen to 700. In 1907 half a million electric units were generated in the municipal area while the 1964 total was 671,942,148 units. During 1964 the value of completed buildings was R9,206,745. In that year the gross valuation for the city was R222,398,120 as compared to R35,632,000 before World War II.

Port Elizabeth is the centre of South Africa's motor assembly industry as well as the headquarters of the footwear industry. It is the country's chief wool port, handling over one-third of the Republic's total wool clip. In addition, its growing industrial complex embraces clothing and textile industries, the manufacture of tyres, abrasives, cement, foodstuffs, furniture, industrial chemicals as well as several important engineering undertakings. Furthermore, Port Elizabeth plays a notable part in the country's distribution trade.

Thus, Port Elizabeth, with its high proportion of ex-rural newcomers to an urban area, was a suitable city for a study of family planning and its correlate, contraception. Many of the current city-dwellers clearly had rural backgrounds which are not normally associated with family planning patterns and attitudes favourable to contraception. The differences between the two main language groups in Port Elizabeth's White population is not a mere linguistic difference but rather a cultural difference, particularly with regard to religious affiliation and socio-economic status. At the 1960 Census the White population was about equally divided between English- (54.3 per cent) and Afrikaans-speaking persons (41.5 per cent), (Republic of South Africa (1962)), and although this distribution was somewhat atypical of South Africa as a whole, it provided an urban White population where the language groups were numerically much the same size for comparative purposes.

Fieldwork for this sample study was undertaken during 1964. Limitations of money and time compelled the use of the latest voters' roll for drawing a systematic sample of addresses. Every n^{th} address was selected in terms of a predetermined sampling fraction. (It was decided not to draw a sample of names from the voters' roll because experience showed one could expect that many addressees would have moved away from Port Elizabeth, or have moved elsewhere within the city, and problems of tracking down new addresses would have been considerable. Hotels, boarding houses and similar institutions were excluded from the survey because of the high rate of ineligibility likely to be encountered there. Only addresses of rooms, flats and houses were sampled.) White married women living with their husbands, under 50 years of age, resident at the addresses so drawn and who were permanently resident in the city, were interviewed by fieldworkers using a completely structured schedule very similar to the one employed in a recent American demographic study. (Freedman et al. (1959, 431 ff.)).

A total of 900 respondents was obtained, with the excellent response rate of 97.8 per cent. Further technical details about the fieldwork are given in Appendix A.

This investigation is the first of its kind undertaken in Port Elizabeth, and one of the first in South Africa. (In 1957-8 a study of family planning amongst Whites was undertaken in Johannesburg. (Higgins (1960), (1962), and (1964); Badenhorst and Higgins (1962), and Badenhorst (1963)).

The specific issue of the present study is a consideration of family planning patterns and values in the sample population. While the subject matter, methods and emphasis of the present study are primarily demographic, it also takes cognisance of the more obvious sociological aspects of controlled fertility in a specific population. Though neither the medical nor biological aspects of fertility are directly treated in this study, their importance is not overlooked. However, the emphasis is on the demographic and socio-cultural aspects of the control of human fertility in the sample investigated, and differentials involved.

As a framework for the investigation, the following working hypotheses were developed for testing:

1. Fertility ideals and values are closely related to actual reproductive performance.
2. A couple's fecundity status has a vital bearing on their family planning pattern irrespective of cultural factors.
3. Commitment to the use of contraception does not, per se, constitute proof of successful family planning.
4. The timing of the use of contraception is a function of socio-economic status and is significantly related to completely successful family planning.
5. Reluctance to employ contraception is largely associated with the religious variable.
6. A woman's pregnancy history has an important bearing on the adoption of contraceptive techniques and family planning.
7. Duration of marriage is an extremely compelling variable vis-à-vis a couple's acceptance of contraception and family planning behaviour.

8. A strong functional interdependence exists between religious affiliation and the nature and extent of family planning patterns.

9. Home language (representing sub-cultures), is a highly significant variable in determining the use of contraception and family planning behaviour.

10. Different types of family planning exist and these differences are the function of socio-economic and socio-cultural variables.

11. Highly successful family planning is positively associated with socio-economic status and educational standards.

12. The spacing of offspring in marriage is directly conditional upon family planning techniques.

13. Family size is a function of family planning.

It need hardly be stated that every study of this nature aims to break new ground even though its scope may of necessity be limited. But since no scientist works in a vacuum, a partial aim of the present study will be to test certain hypotheses employed in similar studies and to compare findings. Primarily, one has in mind the classic study Family Planning, Sterility and Population Growth by Ronald Freedman, P.K. Whelpton and Arthur A. Campbell (1959) in the United States, which has had a key influence on the shape of this investigation, and the formulation of the working hypotheses listed above.

CHAPTER II.

CHARACTERISTICS OF THE SAMPLE POPULATION

Before analysing the family planning behaviour of the sample of 900 White married women, it is necessary to obtain some idea of these women and their social characteristics.

In White South African society, language groups represent distinct and different sub-cultures. Home language means the language that is used exclusively or predominantly in the home; this language is not necessarily the informant's mother tongue. Forty-seven per cent of the sample spoke Afrikaans, and an almost equal number (48 per cent) spoke English at home. Only 4% spoke English and Afrikaans equally. This distribution is atypical of the country as a whole for Afrikaans-speaking persons constitute nearly three-fifths of the White population. They form just over one half of the country's urban White population and just over four-fifths of the rural White population of South Africa. The Afrikaans-speaking persons of Port Elizabeth are comparative newcomers to this rapidly-growing urban area.

The ages of the women sampled are given in Appendix B, Table B.2. The mean age was 34.1 years, with half being over the age of 33.7 years. There is a good spread from young married women in the late teens to women in the late forties.

The religious affiliation of subjects is an important social characteristic. In social surveys conducted in Western countries, it is standard procedure to group all Protestants together when dealing with the religious affiliation variable; however, this would not be feasible as far as South African Whites are concerned because the term "Protestant" would then mask important socio-cultural differences observable between the English- and Afrikaans-speaking respondents.

In the present study a distinction is made between those Protestants (predominantly members of the three Dutch Reformed Churches) whose home language is Afrikaans, and the English-speaking Protestants (e.g.

Anglicans, Methodists, Presbyterians, etc.) whose home language is mainly English. The correspondence is not absolutely perfect in the sense that a few of the English-speaking Protestants in the sample were actually German-speaking Lutherans and there were also a few Afrikaans-speaking Methodists. In the main, however, we have found this a useful and important distinction. For the sake of convenience, these two groups will be referred to as English Protestants and Afrikaans Protestants.

Half (49 per cent) of the women studied were Afrikaans Protestants, and two-fifths (41 per cent) were English Protestants. Roman Catholics were a minority group (7 per cent), as were Jews (two per cent). The remaining few had no religion or belonged to other religious groups.

The occupation of the respondent's husband is important as some indication of socio-economic status. Tables B.3 and B.4 in Appendix B provide details. The general picture is that 44 per cent of the women had white-collar husbands, and 56 per cent had husbands engaged in blue-collar work. Only six per cent of the husbands were employers, so the vast majority were not their own boss. As far as the women themselves were concerned, just over a quarter (28 per cent) were economically active. Most of the women therefore were housewives without gainful employment, but two-thirds in all had been gainfully employed outside the home on one or more occasions since marriage (Appendix C, Tables C.1 and C.2).

One-fifth of the women in the sample had matriculated - i.e. completed their high school education, and only four per cent had gone on to university or a teacher's training college. Most (almost three-quarters) had some secondary school education, as only four per cent had gone no further than primary school.

In the present study income is taken to mean annual family revenue derived by all members of the family during the course of the year from wages, salaries professional fees, bonuses, profits, dividends, interest, pensions and rent.

Tabulated data on the sample income distribution appears in Table C-3, Appendix C. Figure 1 presents the income distribution of the sample diagrammatically. With regard to annual family income, the relevant averages are as follows:-

Mean	:	R2,386-11
Median	:	R2,243-49
Mode	:	R1,864-95

It need hardly be observed that in all surveys research workers encounter exaggerated and inflated reports of the respondent's income, family or otherwise. The present survey is no exception and thus all income figures should be treated with caution. Surprisingly, little resistance was met as regards income - only 2.9% of all the women interviewed either refused to disclose their income or said they did not know what it was.

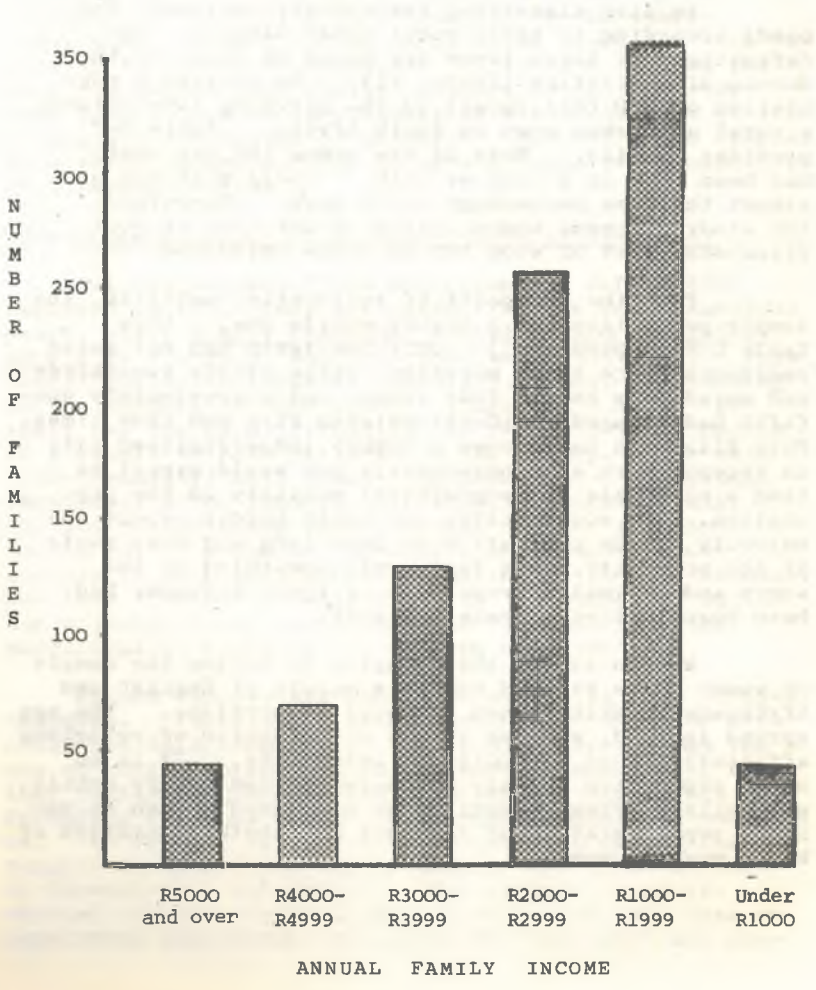
Just over two-fifths (41.7%) of the couples approached in this study owned their own homes while 56.0% rented them. "Tenant" respondents were asked details of the monthly rental while "owner" respondents were asked to estimate what they thought their property would rent for. (See Table C-4, Appendix C.) The mean monthly rental, i.e., actual and equivalent (or putative), was found to be R39-08.

More than nine out of every ten (92.7%) of the women interviewed had been married only once. Most of the more-than-once married women had been married twice. Marriage duration was taken to mean the actual period that either the present marriage had endured or the actual time covered by a first and second marriage, excluding the time between marriages. The mean marriage duration for the sample was 12.4 years. (For further details, see Table C-5, Appendix C.)

The median age at marriage of the sample was 21.3 years. It was found that 59.4% of the respondents were married before they were 22 years of age while 84.1% were married before they reached the age of 25. (See Table C-6, Appendix C.)

FIGURE 1

NUMERICAL DISTRIBUTION OF SAMPLE BY ANNUAL FAMILY INCOME



Ninety-five per cent of the women interviewed in this study were born in South Africa while 94.3% of the husbands were South African born.

We also classified respondents and their husbands according to their rural/urban origin. Our definitions of these terms are based on those of the Bureau of Statistics (1963a, vi). In general a population of 500 (all races) is the dividing line between a rural and urban area in South Africa. Table C-7 provides details. Most of the women (82 per cent) had been born in a town or city. Their husbands had almost the same percentage urban born. Therefore, the study concerns women living in the city of Port Elizabeth, most of whom had an urban childhood.

From the viewpoint of residential mobility, the sample population was a highly mobile one. (See Table C-8, Appendix C.) Only one-tenth had not moved residence since their marriage, while nearly two-thirds had moved from one to four times, and approximately one-fifth had changed residence between five and nine times. Port Elizabeth has become a highly industrialised city in recent years and consequently one would expect to find a high rate of geographical mobility in the population. In such a city, one would hardly expect the majority of the population to have long and deep roots in the community. In fact, only one-third of the women and a similar proportion of their husbands had been born in Port Elizabeth itself.

We can sum up this chapter by saying the sample of women to be studied consists mainly of English and Afrikaans-speaking women in equal proportions. The age spread is good, as also is the distribution of religious affiliations and occupational categories. It is an urban population largely urban-reared and highly mobile spatially. From Appendix B we have good reason to see it as representative of the Port Elizabeth population of White married women.

CHAPTER III

THE INCIDENCE OF STERILITY AND FECUNDITY

One cannot begin to discuss the question of family planning in the 900 cases without some study of the incidence of sterility and fecundity in the sample population. Fecundity - the opposite of sterility - is the ability to reproduce children. There are couples for whom the question of family planning is quite irrelevant simply because they cannot have any children at all - they are sub-fecund or sterile. Many of these couples have tried unsuccessfully to have a child for a considerable period of time.

3.1. Classification of Different Types of Fecundity .

All the fecundity and sub-fecundity definitions employed in this study are taken from the noted American study, viz., Family Planning, Sterility and Population Growth by Freedman, Whelpton and Campbell (1959). This investigation is known as the G.A.F. study. According to the authors of this study: (Pages 17 - 18) "We shall use the term 'fecundity' to refer to the capacity of a couple to have children in the future. The term 'sub-fecundity' will denote the presence of a physical impairment which reduces this capacity substantially. The sub-fecund group thus includes couples for whom future childbearing is impossible and couples whose ability to have children is significantly below 'normal'. The term 'fertility' will refer to the number of children actually born, in contrast to 'fecundity' - the physiological capacity for bearing children".

Fecund couples are those who are still able to have children. There is no reason to suspect that the wife could not fall pregnant if the couple discontinued the use of contraception or, in the case of non-users, if they continued cohabitation. No known impairments to fecundity exist as far as the fecund couples are concerned. Of course, it is possible that some of the fecund couples in this study are in actual fact - but unknown to themselves - sub-fecund. For example, a newly-married couple, always using contraception, may have an impairment preventing conception but they will not dis-

cover this until the wife attempts to become pregnant by stopping the employment of contraception. This, of course, is an extreme case. As Freedman and his co-authors express it: (1959, 25) "... the less a couple tries to prevent conception, the more chance it has to demonstrate sterility or to have a semi-fecund period. In short, classification as Fecund or Sub-Fecund depends not on all the biological facts, but only on those which are not hidden by efforts to avoid pregnancy".

It should be noted that the definitions of fecundity and all levels of sub-fecundity are in no sense medical or clinical definitions; these definitions are merely operational and functional from a demographic point of view. Some cases illustrating sub-fecundity and sterility are as follows:

Case 1

The respondent married in 1944. Her first pregnancy occurred in 1946 but it miscarried after four months. Two years later a second pregnancy miscarried at six months while her third pregnancy (1951) also terminated in a miscarriage at eight months. Since that time the wife has been unable to fall pregnant although there is no medical reason for this inability. The couple have never used any contraceptives whatsoever and do not intend using any in the future. The wife would very much like to have two children. The interviewer records that the respondent became upset when questioned about her pregnancy.

Case 2.

The respondent who lives in a select, well-to-do suburb, is 32 years of age and has been married twice - marriage duration 9 years. The wife would like to have two children but as a result of an operation it is impossible for her ever to become pregnant.

Case 3

An affluent Afrikaans-speaking couple, living in an upper-class suburb, have been married for 19 years and the wife has never been pregnant. This couple used contraceptives only during the first few years of their marriage; since then they have never used any method of

contraception. Medically, there is no reason why this couple should be childless. The wife would like to have two children.

Case 4.

Upper-middle-class Afrikaans-speaking couple married 16 years. Contraception has never been resorted to and yet the wife has never been pregnant. For the last 7 years the wife has known that she could not have a child on medical grounds. The respondent refused to disclose the precise nature of these grounds. She would like to have had four children.

The above cases are the exception rather than the rule. Probable sterility is more important as regards final family size than definite sterility. One encounters many cases of a type of quasi-sterility which manifests itself after one or two successful births and this condition makes it impossible for a couple to achieve their desired family size.

There are also couples where a given physiological drawback makes conception highly unlikely if not impossible. Then again, some couples find that they are able to conceive very soon after discontinuing the use of contraception while other couples try in vain for months or even years. Furthermore, there are those women who conceive fairly easily but each pregnancy results in a miscarriage or, to a markedly lesser extent, a still birth but never in a live birth.

3.1.1. Semi-Fecund Marriages

Among the sub-fecund, the first level is known as the semi-fecund. Following Freedman, Whelpton and Campbell, we have devised certain criteria for what might be termed a "normal" rate of conception. If wives had had a previous pregnancy and never used preventive measures for three years without conceiving, we classified these couples as semi-fecund. If the wife had never been pregnant and had never used contraceptive techniques and had failed to conceive within a two-year period, this couple was also regarded as being semi-fecund. Both these types failed to conceive during "long" periods when no action was taken to prevent conception.

Among the semi-fecund are women who do not conceive at what might, admittedly arbitrarily, be termed a "normal" rate. Generally speaking, the semi-fecund couples are not regular users of contraception and the proportion of non-users among them is high. Some examples of the semi-fecund types follow:-

Case 5.

Couple have been married 10½ years; they reside in a poor area. The wife was pregnant three times in less than four years (two live births, one miscarriage). The couple have never used any form of contraception but the wife has failed to become pregnant in the last seven years. She would like to have four children. Both husband and wife are regular church-goers (Afrikaans Protestants). The wife, who is 39, has a Standard 8 education. The respondent is a religious fatalist. She believes that "a woman must have all the children God sends. If God wants me to have children, then I will have them". On these grounds, she refuses to consult a doctor about her long inability to conceive.

Case 6.

This Afrikaans-speaking couple have been married for 26 years; the wife is 42. They live in one of the poorest areas of Port Elizabeth. Their annual family income is under R1,000 per annum; their house rental is R2-40 weekly. The wife reported that they could not go to church because they had no suitable clothes. The husband has Standard 3 education but the wife has had no schooling at all. The wife always wanted four children and after the birth of her fourth child, this couple started to use contraception. During the period of non-use - 22½ years - when the wife stated she wanted all her pregnancies as soon as possible, she was pregnant only four times. The interval between the birth of her first child and her second child was 11 years 5 months and between the third and fourth children 4 years 10 months.

Case 7.

This couple have been married for 18 years and have never used a contraceptive. The wife was six months

pregnant when she got married. Six children were born within the first six years of marriage. For the last twelve years the respondent has been unable to become pregnant; the couple are not well educated and have not consulted a doctor.

3.1.2. Probably Sterile Marriages

If the birth of a child is considered improbable on the basis of definite medical opinion, then the couple is classed as probably sterile. However, most of these couples cannot conceive a child. In the probably sterile category, we also find couples who conceive fairly normally but a live birth is considered unlikely because (i) the woman has a history of foetal deaths or (ii) pregnancy is considered a grave threat to the woman's health. In this connection we have had to rely on the respondent's own testimony about her medical history and background.

Some examples will illustrate the different types who are regarded as probably sterile:-

Case 8.

The respondent, aged 32, has been married fourteen years. She has two girls and wants a boy badly. Her two girls were born within the first four years of marriage. Nine years later the respondent fell pregnant again but as she suffers from "heart trouble" a therapeutic abortion had to be performed. Since the third pregnancy, the couple have commenced using contraception. The doctor has advised the respondent not to have any more children.

Case 9.

The respondent is 33 years of age and has been married for eleven years. The couple have used contraceptives from the outset of their marriage. The wife's ideal family is four children. This couple planned their one and only child. The respondent is a bleeder and now suffers from ulcers and if these do not clear up soon, her gynaecologist advises an hysterectomy. Medical opinion is that it is dangerous to her health to have any more children. As a result of giving birth to her first child, the respondent had to receive a blood transfusion of nine pints.

Case 10.

This respondent (aged 46) has been married fourteen years. The couple have always used a method and the wife has intentionally never been pregnant; her doctor has advised against pregnancy because she has "a leaking heart valve". This respondent would like to have had two or three children.

Case 11.

Respondent is 44 years of age, married 16½ years; she is university-educated and lives in an upper-middle-class suburb. Her husband is a professional man earning over R5,000 annually. All five pregnancies - in 13 years - were planned. The first pregnancy resulted in a still birth; the second was a live birth; the third was miscarried at two months; the fourth was a live birth and the fifth and final pregnancy ended in a miscarriage at six weeks. Her doctor has advised an hysterectomy; because of a cyst on the uterus, medical opinion is that the respondent cannot have any more children.

3.1.3. Definitely Sterile Marriages

The final level of sub-fecundity comprises the definitely sterile couples. This category includes those who cannot conceive because of the presence of some medical, physiological or physical reason rendering a future pregnancy impossible. Also included, are those couples for whom a further pregnancy is ruled out because the wife has reached the menopause. Most of the definitely sterile cases in this study have arisen as the result of an operation. In three cases, couples were classed as definitely sterile because of the absolute sterility of the husband.

The following are fairly typical examples of the definitely sterile type:-

Case 12.

Couple have been married for 18 years. The wife said she had her family (3 girls) far earlier than she had planned because of medical reasons. Her first child was born after eleven months of marriage and the

same interval exists between her first and second children. Six years later she had her third girl but this child died at the age of three years nine months. After the birth of her third child, the respondent was found to be suffering from a bleeding uterus; the ensuing operation completely ruled out any further pregnancies. Though the couple live in a poor area (annual family income R1,000-R1,999), the wife would very much like to have had more children - four altogether. "I am very sad because I would have loved a son", she told our interviewer.

Case 13.

The respondent is 35 years old and has been married for 11 years. The couple planned their first three pregnancies; the fourth and last pregnancy was an accident. The last child was born by Caesarian Section and the wife was sterilized. She is quite happy with her family of four children.

Case 14.

Afrikaans-speaking respondent, aged 41, married 17 years. The wife was pregnant six times in 12½ years (five live births and one miscarriage). Although the wife disapproves of family limitation - "Ek voel dit is nie vir die mens om te beperk nie; die Hoë Hand moet vir ons reel" ("I feel it's not man's function to limit; the High Hand must regulate for us") - the couple started to use withdrawal after the third pregnancy. Her last two pregnancies were accidental. The respondent states that she suffers from diabetes and she underwent an operation after the death of her last child which makes pregnancy impossible.

Case 15.

This lower-income-group couple have been married for six years. In the first three years and two months of marriage, the wife was pregnant three times and each birth necessitated a Caesarian Section. After the first pregnancy, the wife used the douche "for cleanliness only soon after intercourse"; no other contraceptive was ever used because, according to the respondent, "it is not healthy". After her third child was born, the respondent was sterilized. This respondent only accepts illness as a sufficient ground for family limitation. She considers

three children an ideal-sized family.

Case 16.

The respondent is 36 years old and has been married 14 years. The wife has been pregnant once but has had no children. She lost her first and only pregnancy through a miscarriage within the first year of marriage. It was then discovered that her ovaries had been damaged and the doctor told her that she could never become pregnant again. This respondent would like to have had three children.

Case 17.

This Afrikaans-speaking couple live in a pleasant middle-class suburb. They own their own house; both husband and wife work and the annual family income is in the R4,000-R4,999 category. The wife is 45 and has been married for 20 years. In the first 4 years 11 months of marriage, the respondent was pregnant four times (three live births, one miscarriage). The couple used the rhythm method exclusively after the birth of the first child. According to the wife: "Ek dink vrouens se gesondheid word aangetas deur hierdie metodes." ("Ithink women's health is adversely affected by these methods"). All three subsequent pregnancies occurred while the rhythm method was being used. After the fourth pregnancy, the woman had an hysterectomy. The respondent stated that she would have liked to have had one more child.

3.1.4. Fecundity Indeterminate Couples

The residual category in the fecundity classification is known as fecundity indeterminate. This simply means that on the basis of the information supplied these couples do not fit into any of the categories so far discussed. While some couples report no use of contraception, the wife admits to using a douche soon after intercourse for the sake of cleanliness only (signified in this, as in the GAF study, by the abbreviation DFCO). Not all DFCO couples have their fecundity classified as indeterminate, however, because some conceived frequently enough to be classed as fecund while others qualified for classification as probably or definitely sterile.

Strictly speaking, it is the residual group whose fecundity is regarded as indeterminate - there are no known impairments to fertility in this group but there have been one or two long periods during which conception might have occurred but did not. (Freedman et al., 1959, 24).

In the GAF study 121 (5 per cent) of the wives were found to be in the fecundity indeterminate category whereas in the present study only 3 (0.3 per cent) of the women interviewed have been so classified. In the Johannesburg Fertility Survey (Higgins 1960; Badenhorst and Higgins, 1962; Higgins 1962, and Higgins 1964), a similarly small proportion of women were found to be in the fecundity indeterminate class. In the present study it was found that women who used a douche soon after intercourse for reasons of cleanliness only also used some other contraceptive device either conjointly or at some other period of their marriage. One example of the type follows:-

Case 18.

The respondent, aged 28, got married in 1957. Her first and only child was born eighteen months later. During the course of this pregnancy the wife reported douching for cleanliness only soon after intercourse; no other method was ever used. The wife regards family limitation as a sin except in cases of ill health. In her own words: "God wouldn't give me more children than He thought one could look after." She said that she and her husband prefer "will power" to the use of mechanical and/or chemical forms of contraception. The respondent wants three children and would like her next two "as soon as possible." However, since her first pregnancy the respondent has failed to become pregnant again. She has not consulted a doctor about her inability to become pregnant "because I believe it is God's will so; if He wants me to have a child, then I will have it. Both my husband and I are healthy."

3.2. Distribution of Couples According to Fecundity Status

Such then are the levels of fecundity which will be analysed in this chapter. Depending on our statistical requirements, our analysis will sometimes be in terms of four levels, i.e., the fecund, the semi-fecund, the probably sterile and the definitely sterile while at

other times a simple twofold division will be employed, viz., the fecund and the sub-fecund.

The following table gives the percentage and numerical distribution of all couples according to their fecundity status.

TABLE I.

DISTRIBUTION OF ALL COUPLES ACCORDING TO THEIR FECUNDITY STATUS

FECUNDITY STATUS OF COUPLE	NUMBER	PERCENTAGE
Fecund	590	65.6
Semi-Fecund	107	11.9
Probably Sterile	38	4.2
Definitely Sterile	162	18.0
Fecundity Indeterminate	3	0.3
TOTAL	900	100.0

The above table indicates that nearly two-thirds of the couples in the sample are fecund while just over one-tenth are semi-fecund (they find it difficult to conceive though by no means all of them want more children). About one in every twenty-three couples are probably sterile whereas nearly one-fifth of the sample is definitely sterile.

The following table compares the fecundity status of couples in the American (Freedman et al. 1959), Johannesburg (Badenhorst and Higgins 1962, 281), and Port Elizabeth surveys - in all cases identical definitions have been employed. It should be noted, however, that in the GAF (American) study the upper age limit was 39 years whereas in the South African studies it was 49 years.

TABLE 2.

PERCENTAGE DISTRIBUTION OF ALL COUPLES IN AMERICAN, JOHANNESBURG AND PORT ELIZABETH SURVEYS ACCORDING TO THEIR FECUNDITY STATUS

FECUNDITY STATUS OF COUPLE	S U R V E Y		
	American (1955)	Johannes-burg (1957-58)	Port Elizabeth (1964)
Fecund	66	73	66
Semi-Fecund	12	11	12
Probably Sterile	7	10	4
Definitely Sterile	10	6	18
Fecundity Indeterminate	5	a	b
TOTAL	100	100	100

a. Only one woman so classified
b. Only three women so classified

Both South African surveys limited their investigations to urban populations while the American survey was conducted on a nationwide basis and included rural-farm, rural non-farm and urban couples. In spite of this factor as well as the age differentials, the fecundity status of these three populations appears reasonably similar. One noteworthy difference appears in the high proportion of definitely sterile respondents in the Port Elizabeth study. The American and Johannesburg proportions are noticeably lower. This is due largely to a far greater incidence in sterility resulting from operations in the Port Elizabeth study than in the other two. The Port Elizabeth study also took place more recently than the other two, and it is possible that sterility-inducing operations will become more frequent, if not popular, among urban women in the Western world in the future. It should be remembered that many of the women sterilized by an operation have, up to that time, been fecund.

3.3. Factors of Age and Marriage Duration

When we apply the control of age to the fecundity status of married women in both the Johannesburg and Port Elizabeth studies, one notices (see Table 3) that the Johannesburg women in the above 35 years group appear more fecund than their Port Elizabeth age counterparts. The limited nature of the data in both surveys preclude any final explanations but one thing is certain - we found a far higher incidence of sterility due to surgical operations in the Port Elizabeth population (studied in 1964) than in the Johannesburg population (studied in 1957-58).

TABLE 3.

PERCENTAGE OF ALL COUPLES WHO ARE FECUND IN JOHANNESBURG AND PORT ELIZABETH SURVEYS, BY WIFE'S AGE

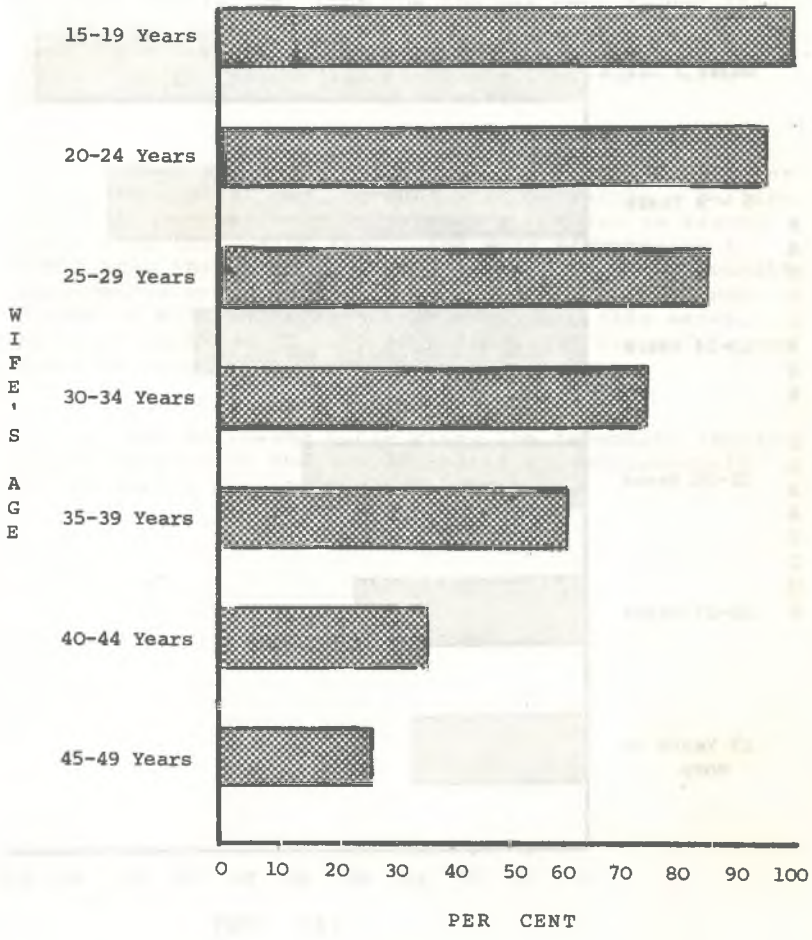
WIFE'S AGE	PERCENTAGE FECUND	
	Johannesburg	Port Elizabeth
	N = 1022	N = 900
15-19 years	*	100
20-24 years	92	94
25-29 years	91	86
30-34 years	77	74
35-39 years	74	60
40-44 years	54	37
45-49 years	48	27
Total All Ages	66	66

* Too few cases to be statistically significant

In the present study fecundity differences were not found to be significantly associated with socio-economic factors. Income, education, occupation - these have no direct bearing on fecundity status as such. These variables can have an indirect bearing on fecundity status in that in groups which have a high rate of non-use of contraception - the fecundity impairments will be more readily detectable than in a group of predominantly users because use tends to conceal fecundity impairments - at least temporarily. In this study, the wife's age as well as the duration of the marriage are the two most telling variables with regard to fecundity status. No other variables exert such a pronounced effect on the fecundity status of the average couple. (See Figures 2 and 3).

FIGURE 2

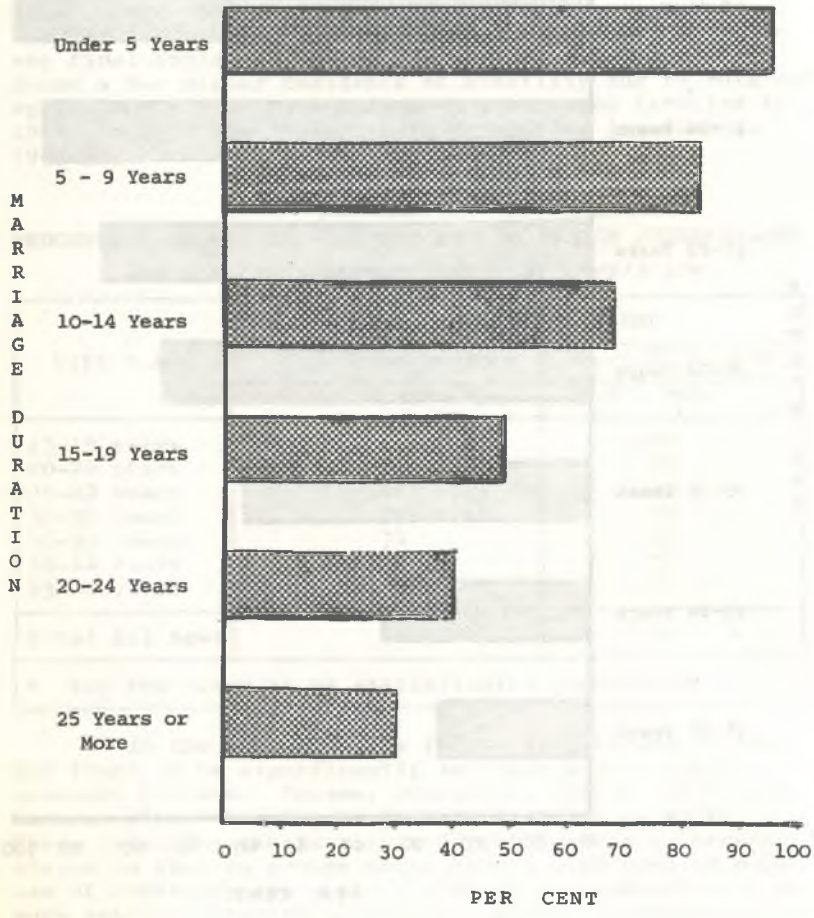
PERCENTAGE OF COUPLES WHO ARE FECUND, BY WIFE'S AGE



$x^2 = 246.02$, d.f., 10, $p < .01$.

FIGURE 3

PERCENTAGE OF COUPLES WHO ARE FECUND, BY MARRIAGE DURATION



$x^2 = 448.63$, d.f., 15, $p < .01$

It is clear from Figure 2 that the proportion of fecund couples declines steadily and progressively with the wife's age, from the 100 per cent fecund 15 - 19 year age group to the 26 per cent fecund 45 - 49 year age group. The converse also holds good, viz., sub-fecundity, especially sterility, increases with age and, of course, marriage duration.

More important than age, per se, is the greater length of marital and reproductive experience - particularly longer exposure to pregnancy - which is associated with increasing age. The more pregnancies a woman has, the more likely that it is that the fecundity impairments connected with the various levels of sub-fecundity will manifest themselves. In this sense, marriage duration is more revealing than the wife's age taken by itself.

The following table gives the fecundity status of all couples in the sample analysed simultaneously by the wife's age and marriage duration.

TABLE 4.

PERCENTAGE DISTRIBUTION OF ALL COUPLES ACCORDING TO FECUNDITY STATUS, BY WIFE'S AGE, BY MARRIAGE DURATION

DURATION OF MARRIAGE	NO. OF COUPLES	TOTAL	FECUNDITY STATUS				
			Fecund	Semi-Fecund	Probably Sterile	Definitely Sterile	Fecundity Indeterminate
T O T A L							
Under 5 years	182	100.0	94.5	2.7	2.2	0.6	-
5 - 9 years	226	99.9	80.5	9.7	0.9	8.4	0.4
10-14 years	170	100.0	65.3	11.8	5.9	16.5	0.5
15-19 years	139	100.0	48.2	19.4	5.1	27.3	-
20-24 years	121	100.0	38.0	20.7	9.1	31.4	0.8
25 or more	62	100.0	19.4	12.9	6.4	61.3	-
Total	900	100.0	65.6	11.9	4.2	18.0	0.3
AGES 15 - 19							
Under 5 years	21	100.0	100.0	-	-	-	-
5 - 9 years	-	-	-	-	-	-	-
10-14 years	-	-	-	-	-	-	-
15-19 years	-	-	-	-	-	-	-
20-24 years	-	-	-	-	-	-	-
25 or more	-	-	-	-	-	-	-
Total	21	100.0	100.0	-	-	-	-

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AGES 20 - 24							
Under 5 years	97	100.0	95.8	2.1	2.1	-	-
5-9 years	25	100.0	92.0	8.0	-	-	-
10-14 years	1	100.0	-	-	100.0	-	-
15-19 years	-	-	-	-	-	-	-
20-24 years	-	-	-	-	-	-	-
25 or more	-	-	-	-	-	-	-
Total	123	99.9	94.3	3.3	2.4	-	-
AGES 25 - 29							
Under 5 years	50	100.0	90.0	6.0	4.0	-	-
5-9 years	115	100.0	85.2	7.0	0.9	6.0	0.9
10-14 years	15	100.0	73.3	6.7	-	20.0	-
15-19 years	2	100.0	100.0	-	-	-	-
20-24 years	-	-	-	-	-	-	-
25 or more	-	-	-	-	-	-	-
Total	182	100.0	85.7	6.6	1.6	5.5	0.6
AGES 30 - 34							
Under 5 years	11	100.0	100.0	-	-	-	-
5-9 years	58	100.0	75.9	12.1	1.7	10.3	-
10-14 years	89	100.0	71.9	14.6	4.5	7.9	1.1
15-19 years	11	100.0	54.5	27.3	-	18.2	-
20-24 years	-	-	-	-	-	-	-
25 or more	-	-	-	-	-	-	-
Total	169	100.0	74.0	13.6	3.0	8.9	0.5

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AGES 35 - 39							
Under 5 years	2	100.0	50.0	-	-	50.0	-
5-9 years	20	100.0	70.0	15.0	-	15.0	-
10-14 years	44	100.0	63.6	13.6	2.3	20.5	-
15-19 years	69	100.0	56.5	17.4	1.5	24.6	-
20-24 years	8	100.0	50.0	12.5	12.5	25.0	-
25 or more	1	100.0	100.0	-	-	-	-
Total	144	100.0	60.4	15.3	2.1	22.2	-
AGES 40 - 44							
Under 5 years	1	100.0	100.0	-	-	-	-
5-9 years	4	100.0	75.0	25.0	-	-	-
10-14 years	14	100.0	42.9	-	7.1	50.0	-
15-19 years	50	100.0	34.0	22.0	8.0	36.0	-
20-24 years	60	100.0	38.3	23.3	11.7	25.0	1.7
25 or more	16	100.0	18.8	12.5	6.2	62.5	-
Total	145	100.0	36.6	19.3	9.0	34.5	0.6
AGES 45 - 49							
Under 5 years	-	-	-	-	-	-	-
5-9 years	4	100.0	-	25.0	-	75.0	-
10-14 years	6	100.0	16.7	-	50.0	33.3	-
15-19 years	7	100.0	42.9	14.3	28.5	14.3	-
20-24 years	53	100.0	35.8	18.9	5.7	39.6	-
25 or more	45	100.0	17.8	13.3	6.7	62.2	-
Total	115	100.0	27.0	15.7	9.5	47.8	-

N.B. One respondent who completely refused to give her age, has been excluded from this table.

In Table 4 - apart from cases where the sub-totals are too small to be statistically reliable - it will be seen that in all the age-groups, fecundity tends to decrease with marriage duration and, conversely, the various types of sub-fecundity show an increase. Except for minor fluctuations, as a couple are longer married and grow older there is a clear, definite and overall manifestation of increasing sub-fecundity.

In comparing the fecundity status of once-married wives with those who have been married more than once, it was found that the once-married women were more fecund than those who had been married more than once, 67.3 per cent as compared to 43.9 per cent. However, the latter group represent, on the average, older women than the former. In addition, women married more than once comprise only just over 7 per cent of the sample. In order to make safe comparisons, one would require much larger numbers of twice-married women.

In the present study it was found that the younger the bride's age at marriage the higher the degree of fecundity. The semi-fecund and probably sterile were inclined to be slightly older at marriage than the fecund whereas the definitely sterile were the oldest of all the brides at marriage. However, these differences are not great and are not statistically significant.
(X^2 = 5.44, d.f., 3, $p > .05$)

TABLE 5.

MEDIAN AGE AT MARRIAGE OF ALL RESPONDENTS, BY FECUNDITY STATUS

ALL RESPONDENTS	FECUNDITY STATUS			
	Fecund	Semi-Fecund	Probably Sterile	Definitely Sterile
21.3 years	21.2 years	21.3 years	21.7 years	22.0 years

Table 5 above shows the median differences are small.

3.4. Fecundity by Religious Affiliation

It has been said that non-use of contraception tends to reveal fecundity impairments more directly than use of contraception. This factor undoubtedly explains the difference in fecundity level between the major religious groups in the sample as apparent in Table 6.

TABLE 6.

PERCENTAGE FECUND COUPLES BY RELIGIOUS AFFILIATION OF WIFE

ALL COUPLES	RELIGION OF WIFE			
	English Protestant	Afrikaans Protestant	Jewish	Catholic
65.6%	69.1%	63.7%	81.0%	53.3%
$X^2 = 9.60$, d.f., 3, $p < .05$				

As will be seen in Chapter IV, Jewish respondents have a considerably higher user rate of contraceptives than Catholic wives and this is one factor explaining the notable difference in fecundity between these two groups; another factor is the higher median duration of marriage of the Catholic group as compared to the Jewish group.

3.5. Fertility Indices

3.5.1 Hypothetical Fertility Rate

In the present study the duration of a couple's marriage obviously constitutes an important variable because it represents the period of exposure to pregnancy. For example, in comparing family size, (i.e. number of children ever born alive to a couple), with certain standard sociological variables such as standard of education or religious affiliation, a mere average (mean, median or mode) tells one very little unless marriage duration is held constant. Throughout this study the control of marriage duration is applied to

family size, pregnancy rates and so forth. We always calculate our fertility rate by comparing the relevant marriage duration to number of children ever born alive, total pregnancies, planned pregnancies and so forth. However, in order to achieve a more meaningful result, the rate is based on a hypothetical 30-year period as this, roughly speaking, represents the fertility time-span, viz., 15 - 45 years. This we term a hypothetical fertility rate. It should be noted that in this context we are drawing comparisons between groups rather than individuals.

The hypothetical fertility rate (in this instance number of children) for 30 completed years of marriage for the various fertility status groups differs quite significantly, viz.,

TABLE 7

HYPOTHETICAL FERTILITY RATE CALCULATED TO THE BASE OF A THIRTY-YEAR MARRIAGE

Fecund	Semi-Fecund	Probably Sterile	Definitely Sterile
7.8	5.0	3.2	5.4
$X^2 = 20.72$, d.f., 3, $p < .01$			

Confining our attention to contraception users, we obtain a hypothetical fertility rate of 7.3 children (fecund) and 4.8 children (sub-fecund) for 30 completed years of marriage. ($X^2 = 5.21$, d.f., 1, $p < .05$).

3.5.2 Types of Pregnancies

In the present study we classify all pregnancies as either PLANNED (i.e. deliberate cessation of use of contraception for the purpose of conceiving or wanting a child as soon as possible and not using any contraceptive techniques until after birth of that child); ACCIDENTAL (conception occurs when a contraceptive method is being used to prevent conception), and, finally, the residual category termed UNPLANNED pregnancies.

Planning, in the strict sense, is highly correlated with both fecundity and use of contraception. It is much easier for fecund couples to plan their pregnancies than

for semi-fecund couples to do so. For the fecund couple non-use of contraception sooner or later leads to a pregnancy which has a successful outcome in a live birth. In the case of the semi-fecund couples, conception is more difficult and the outcome of a pregnancy is more dubious and hazardous than in the case of fecund couples.

3.5.3. Number of Planned Pregnancies

Vis-à-vis all ever-pregnant respondents (94.8 per cent of the sample), the median number of planned pregnancies is 1.6. For the fecund respondents the median is 1.9 planned pregnancies, for the semi-fecund 0.7 and in the case of both the probably sterile and the definitely sterile it is 0.9 planned pregnancies. (Median test, $X^2 = 38.30$, d.f., 3, $p < .01$).

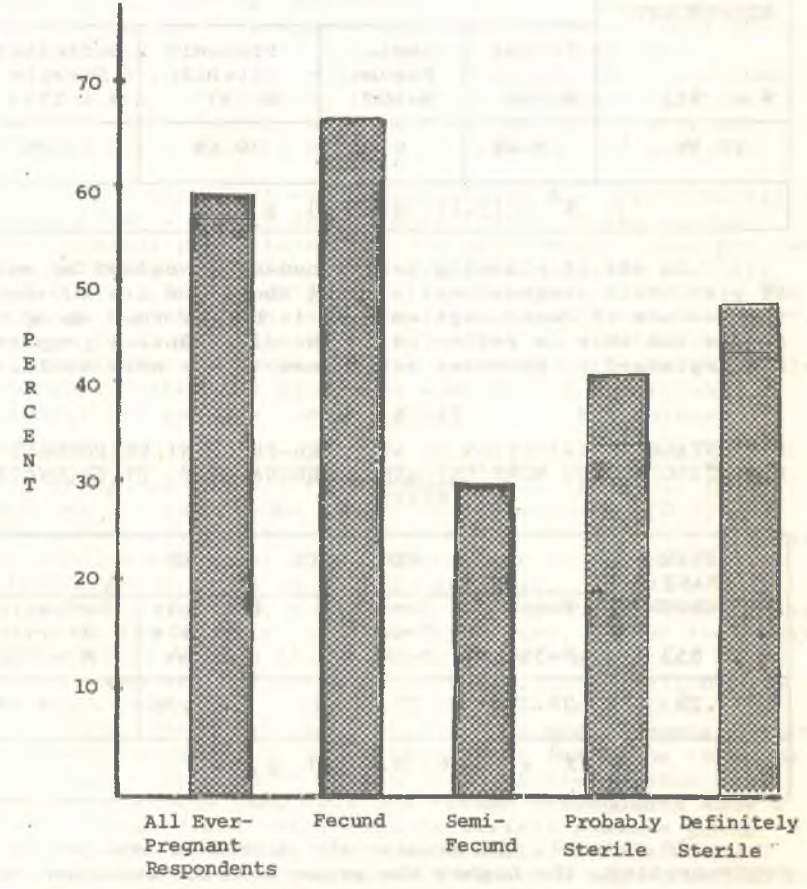
Figure 4 presents the proportion of all ever-pregnant women reporting one or more planned pregnancies according to fecundity status and the differences are quite marked.

3.5.4 Number of Unplanned Pregnancies

The fecund couples, together with most of the probably sterile and definitely sterile couples, have in common that all were fecund at one time of their reproductive careers and were, therefore, users of contraception. Most of the probably sterile and definitely sterile couples were formerly fecund, whereas the semi-fecund couples belong to a different category; they appear always to have struggled to conceive and have live children, and consequently have largely eschewed contraception. In so doing, they achieve a low degree of accidental pregnancies as compared to the other three fecundity groups. This will be seen in Table 8.

FIGURE 4

PERCENTAGE OF ALL EVER-PREGNANT RESPONDENTS REPORTING ONE OR MORE PLANNED PREGNANCIES, BY FECUNDITY STATUS



$x^2 = 68.51$, d.f., 3; $p < .01$

TABLE 8.

PERCENTAGE OF ALL EVER-PREGNANT RESPONDENTS REPORTING ONE OR MORE ACCIDENTAL PREGNANCIES, BY FECUNDITY STATUS

ALL RESPONDENTS	FECUNDITY STATUS			
N = 853	Fecund N=560	Semi-Fecund N=100	Probably Sterile N= 34	Definitely Sterile N = 156
20.5%	23.4%	6.0%	20.6%	19.2%
X^2 = 15.17, d.f., 3, $p < .01$				

In strict planning terms, non-users cannot be said to plan their pregnancies. Among those who are sub-fecund the non-use of contraception rate is higher than among the fecund and this is reflected in the differential proportions for unplanned pregnancies as appears in the next table.

TABLE 9.

PERCENTAGE DISTRIBUTION OF ALL EVER-PREGNANT RESPONDENTS REPORTING ONE OR MORE UNPLANNED PREGNANCIES, BY FECUNDITY STATUS

ALL EVER-PREGNANT RESPONDENTS	FECUNDITY STATUS			
N = 853	Fecund N=560	Semi-Fecund N=100	Probably Sterile N= 34	Definitely Sterile N = 156
47.7%	38.2%	77.0%	64.7%	59.0%
X^2 = 66.36, d.f., 3, $p < .01$				

In general, the greater the degree of non-use of contraception, the higher the proportion of unplanned pregnancies; consequently, in the light of the above table the fecund couples and those that are semi-fecund constitute two polar types.

3.6. Incidence of Foetal Deaths

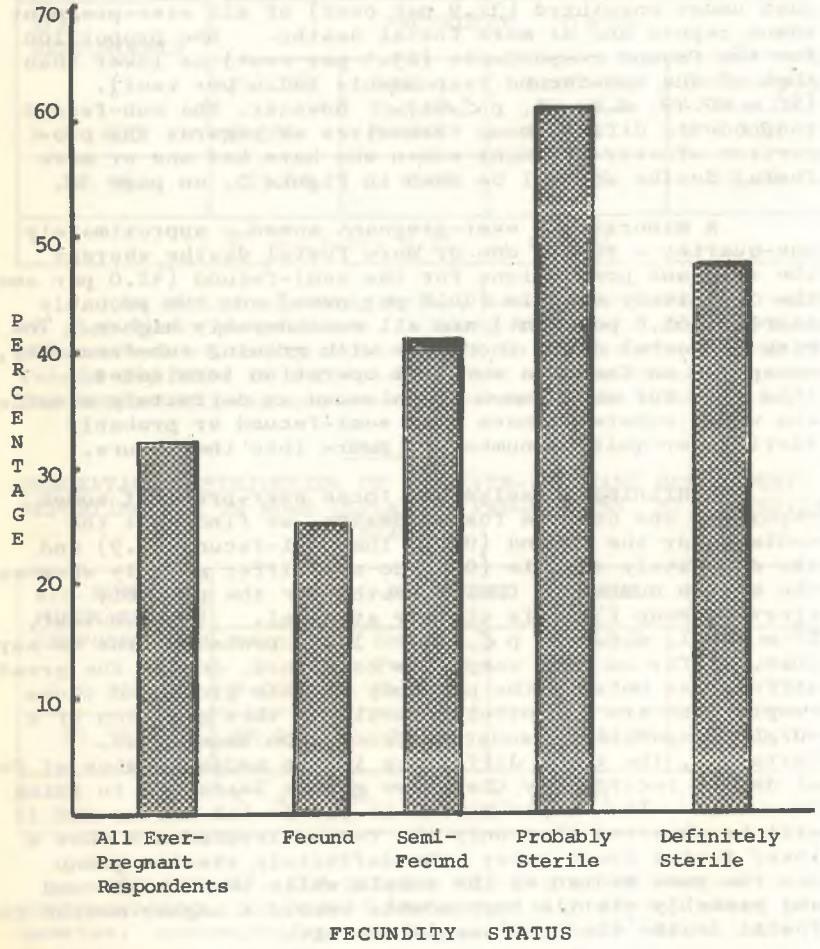
Human pregnancies terminate either in a live birth, a still birth, a miscarriage or an abortion. From a demographic point of view, any termination other than a live birth is known as a foetal death. In the present study, just under one-third (32.9 per cent) of all ever-pregnant women report one or more foetal deaths. The proportion for the fecund respondents (25.5 per cent) is lower than that of the sub-fecund respondents (47.4 per cent). (X^2 = 40.49, d.f., 1, $p < .01$). However, the sub-fecund respondents differ among themselves as regards the proportion of ever-pregnant women who have had one or more foetal deaths as will be seen in Figure 5, on page 38.

A minority of ever-pregnant women - approximately one-quarter - report one or more foetal deaths whereas the relevant proportions for the semi-fecund (42.0 per cent), the definitely sterile (46.8 per cent) and the probably sterile (61.8 per cent) are all considerably higher. The risk of foetal death increases with growing sub-fecundity, except in so far as a surgical operation terminates this risk for many women now classed as definitely sterile who would otherwise have been semi-fecund or probably sterile for quite a number of years into the future.

Confining ourselves to those ever-pregnant women reporting one or more foetal deaths, we find that the medians for the fecund (0.6), the semi-fecund (0.9) and the definitely sterile (0.8) do not differ greatly whereas the median number of foetal deaths for the probably sterile group (3.8) is clearly atypical. (Median test, X^2 = 18.01, d.f., 3, $p < .01$). It is probably true to say that, as far as this sample is concerned, one of the great differences between the probably sterile group and those couples who are definitely sterile is this question of a surgical operation rendering conception impossible. Certainly, the great difference in the median number of foetal deaths recorded by these two groups leads one to think this way. The sample median is 0.8 foetal deaths and it will be observed that only the fecund respondents show a lower foetal death rate; the definitely sterile group has the same median as the sample while the semi-fecund and probably sterile respondents record a higher median for foetal deaths than the sample average.

FIGURE 5

PERCENTAGE DISTRIBUTION OF ALL EVER-PREGNANT RESPONDENTS REPORTING ONE OR MORE FOETAL DEATHS, BY FECUNDITY STATUS



$X^2 = 44.77$, d.f., 3, $p < .01$

Some examples of women with above average foetal death rates now follow:-

Case 19.

The respondent has been married for 25 years and is 43 years of age. The wife has passed standard 7 and the husband standard 6. He is employed in a semi-skilled capacity and the annual family income is in the R1,000-R1,999 category. They live in a lower-middle-class suburb. Four children were born in the first eight years of marriage. During the next ten years, the wife had three miscarriages - all at four months. Seven years ago the wife had an operation which made her sterile. This couple commenced using contraception after the second child was born. The respondent would like to have had six children.

Case 20.

The respondent is a definitely sterile non-user. She is 38 years of age and the couple's marriage duration is 18 years. Six children were born in the first 8½ years of marriage. In the next 5 years, the respondent had three successive miscarriages followed by two live births (the last one in 1961). After this the respondent had her tubes tied.

This couple live in a middle-class area; the husband is a builder's foreman. They have never used any form of contraception during their married life. The interviewer reports that the couple are extremely happy with their eight children.

Case 21.

This respondent has reached the menopause; she is 49 years of age; she got married when she was 14 and has been married for 34 years. Her husband is a fireman with a Standard 3 education; the wife passed Standard 2. Both are farm-born and English-speaking. From the outset of their marriage this couple have regularly used the withdrawal method of contraception.

During the first 20 years of marriage the respondent had three live births followed by one miscarriage (at five months) and one further live birth. Eight years later a second miscarriage occurred at six weeks. The respondent has not been pregnant for the last six years. She would like to have had six children.

Case 22.

This is a probably sterile couple married 16½ years; the wife is 44 years of age. Both husband and wife are professional people. They own their own home which is in a good area and their annual family income is over R5,000 per annum.

The respondent's first pregnancy terminated in a still birth; her second was a live birth; the third was a miscarriage at two months; her fourth pregnancy resulted in a live birth and her fifth and final pregnancy ended in a miscarriage at six weeks. The couple have used contraception throughout their marriage and all five pregnancies were planned.

Since 1960 the wife has suffered from a cyst on the uterus and a hysterectomy has been advised. She told our interviewer that she would probably undergo this operation.

Case 23.

Couple live in a poor area in two rooms for which they pay R18 per month. They have been married 2½ years and the wife is 21 years of age. She has been pregnant three times without having a live birth. All three pregnancies ended quite early in miscarriages.

The couple have never used any form of contraception and do not intend using any method in the future. The wife wants as many children as she can possibly have. Her ideal family would consist of eight children. She approves of family limitation only for health and financial reasons whereas her husband is totally opposed to family limitation. The interviewer reports that the respondent desperately wants children and her whole attitude to life is coloured by the fact that she has as yet been unable to have an infant. This couple have been classified as probably sterile.

Case 24.

This is a probably sterile couple who have been married for 17½ years. The wife is 38 and she has a full-time clerical job. Her husband is an artisan and their annual income is between R2,000 and R2,999.

The couple have used contraception since the wife's first pregnancy. Although she thinks four children are ideal, this respondent has been unable to have any children. All five pregnancies in the first ten years of marriage have ended in a miscarriage. Four of her five pregnancies were planned; the last one was accidental, i.e., it occurred when some method was being employed to prevent conception. The couple intend using contraceptives in the future because seven years ago the respondent was warned by her doctor not to conceive again because of glandular trouble. Accordingly, this couple has been classified as probably sterile.

Case 25.

This couple is classified as semi-fecund. They have been married 13½ years and the respondent is 40 years of age. The wife's first two pregnancies ended in miscarriages. Then one live birth occurred followed by another miscarriage and a second live birth. The respondent has failed to conceive in the last 6½ years although no steps were taken to prevent conception. The wife wants seven children but only expects five by the time her family is complete. This couple commenced using contraception after the wife's third pregnancy.

The husband is an artisan and the couple own their house which is in a middle-class area. Both have a Standard 6 education.

Case 26.

This is perhaps one of the most interesting cases encountered during the course of this family planning survey. The respondent is 43 years of age and has been married for 21 years. She and her husband rent (R30 per month) a house in a lower-middle-class area of Port Elizabeth. The wife has a Standard 6 education and the husband Standard 2. At the time of the interview the wife was not working but she had worked for about 19 years of her married life as a cashier. The husband is employed as a bus driver; the annual family income was given as less than R1,000. The couple are fecund users.

The wife's first child was born out of wedlock; furthermore, she was pregnant at the time of her marriage. During her marriage, the respondent has been pregnant 22 times (nine live births, thirteen miscarriages). Her last two pregnancies resulted in live births whereas the preceding five pregnancies terminated in miscarriages. After her twenty-first pregnancy the respondent had a dilatation and curettage. Undoubtedly this respondent is a remarkable person in some ways - on one occasion she "adopted" a three-day-old infant unwanted by its mother.

The wife states that the only method of contraception she has ever used is douche for cleanliness sake soon after intercourse. However, she stated quite volubly that it was never used for contraceptive purposes. Nevertheless, on the basis of our classification, this woman is an action user in contradistinction to a motive user.

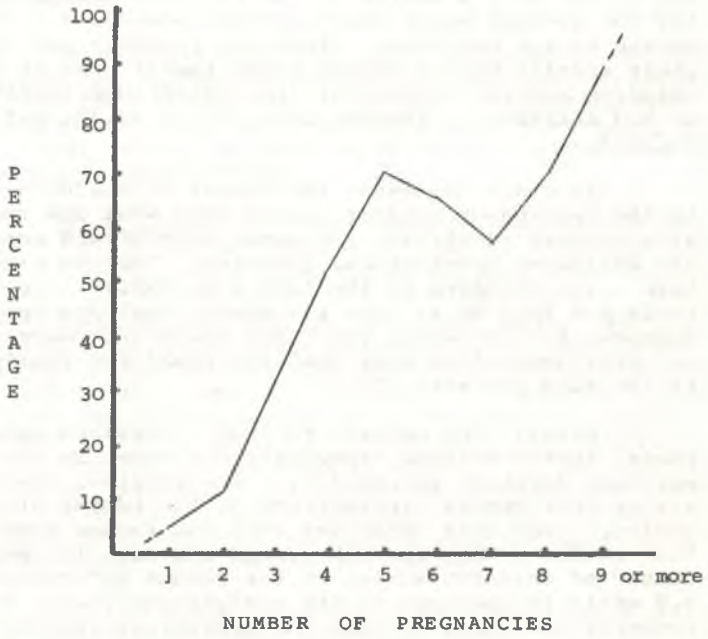
This respondent regards having one child per year as quite normal. In her own words: "God's way of keeping a woman in the home." One of her daughters was married at 15; now 18, this young woman has four children.

The respondent believed that family limitation was sinful: "If God didn't want you to have those children, why did He put them out (sic) for you to have?". Only in cases of ill-health would the informant approve of mechanical and/or chemical contraceptives. Otherwise, she disapproved of them: "It's not right; if you're going to have a family, get on with it."

It is clear from a consideration of the foregoing examples, that the risk of foetal death mounts with increasing pregnancies. In fact, a direct correlation was found between foetal deaths and pregnancies. We obtained a product moment correlation coefficient of + 0.8576 between the number of foetal deaths experienced by ever-pregnant women in terms of the number of pregnancies they had had. This is an exceptionally high correlation for sociological data. Figure 6 portrays the data diagrammatically.

FIGURE 6

PERCENTAGE OF EVER-PREGNANT RESPONDENTS HAVING ONE OR MORE FOETAL DEATHS, BY NUMBER OF PREGNANCIES



3.7. Family Size and Fecundity Levels

In the present study, information on ideal family size was sought from all interviewees. The wording of the question was as follows: "As you know, people have many different ideas about children and families; as things are now, what do you think is the ideal number of children for the average White family?" The question was aimed at establishing a general norm rather than the numerical preferences of individual women.

In terms of median ideal family size, sub-fecund women have a higher ideal family size than fecund women. The latter have a median of 4.1 children considered ideal for the average White South African household - the sample median is 4.2 children. Both the probably and the definitely sterile have a median ideal family size of 4.4 children and the median for the semi-fecund interviewees is 4.3 children. (Median test, X^2 = 12.18, d.f., 3, $p < .01$).

In order to assess the number of children wanted by the respondent herself, apart from what she regarded as a general ideal, all the women interviewed were asked the following hypothetical question: "So you expect to have ..... children by the time your family is complete; could you tell me is this the number that you really want? Suppose, for instance, you could begin your married life all over again, how many children would you really want by the time you were 45?."

Clearly the answers to such a question are, in most cases, approximations especially for women in the younger marriage duration categories. The replies, therefore, are at best general indications of the number of children wanted. Our data indicates that the fecund women want less children than the sub-fecund women. The median number of children wanted by the fecund informants is 3.9 while the medians of the semi-fecund (4.3), the probably sterile (4.2) and the definitely sterile (4.4) are all higher than the median number wanted by the fecund women as well as the sample as a whole (3.9 children). (Median test, X^2 = 14.70, d.f., 3, $p < .01$).

All the interviewees were asked how many children they expected to have by the time their family was

complete. The great majority were able to answer this question without too much hesitation or uncertainty.

In the present study there is no evidence suggesting that differences in fecundity status have any bearing on differences in expected family size. Such differences as are found, are not significant. On the average, the fecund, semi-fecund and definitely sterile respondents expect very similar sized families by the time they have all the children they intend having. The probably sterile deviate noticeably from the other three groups as well as from the sample median, viz., 2.4 children as compared to 3.6 children on the part of all the women interviewed in this survey.

Respondents were also questioned about the extent to which their expected family size matched the number of children that they actually wanted. In making this comparison in terms of fecundity status some quite striking - and, it may be said, unexpected - differences appear as Table 10 demonstrates.

Prima facie, one would imagine that all three classes of sub-fecund women would be dissatisfied with their expected family size and would want more children but this is not the case in the present study. The proportions wanting more children are small. What is more striking is the high proportions who want fewer children among particularly the definitely sterile and probably sterile women. In terms of comparative satisfaction, the fecund appear to be the most satisfied, followed (in this order) by the semi-fecund, probably sterile and definitely sterile women. It is clear that the fecund informants have achieved a somewhat higher degree of satisfactory integration between the number of children they want and the number they actually expect than the sample population as a whole.

All the women interviewed were questioned about their attitude to family planning, viz.,

"Some married people do something to limit the size of their families and to control when their children come. How do you feel about that?"

Those who disapproved were asked a further question:

TABLE 10.

PERCENTAGE DISTRIBUTION OF ALL RESPONDENTS IN TERMS OF WHETHER THEY WANT FEWER, MORE, OR THE SAME NUMBER OF CHILDREN AS THEY EXPECT TO HAVE BY THE TIME THEIR FAMILY IS COMPLETE.

NUMBER OF CHILDREN WANTED AS COMPARED TO NUMBER EXPECTED	ALL RESPONDENTS N = 881 *	FECUNDITY STATUS			
		Fecund N=581	Semi-Fecund N = 104	Probably Sterile N = 35	Definitely Sterile N = 159
Wants Fewer	27.2	16.4	33.7	57.2	56.6
Wants More	5.1	4.1	1.0	5.7	11.3
Wants the same Number	67.7	79.5	65.3	37.1	32.1
TOTAL	100.0	100.0	100.0	100.0	100.0

* Those respondents (19) who could not answer this question have been omitted from this table.

$X^2 = 152.67$, d.f., 6, $p < .01$.

"Are there any conditions under which you think it all right for a married couple to limit family size or control when children come?"

It was found that the great majority (81.1 per cent) approved of family planning. Replies to this question were cross-tabulated with the respondent's fecundity and the results appear in the following table.

TABLE 11.

PERCENTAGE APPROVING OF FAMILY PLANNING, BY FECUNDITY STATUS

ALL RESPONDENTS	FECUNDITY STATUS			
N = 880	Fecund N=584	Semi-Fecund N=103	Probably Sterile N= 38	Definitely Sterile N=155
88.1%	88.5%	55.3%	76.3%	72.3%

$X^2 = 76.92$, d.f., 3, $p < .01$.

It is clear from Table 11 that of all the fecundity status groups, the fecund women are the most favourably disposed towards family planning - possibly their particular fecundity status impels them in this direction. The definitely sterile and the probably sterile generally have similar reasons and tend to approximate each other in favourable outlook vis-à-vis family planning. Both these groups have faced pregnancy hazards during marriage which the sub-fecund have not faced. The latter group of women experience great difficulty in conceiving, hence their below average expected family size as well as their relative indifference to family planning - only just over half (55.3 per cent) of them approving of it.

3.8. Sterility and Surgical Operations

In the present study we found that 13.1 per cent of all the women interviewed reported one or other type of operation which made them definitely sterile. The 119 wives reporting such an operation constitute 73.5 per cent

of the definitely sterile group (the GAF equivalent is 87 per cent but their age limit is 39 years as compared to 49 years in the present study). In the Port Elizabeth survey, only 3.0 per cent of all the wives interviewed stated that they had reached the menopause and so could no longer conceive. The great majority, then, of the definitely sterile group report an operation, e.g., hysterectomy, the tying of the Fallopian tubes, direct sterilization or some other operation which renders conception impossible. From the data gathered, it appears that some operations were specifically performed in order to make pregnancy impossible while other operations, though having that effect, were not performed for that reason. Questions were not asked about the nature and purpose of particular operations yet many informants volunteered detailed information. Table 12 shows the different sterility types that make up the definitely sterile group.

TABLE 12.

DISTRIBUTION OF ALL DEFINITELY STERILE COUPLES, BY TYPE OF STERILITY

TYPE OF STERILITY	NUMBER	PERCENTAGE
Due to Operation	119	73.5
Menopause	27	16.7
Physiological Defect in Women	6	3.7
Husband Sterile	3	1.8
No Information	7	4.3
TOTAL	162	100.0

From Table 12 it is clear that without surgical operations, the proportion of definitely sterile couples in the sample population would be much smaller than it actually is. Apart from sterility as a result of a woman reaching the menopause, the other types of sterility do not constitute a significant proportion of the 162 definitely sterile couples in this survey.

The manner in which surgical operations inflate the proportion of definitely sterile women in the sample population can be seen in Table 13 which gives, by age, the proportion of the "operation" group among the definitely sterile women.

TABLE 13

PERCENTAGE OF DEFINITELY STERILE RESPONDENTS WHOSE STERILITY IS DUE TO A SURGICAL OPERATION, BY RESPONDENT'S AGE.

ALL STERILE RESPONDENTS	AGE OF RESPONDENT (Years)				
N = 119	25-29 N=10	30-34 N=15	35-39 N=29	40-44 N=41	45-49 N=24
73.5%	100.0%	100.0%	90.6%	82.0%	43.6%

It is clear that sterility which might normally only manifest itself in the late thirties, early forties or at the onset of menopause, is brought about much earlier by means of surgical operations.

Among the "operation" group and the "non-operation" group there are certain similarities as well as some interesting differences.

If we hold the duration of marriage constant we find that the "operation" group is responsible for a higher average number of pregnancies than the "non-operation" group. Applying our 30-year fertility rate, the "operation" group would be responsible for 7.1 pregnancies and the "non-operation" group for 5.4 pregnancies. ($X^2 = 6.68$, d.f., 1, $p < .01$).

For the same duration of marriage, the surgically definitely sterile show a higher rate of planned pregnancies than the non-surgically definitely sterile respondents, viz., 0.15 and 0.08 planned pregnancies per annum. Calculating the planned pregnancy rate on a 30-year basis, we find a significant difference, e.g. 4.6 and 2.6 planned pregnancies respectively. ($X^2 = 11.90$, d.f., 1, $p < .01$). One might hypothesize that since these surgically sterile women plan their pregnancies to a greater extent than do the non-surgically sterile women, the former are more rational than the latter in this question of medical treatment which eventually led to their sterility.

The indications thus far are that the "operation"

group is potentially more fertile than the "non-operation" group and also more inclined to plan their pregnancies. The median foetal death rate between the "operation" group and the "non-operation" group is not significantly different, viz., 1.8 and 1.9 respectively.

In comparing couples whose sterility is due to a surgical operation performed on the wife with those where sterility has arisen from some other factor, we find no significant differences in the average number of foetal deaths experienced. Furthermore, the definitely sterile group taken as a whole, does not differ significantly in terms of median foetal death rate from the other ever-pregnant women in the sample. Neither are the differences between these two groups in terms of the 30-year fertility rate in any way significant. What is significant, however, is the fact that a greater proportion of the ever-pregnant definitely sterile couples, report one or more foetal deaths (46.8 per cent) than do other ever-pregnant couples who are not sterile (29.8 per cent). (X^2 = 16.93, d.f., 1, $p < .01$).

The accidental pregnancy rate and the unplanned pregnancy rate of the "operation" group and the "non-operation" group do not differ significantly. Likewise, the proportion of users and non-users of contraception in these two groups is similar, as is the pattern pertaining to the commencement of the use of contraception.

3.9. Fecundity Impairments and Use of Contraception

Only 7.5 per cent of all fecund respondents state that they never have and never will use contraceptives at any time during their marriage. Put another way, only 37.5 per cent of the non-users are fecund as compared to 74.1 per cent of the users. (X^2 = 114.27, d.f., 3, $p < .01$). It is clear that the role of sub-fecundity in non-use and never-use of contraceptive techniques is highly significant. Couples use contraception because they have to, while the majority of those who do not use contraceptives simply do not have to. Non-use of contraception is not coterminous with objections to the use of contraceptives. A similar phenomenon was encountered in the GAF study, viz., nearly three-quarters of the non-users who do not intend using contraception in future are sub-fecund.

The bearing of sub-fecundity on non-use of contraception has already been mentioned. Our hypothetical fertility rate would give as a rate of 11.6 children amongst fecund non-users and 5.2 children amongst sub-fecund non-users for 30 completed years of marriage. (X^2 = 53.32, d.f., 1, $p < .01$). On a per annum basis, the fecund non-users have 2.2 times as many children as the sub-fecund non-users.

Clearly, contraception is a more pertinent issue for fecund couples than it is for sub-fecund couples. This will be more fully discussed in the next chapter. Similarly, family planning is more relevant for fecund couples than sub-fecund couples. We found that 57.9 per cent of all the wives interviewed regard their family as complete; only 47.2 per cent of the fecund wives reported that their family was complete as compared to nearly four-fifths (78.8 per cent) of the sub-fecund wives. (X^2 = 83.32, d.f., 2, $p < .01$). Consequently, throughout this study the biological factors of fecundity and the various degrees of sub-fecundity colour phenomena such as the use/non-use of contraception and the types of family planning to be discussed in later chapters.

CHAPTER IV

EXTENT OF USE OF CONTRACEPTION

Our definition of a user of contraception is a broad and generous one. The term "user" means that the couple has at some time during their married life used one or other method of contraception, although they may have given up all use of contraception prior to the interview. ("Ever-user" is a more accurate but rather cumbersome description, which is resorted to when there is a need to be absolutely explicit). A "non-user" refers to a couple that have never used any form of contraception during their marriage, but intend to commence using a method in the near future. Couples who have never used a method of contraception and do not intend using one in the future are termed "never users". Present and past non-users who intend using contraceptives in the future are known as "future users".

4.1. Method of Obtaining Information About Use of Contraception

Questions about contraception are undoubtedly somewhat awkward in that they concern and impinge upon a private and delicate aspect of the marital relationship. The relevant section of the interview schedule was as follows:

"Some things couples do may not be considered birth control. Doctors and public health workers are interested in learning about the methods people use these days. Have you or your husband ever made use of any of the methods on this card? You can tell me by the numbers on the card".

The numbered cards were:

1. Safe period rhythm (avoiding those days of the monthly cycle when conception is likely to occur).
2. Douche - for cleanliness (soon after intercourse).
3. Douche - (soon after intercourse).
4. Withdrawal (by husband before completion).

5. Abstinence (abstaining for more than a month)

6. Rubber condom (prophylactic).

7. Diaphragm.

8. Jelly.

9. Vaginal Suppository.

10. Foam Tablet.

11. Tampon, vaginal cap or stem pessary.

12. Anti-ovulatory tablet.

To minimise embarrassment the respondent was handed a card with the above twelve methods printed on it as well as the numbers; she was thus able to read off the appropriate numbers which the fieldworker simply circled on her schedule. Only one of the 900 women interviewed refused to assist with this part of the interview.

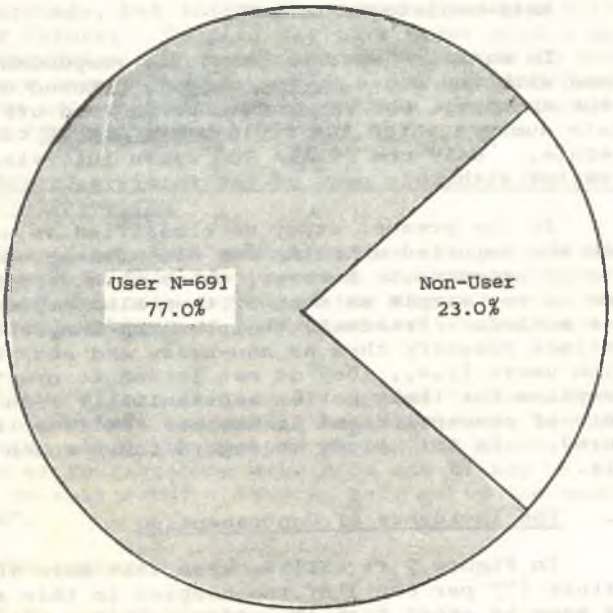
In the present study we classified as users, those women who reported douching for cleanliness only, soon after intercourse. However, there were very few of these women in our sample as most of them also employed some other method. Freedman, Whelpton and Campbell (1959) sometimes classify them as non-users and sometimes as action users (i.e., they do not intend to practise contraception but their action substantially reduces the chance of conception and is thereby contraceptive in nature). In this study we regard these women always as users.

4.2. The Incidence of Contraception

In Figure 7 it will be seen that more than three-quarters (77 per cent) of the couples in this study have used some or other form of contraception. We found that 98 per cent of these users employ contraception deliberately on a motive basis while less than 2 per cent do so in fact on an action basis as a result of douching. Therefore, the distinction between motive and action lacks relevance as far as our sample is concerned. Twenty-three per cent of the couples interviewed were classified as non-users. Many of these non-users suffer from fecundity impairments and thus lack sufficient motivation to employ contraceptive devices.

FIGURE 7

PERCENTAGE DISTRIBUTION OF SAMPLE POPULATION,
BY USE/NON-USE OF CONTRACEPTION



It would be misleading to accept a respondent's present user status as final. When one applies the control of fecundity status to user status, one discovers that nearly three-quarters (74.1 per cent) of the users are fecund while only 37.5 per cent of the non-users are fecund - the majority of these latter women suffer from fecundity impairments and hence the lack of urgency about using contraceptives. This can be seen in the following table which gives the percentage fecund of couples in the various user categories.

TABLE 14.

PERCENTAGE OF COUPLES, BY USER STATUS, WHO ARE FECUND

USER/NON-USER STATUS	PERCENTAGE FECUND
All couples	65.6
All Ever-Users	74.1
All Non-Users	37.5
Ever-Users, Future Users	91.0
Ever-Users, Future Non-Users	18.2
Ever-Users, Uncertain About Future Use	75.0
Non-Users, Future Non-Users	26.7
Non-Users, Future Users	90.0
Non-Users, Uncertain About Future Use	53.8

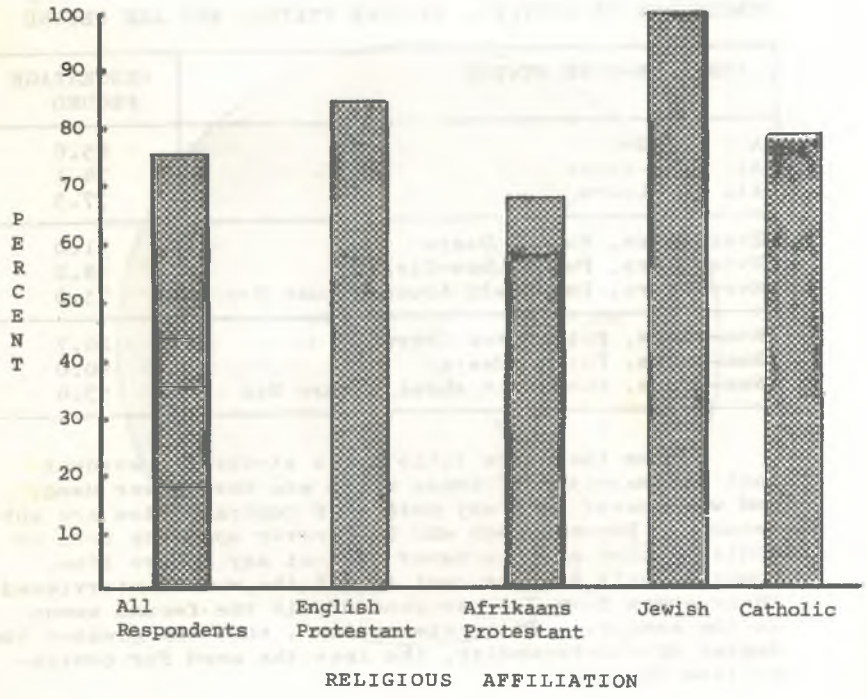
From the above table it is strikingly evident that the majority of those women who have never used, and will never use, any method of contraception are sub-fecund. Fecund women who have never used any form of contraception and who never will at any future time, comprise only 4.9 per cent of all the women interviewed; these women form 7.5 per cent of all the fecund women in the sample. It is clear, then, that the greater the degree of sub-fecundity, the less the need for contraceptive devices.

4.2.1. Incidence of Contraception By Religion

Figure 8 shows the proportion of users in the four main religious groups.

FIGURE 8

PERCENTAGE USERS OF CONTRACEPTION,
BY RESPONDENT'S RELIGIOUS AFFILIATION



It will be observed that all the Jewish women are users (they are the most fecund group), as are 85.8 per cent of the English Protestants, 78.3 per cent of the Catholics (the least fecund group), and 68.2 per cent of the Afrikaans Protestants. The Catholics do not differ from the general sample pattern in this matter of use of contraception; where they differ is in the type of contraceptive techniques employed (to be discussed in the following chapter).

It is commonly known that Catholicism is one of the few religions which forbids its adherents to use any form of mechanical or chemical contraceptive or even the withdrawal method. Of recent years, this position has come under fire from Catholics themselves but the official teaching on the acceptable methods of family limitation has not changed, viz., only the rhythm method is morally acceptable to the Church no matter what the situation of the individual couple happens to be. This teaching has been re-affirmed by the latest papal encyclical, "Humanae Vitae", issued in July 1968.

Like other sub-groups composing the sample population, the majority of Catholic non-users are sub-fecund - in that their pressure to employ contraceptive techniques is not very great. Only 27.7 per cent of the Catholic users in this study conform to the Catholic norm vis-à-vis permissible methods of contraception. In other words, more than seven out of every ten Catholic users (respondents) either have used or are using some or other contraceptive technique forbidden by the Church.

Some case histories illustrating the various reactions of Catholics in our sample to the Church's prohibition of almost every form of contraception follow:-

Case 27.

This Catholic couple have been married 23 years. Their annual income is in the R1,000 - R1,999 category. They live in a lower-middle-class area and their monthly rental is R16. The wife has a Standard 8 education and the husband passed Standard 6. The wife says she would only approve of family planning if the husband was an alcoholic and then rhythm was the only permissible method. Both husband and wife object to mechanical and/or chemical contraceptives on the grounds of health and religion.

The respondent has had ten pregnancies in 19 years including two miscarriages. She told our interviewer that she wanted her first seven pregnancies as soon as possible. The couple only started to use the rhythm method after the seventh pregnancy. This woman is an unusual planner in that her first seven pregnancies were planned on an action basis and her last three on a motive basis. The couple are classified as semi-fecund.

Case 28.

Both husband and wife are Catholics. They attend Mass every Sunday and so fulfil the Catholic norm of external religious observance. The wife is matriculated and the husband holds a managerial position. The annual income is between R3,000 and R3,999; the couple live in comfortable surroundings. The wife is 28 years old and has been married for 8 years.

The wife approves of family planning because "it doesn't land you with too many children; it gives the wife a break". Both husband and wife approve of mechanical and/or chemical means of contraception: "It's the safest way to plan; I disagree with my Church". The couple used a type of contraception forbidden by the Church before the wife's first and only pregnancy. As all her infants have to be delivered by Caesarian Section, the wife feels it unwise to have more than three. Her first child was born 7 years and 4 months after marriage. She plans to have her next child as soon as possible and her third and last one 2 years afterwards.

Case 29.

This Catholic couple attends Mass every Sunday. The wife is 26 years of age and has been married for 5 years. In less than 4½ years she has had three children - all "accidentally" conceived while employing the "safe" period method of contraception. The respondent was extremely upset by her last pregnancies because all her confinements involve a Caesarian Section and there was only an interval of one year between her second and third child. Since then she has had a ligation. The couple live in comfortable circumstances. The wife believes in family planning: "It is a very good thing; in fairness to the children, you must limit your family."

Both husband and wife approve of mechanical and/or chemical contraceptives because "it is easier to control the family this way."

Case 30.

The respondent and her husband are both Catholics; they do not attend church regularly. The wife is 23 years of age and has been married for 6 years. In a period of 5 years and 9 months the wife had four children. The couple began using contraceptives (rubber condom and anti-ovulatory tablets) after the wife's first pregnancy. Her fourth pregnancy was an "accident". When queried as to her reaction to this fourth and last pregnancy, she replied: "I nearly killed myself; my other baby was only four months old." Both husband and wife approve of family planning: "You can't have children every year; children would get neglected." Couple approve of mechanical and/or chemical contraceptives: "It's the right thing to do even though it is against my religion", said the wife, and she added: "It is safer."

The respondent regards her family as complete. She finds bringing up a family of four children a heavy financial burden. She dreads the time when they will have to go to school and eventually need a higher education. The husband is employed in a secretarial position and the annual family income is in the R3,000 - R3,999 category.

Case 31.

The wife is a Catholic married to an Afrikaans Protestant. She is 33 years of age and has been married 15 years. Her husband is a clerk earning between R2,000 and R2,999 per annum. They have had eight children in 9½ years. The only method of contraception ever used was the "safe" period. After the birth of her last child the wife was sterilized.

The wife approves of family planning but observes that her religion only allows the "safe" period, "which really is not a sure thing". With regard to mechanical and/or chemical contraceptives, she states: "If it wasn't for my religion, I'd agree". Her husband was not concerned about his large family. He could not be bothered

with mechanical and/or chemical contraceptive devices. The respondent said she would much prefer to have had only four children instead of the eight which she already had. Her last pregnancy made her "quite fed up".

4.2.2. Incidence of Contraception By Home Language

In comparing use of contraception with the respondents' home language, it was found that the English-speaking women (86.0 per cent) are "greater" users of contraception than the average woman interviewed. Women whose home language is English/Afrikaans equally (71.4 per cent), foreign-language women (75.0 per cent) and Afrikaans-speaking women (68.1 per cent), all fall somewhat below the sample average as regards use of contraception. ($X^2 = 39.97$, d.f., 3, $p < .01$).

4.2.3. Incidence of Contraception By Education

As regards education, matriculated informants show the highest degree of use of contraception, viz., 92.5 per cent as compared to university or college women (86.8 per cent), secondary school women (73.7 per cent) and primary school women (48.6 per cent). ($X^2 = 46.06$, d.f., 3, $p < .01$). A similar pattern is evident when use of contraception is compared with husband's standard of education. (See Appendix C, Table C.10).

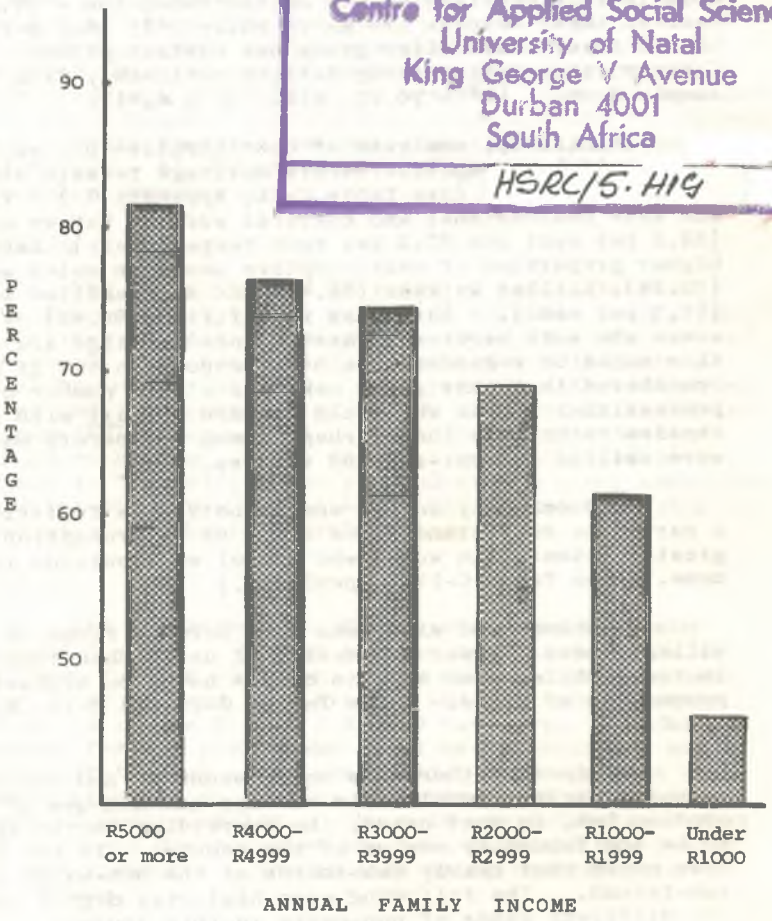
4.2.4. Incidence of Contraception By Socio-Economic Status

To a certain extent, income, house rental and home ownership, taken together, form an index of socio-economic status. Use of contraception was analysed in terms of all three variables and socio-economic status appears to be directly correlated with use of contraception. This is particularly evident in Figure 9 which compares use of contraception with annual family income. ($X^2 = 36.64$, d.f., 5, $p < .01$).

Figure 9 shows a reasonably symmetrical progression from a 95.3 per cent usage on the part of couples in the highest income group to 50 per cent usage on the part of couples in the lowest income group. The difference in degree of usage between the first three income groups is not very great; however, couples with annual incomes below the R3,000 level reveal greater differences in user proportion.

FIGURE 9

PERCENTAGE DISTRIBUTION OF USERS OF CONTRACEPTION, BY COUPLE'S ANNUAL FAMILY INCOME



The husband's occupation has a distinct influence on the average couple's degree of use of contraception. More than nine out of ten upper-white-collar couples (91.3 per cent) report use of contraception as compared to 84.0 per cent of the lower-white-collar couples. The upper-blue-collar couples more or less match the sample norm in this question of use of contraception - 79.4 per cent of these couples are users while only 58.6 per cent of the lower-blue-collar group use contraception. Clearly, this latter group deviate noticeably from the sample norm. ($X^2 = 70.23$, d.f., 3, $p < .01$).

Similarly, analysis of contraceptive use according to the wife's occupation before marriage reveals significant differences. (See Table C-11, Appendix C.) Women who were professional and clerical workers before marriage (88.2 per cent and 87.1 per cent respectively) have a higher proportion of contraceptive use than sales workers (72.2%), skilled workers (68.4%) and semi-skilled workers (62,3 per cent). More than four-fifths (80.6%) of the women who were service workers before marriage are users; this might be regarded as a high proportion but it must be remembered that this group contains a fair number of non-professional nurses who would be more au fait with contraceptive techniques than perhaps women who before marriage were skilled or semi-skilled workers.

Economically active women, both on a full-time and a part-time basis tend to be users of contraception to a greater extent than women who do not work outside the home. (See Table C-12, Appendix C,)

Husbands and wives who were born on farms or in villages have a lower proportion of users than those born in towns while those born in cities have the highest proportion of users. (See Tables C-13 and C-14, Appendix C.)

Obviously, there are socio-economic and socio-cultural factors involved in the use and non-use of contraception but, in most cases, the overriding factor appears to be the fecundity status of the couple. It has already been noted that nearly two-thirds of the non-users are sub-fecund. The following case histories depict some of the different kinds of non-users in this study:-

Case 32.

This non-user Afrikaans-speaking couple lives in a lower-middle-class suburb. They have been married for 21 years and the respondent is 44 years of age. Couple have had two children and wife was pregnant for the third time at the time of the interview. There is a gap of 17½ years between the second and third pregnancies. The respondent regards family planning as "a big sin" and believes that the use of mechanical and/or chemical contraceptives are harmful to health. Both husband and wife have Standard 6 education; the husband is employed as a furnace operator and the annual family income is in the R1,000 - R1,999 category. This sub-fecund couple are irregular church-goers.

Case 33.

The respondent is 48 years of age. The couple have been married for 26 years and wife has been pregnant four times. Each pregnancy has ended in a miscarriage. The couple have never used any method and the wife is still hoping for a child. She regards six children as ideal and only approves of family planning if financial circumstances warrant it. Both she and her husband regard mechanical and/or chemical contraceptive techniques as "sinful". The respondent has never consulted a doctor about her condition. Her fecundity status is that of the probably sterile category.

Case 34.

The interviewee is 25 years old and has been married 5 years. Though she has two children, she is not very fond of children. The couple live in a poor area; the husband is a fireman and the annual family income is in the R1,000 - R1,999 category. The wife regards fertile people who avoid having children as "baie verstandig" (very sensible). She approves of family planning as well as mechanical and chemical means of contraception. She told our interviewer that she was very disappointed the last time she discovered she was pregnant. She intends using contraception in the future.

Case 35.

The respondent has been married for 20 years and is 43 years old. Her first and only child was born 2 years and 5 months after marriage. Since then she has been unable to become pregnant although neither she nor her husband have ever used any form of contraception. She would like to have four children.

Both husband and wife are Afrikaans-speaking, matriculated and regular church-goers. They own their own house and the husband occupies a managerial position with an income between R4,000 and R4,999 per annum. The respondent has consulted her doctor who has ruled out the possibility of any further children.

Case 36.

This couple, living in a poor area, have been married for 7 years. They have three children, but want one more and then plan to use contraception. The wife considers four children ideal. She believes in family planning and mechanical and chemical contraception. As a child, the informant contracted polio and before the birth of her first child, she suffered a good deal of kidney trouble. Her husband is a semi-skilled worker earning between R1,000 and R1,999 per annum. Both husband and wife have passed Standard 6.

Case 37.

The respondent lives in an extremely poor area and told the interviewer that she had never thought about family planning. She is completely ignorant of contraceptives.

The couple have been married 3 years and the wife is 25 years of age. She and her husband have a Standard 6 education; they live in a flat for which they pay R29 per month. The husband is a semi-skilled worker earning between R1,000 and R1,999 per year.

The couple do not intend using any form of contraception in the future. The wife was pregnant at the time of her marriage. She has had two children within 2½ years; she wants to have two more children.

Case 38,

Couple live in a poor area. They have been married for 12 years and the wife is 33 years of age. The wife disapproves of contraceptives and neither she nor her husband have ever used them. In less than 10 years, the informant has been pregnant seven times - five live births and two miscarriages; in addition, one of her children died eight months after birth. The husband is a semi-skilled worker earning between R1,000 and R1,999 yearly.

4.3. Use of Contraception By Marriage Duration

It has already been noted (vide Chapter III, page 24) that sub-fecundity increases with marriage duration. This phenomenon is indirectly manifested in Figure 10, which examines the user status of couples in the light of their marriage duration. (X^2 = 19.64, d.f., 5, $p < .01$)

It will be observed in this figure that the highest incidence of use of contraceptives is to be found among couples who have been married 10-14 years and the lowest among those who have been married 25 years or more. The longer a couple is married, the greater the chance of different types of sub-fecundity manifesting themselves.

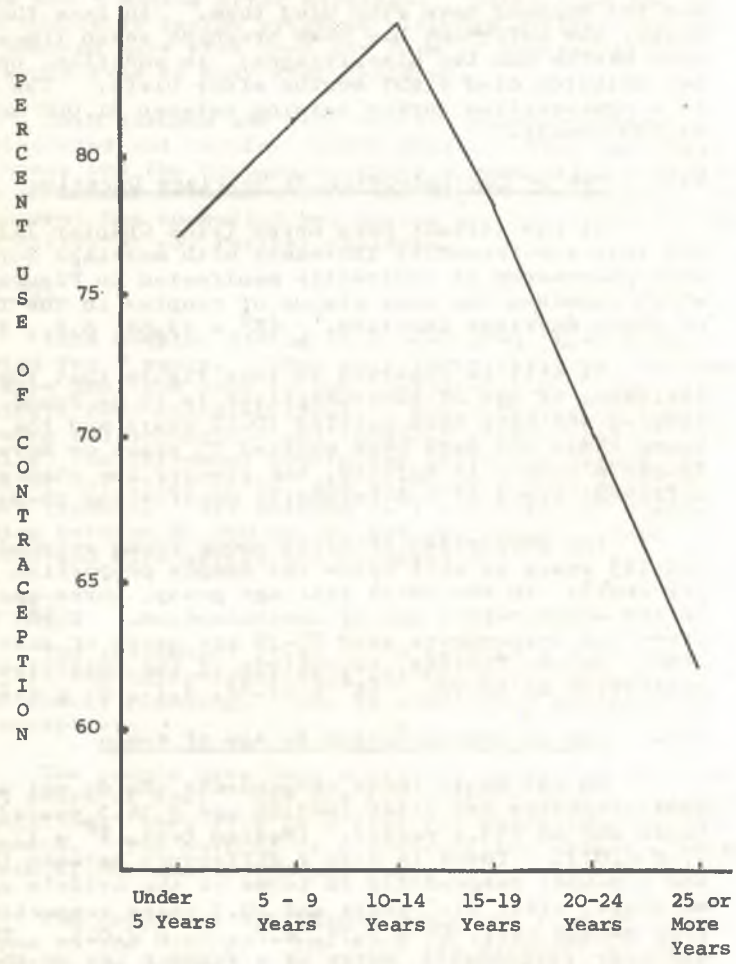
The proportion of users among young respondents (15-19) years is well below the sample proportion (42.9 per cent); in the 20-24 year age group, three-quarters of the women report use of contraception. Eight out of every ten respondents aged 25-39 are users of contraception. In the forties, two-thirds of the interviewees are classified as users. (X^2 = 37.88, d.f., 6, $p < .01$).

4.4. Use of Contraception By Age of Woman

On the whole those respondents who do not use contraceptives are older (median age = 36.5 years), than those who do (33.1 years). (Median test, X^2 = 17.97, d.f., 1, $p < .01$). There is also a difference between the user and non-user respondents in terms of the bride's age at marriage, viz., 21.5 years and 20.7 years respectively. (For median test, X^2 = 7.74, d.f., 1, $p < .01$). The non-user respondents marry at a younger age on the average than do the user women.

FIGURE 10

PERCENTAGE DISTRIBUTION OF USERS OF CONTRACEPTION, BY DURATION OF MARRIAGE



While the difference is small it is consistent with the well-known phenomenon of lower-class women (who have a lower per cent of users), marrying at a younger age than women in the middle- and upper-classes.

4.5. Use of Contraception and Family Size

In regard to the various types of family size studied in this survey, user and non-user respondents differ. Usually the differences are small but statistically sometimes significant.

Non-users favour a larger number of children in their IDEAL FAMILY (4.5 children) as compared to user respondents (4.1 children). (Median test, $X^2 = 16.39$, d.f., 1, $p < .01$).

Because sub-fecundity is closely associated with non-use, the EXPECTED FAMILY SIZE of the non-users (3.8 children) does not differ much from that of the users, viz., 3.5 children. (Median test, $X^2 = 4.63$, d.f., 1, $p < .05$). However, greater differences vis-à-vis expected family size occur between user and non-user wives when the comparison is restricted to fecund women: fecund non-users expect a median of 4.4 children in their completed family while fecund users expect a median of 3.5 children. (Median test, $X^2 = 16.66$, d.f., 1, $p < .01$).

The user respondents are somewhat more satisfied with the number of children they expect in their family by the time it is complete than are the non-users. Just over one-quarter (26.2 per cent) of the user wives would prefer FEWER children than they expect to have in their completed family as compared to 30.8 per cent of the non-user respondents. The differences while significant statistically, are small. ($X^2 = 7.40$, d.f., 2, $p. < .05$).

Non-use, by itself, does not imply an above-average number of pregnancies. For the same duration of marriage, users have slightly more pregnancies than non-users but the difference is minimal and not statistically significant. Non-use often implies a high degree of sub-fecundity, whereas use of contraception is to a large extent associated with fecundity. In a nutshell, those who use contraception, need it.

4.6. Use of Contraception and the Fertility Index

Use and non-use of contraceptives become more important when restricted to fecund couples. In applying our 30-year fertility index to user and non-user couples who are fecund we find that the users would have, on the average, a family of 7.3 children and the non-users 11.1 children. (X^2 = 47.87, d.f., 1, $p < .01$). As far as total number of pregnancies are concerned, over a hypothetical marriage duration of 30 years, fecund users will average 8.3 pregnancies as compared to 13.0 pregnancies on the part of the fecund non-users. (X^2 = 39.00, d.f., 1, $p < .01$). It is clear that in the case of fecund couples, use of contraception does make a significant difference to the number of children a couple will have and also to the number of times the wife will be pregnant.

4.7 Contraception and Completed Families

Restricting our comparison to fecund couples, we find that just over half (51.1 per cent) of the users regard their family as complete while only just over one-fifth (21.8 per cent) of the non-users are in this position. (X^2 = 23.75, d.f., 2, $p < .01$). Use of contraception clearly brings with it a greater degree of certainty and definiteness in matters of family size and family completion than does non-use, especially in the case of fecund couples.

4.8. Frequency of Use of Contraceptives

Not all user couples use - or have used - contraceptive techniques regularly. Just over three-quarters (75.9 per cent) of the users report regular use while 24.1 per cent are occasional or intermittent users. As might be surmised, the majority (80.2 per cent) of the regular users are fecund whereas only 57.9 per cent of the occasional users are classified as fecund. (X^2 = 31.57, d.f., 1, $p < .01$).

A few cases will illustrate types of regular and occasional users of contraception:-

Case 39.

Couple, married 18 years, are regular users of

contraception (withdrawal, condom and foam tablets). Contraception was commenced at the outset of their marriage. The wife, who is 39, has been pregnant three times - two live births and one miscarriage. She now regards her family as complete. The mean interval between the respondent's three pregnancies is 5.8 years; one pregnancy was planned, another was "accidental" and the third was unplanned.

The couple, both Afrikaans Protestants, live in a lower-middle-class suburb. They own their own home. Both husband and wife work full-time.

The husband is a semi-skilled worker and their annual income is R2,000 - R2,999. Both believe in family planning. According to the wife: "'n Mens kan nie bekostig om elke jaar 'n baba te hê nie." * The wife approves of chemical means of contraception but not mechanical ones; the husband feels the same way - he feels that mechanical methods of contraception could be harmful.

Case 40.

Afrikaans Protestant couple have been married 3 years. The wife is 25 years of age. The wife has one child and plans to have two more - the next one in a year's time and a third child 3 years afterwards.

The couple commenced using contraceptives (jelly and anti-ovulatory tablets) at the beginning of their marriage. They are regular users and intend using contraceptives in the future. The wife's first and only pregnancy was planned.

Both husband and wife are teachers and both are in full-time employment. They rent a flat in a middle-class suburb. Their annual family income is between R3,000 and R3,999. The respondent approves of family planning: "Dan is alle kinders wat gebore word welkom".**

Both husband and wife approve of chemical contraceptives but not mechanical ones because they believe

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* "A person can't afford to have a baby every year."
**"Then all the children that are born are welcome".

that only the former types preserve a normal conjugal relationship. *

Case 41.

English-speaking couple are occasional users. The wife is 38 years of age. She has been married twice; her first marriage lasted 10 years and she has been married to her second husband 6 years. In her first marriage no contraceptives were used and she had two pregnancies (one live birth, one miscarriage). She has been pregnant twice in her present marriage (one live birth, one miscarriage).

After her third pregnancy, the couple started using the rhythm method. None of her pregnancies were planned. The wife would like to have two more children but she only expects one more.

Both husband and wife work full-time. The husband has passed Standard 8 and the wife Standard 7. The husband is employed as a general foreman. The annual family income is in the R3,000 - R3,999 category.

The wife believes in family planning but neither she nor her husband approve of mechanical or chemical contraceptives; both spouses regard these methods as unhealthy.

Case 42.

Afrikaans Protestant couple live in a lower middle-class suburb. The wife, who has a Standard 6 education, is 31 years of age and has been married for 13 years. She has been pregnant eight times in 11 years (five live births, three miscarriages - in that order). The couple started using withdrawal after her eighth and last pregnancy. She reported that she wanted all her pregnancies up to that time "as soon as possible" but this may very well be a rationalization.

The couple own their own home. The husband is a driver earning R2,000 to R2,999 annually. The respondent dislikes the idea of family planning except if financial circumstances warrant it. Neither she nor her husband approve of mechanical or chemical contraceptives.

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* "Dit hou die huweliksverhouding normaal."

The majority of all users in the various marriage duration categories report regular use of contraception - the differences between the various marriage duration groups in this regard is not particularly significant. The presence of fecundity increases the proportion of regular users in all the marriage duration categories as well as revealing greater differences between users married for different lengths of time. (See Table C-15 Appendix C,). As one would expect regularity of use increases - not quite perfectly or symmetrically, however - with increasing length of marriage duration.

In terms of the hypothetical fertility rate already alluded to, fecund occasional users show a higher rate (for total pregnancies) than do fecund regular users, viz., 8.0 and 9.9 pregnancies respectively over a 30-year period. ($X^2 = 7.17$, d.f., 1, $p < .01$). As far as the fertility rate for children is concerned, this difference is maintained, e.g., 6.5 children in the case of fecund regular users for 30 years of marriage and 9.1 children for fecund occasional users for the same period. ($X^2 = 16.42$, d.f., 1, $p < .01$). Clearly, regularity of use has a bearing on family size and family planning. Regular users also expect less children than occasional users, viz., a median of 3.4 children as compared to 3.9 children in the completed family. ($X^2 = 7.21$, d.f., 1, $p < .01$). As regards the median number of children expected in the completed family there is also a difference in the regular users (3.5 children) and the occasional users (4.1 children). (Median Test, $X^2 = 6.61$, d.f., 1, $p < .05$).

However, both in the case of fecund and sub-fecund users, there is no difference between the degree of satisfaction with the expected family size on the part of the occasional and regular users.

Among fecund couples respondents reporting regular use have a lower ideal-sized family (3.9 children) than those who use contraceptives occasionally (4.3 children). (Median test, $X^2 = 4.40$, d.f., 1, $p < .05$). These differences persist when all users are examined in the light of the number of children considered ideal - higher in the case of the occasional users (median: 4.4 children) and lower in the case of the regular users of contraception (median: 3.9 children). (Median test, $X^2 = 8.46$, d.f., 1, $p < .01$).

Among the fecund, occasional users want more children than regular users - medians of 3.7 and 4.2 children respectively. ($X^2 = 5.53$, d.f., 1, $p < .05$).

In the light of the sociological variables employed in this study, certain differences in regularity of use appear with respect to some of the sub-groups which compose the sample population. Nine-tenths of all Jewish users use contraceptives regularly as do four-fifths of the English Protestant users, 71.7 per cent of the Catholic and 70.8 per cent of the Afrikaans Protestant users ($X^2 = 10.17$, d.f., 3, $p < .05$). Fecundity control makes no significant overall difference to the above distribution although it does increase the proportion of regular users among Catholic respondents. (See Table C-16, Appendix C). Sub-fecundity, however, reduces the proportion of regular users in all religious groups but especially in the case of Afrikaans Protestant and Catholic users. (See Table C-17, Appendix C).

Higher education (matriculation and higher) increases the frequency of use among all users in all religious groups except the Catholic. Lower education (below the matriculation level) makes no significant change in the proportion of regular users in the various religious groups.

The differences between users in the various income groups in regard to frequency of use is not particularly great; neither are these differences symmetrical. Even when the comparison is restricted to fecund users, no significant differences appear.

In the analysis of the frequency of use by home language, it appears that 81.0 per cent of the English users and 70.0 per cent of the Afrikaans users belong to the regular user category. ($X^2 = 10.08$, d.f., 1, $p < .01$). In addition, 85.3 per cent of the fecund English users and 76.8 per cent of the fecund Afrikaans users report regular - as opposed to - occasional use of contraceptives ($X^2 = 5.14$, d.f., 1, $p < .05$).

Four-fifths of both white-collar groups were found to be regular users of contraception; approximately three-quarters of the upper-blue-collar users belong to this group as do 65.7 per cent of the lower-blue-collar users. Applying the control of fecundity, an increase

in the proportion of regular users occurs in all four occupation groups. (See Table C-18, Appendix C.).

The higher the respondent's standard of education the more likely it is that she will be a regular user. Whereas 91% of university and college graduates are regular users of contraception, 83% of matriculants, 73% of those with secondary school education and 59% of those with primary school education are regular users. (X^2 = 13.20, d.f., 3, $p < .01$).

It will be observed that the decline in the proportion of regular users is even between the first three groups and slightly sharper when we consider the primary school-educated users. The presence of fecundity reduces the differences between the various educational groups. Whereas 81% of all fecund users are regular users of contraceptives, the percentage of regular users in the respective educational groups is 90% for university/college graduates, 89% for matriculants, 78% for those with secondary education and also those with a primary school education.

CHAPTER V.

NATURE AND TYPES OF CONTRACEPTIVE PRACTICE

5.1. Types of Contraceptives

The various types of contraceptives may be grouped into three broad categories, viz.,

1. Appliance and/or chemical methods exclusively (e.g., condom, jelly, diaphragm, etc).;

2. Non-appliance methods only (e.g. rhythm, withdrawal); and

3. Mixed methods, i.e. the use of appliance and non-appliance methods of contraception either simultaneously or consecutively.

Some case studies illustrate the different types of contraceptives used as well as the various combinations:-

Case 43.

Respondent has been married for 27 years and is 45 years of age. Sixteen years ago she had an operation which made her sterile. In the first 12 years of marriage the respondent had four pregnancies (three live births and one miscarriage). The couple started using appliance methods of contraception (douche, diaphragm, jelly and vaginal cap) after the wife's first pregnancy. Contraceptives were used regularly until the onset of sterility. By means of contraceptives, the couple planned the second, third and fourth pregnancies.

The couple own their own home in a very well-to-do suburb. Both have a Standard 7 education; both work; the husband is employed in a managerial position and the annual family income is in the R5,000 and over category. Both are English Protestants and attend church every Sunday.

The respondent approves of family planning; she approves of chemical means of contraception but has objections of a psychological nature to mechanical means of contraception. The husband, however, approves of both chemical and mechanical contraceptives.

Case 44.

Afrikaans-speaking couple married for 8 years: The wife is 27 and has been pregnant twice (one miscarriage, one live birth). The couple used contraception (only one method, viz., jelly) right from the outset of their marriage. The wife wants one more child and then she will regard her family as complete. Both her pregnancies have been fully planned.

The couple own their own home in a middle-class area. Both have a Standard 8 education. The husband is employed as a clerk earning between R2,000 - R2,999 annually. The wife believes in family planning because "Ouers is nie altyd in staat om 'n onbeperkte aantal kinders to versorg nie". *

Case 45.

The respondent is 18 years of age and has been married 10 months; she has a five-month old baby. Her husband is 20 years of age. The wife is matriculated and the husband has passed Standard 9. He is in business with his father and earns between R2,000 and R2,999 per annum. The couple only use anti-ovulatory tablets which the respondent commenced taking after her baby was born. They are fecund and regular users.

The wife would like to have a family of three children. She would like to have her next child in two years' time and the third one two years after that. The respondent approves of family planning.

Case 46.

Respondent is 21 years of age and has been married for 3 years. The couple own their own home in a middle-class suburb. Both have a Standard 8 education. The husband is a technician and his income is in the R4,000 - R4,999 category. Both husband and wife are Afrikaans Protestants and regular church-goers.

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* "Parents are not always in a position to provide for an unlimited number of children" .

From the beginning of their marriage this couple have used contraceptives regularly, viz., jelly and foam tablets. The wife would like to have three children but the couple have not yet definitely decided when to start their family - both appear to be governed strongly by financial considerations.

The wife believes in family planning because "Baie mense kan nie baie kinders bekostig nie."* Both husband and wife approve of mechanical and chemical forms of contraception.

Case 47.

Respondent is 35 years of age and has been married for 8 years, 3½ years in her first marriage and 4½ years in her second and present marriage. The respondent has two children and was eight months pregnant at the time of the interview. She has used mixed methods of contraception, viz., foam liquid, anti-ovulatory tablets and rhythm. After a bout of pneumonia the respondent - acting on her doctor's advice - used only the rhythm method and while using this method of contraception she became pregnant for the third time.

The respondent has matriculated and her husband is a lawyer. They live in a select area of Port Elizabeth. The respondent is a firm believer in family planning and both she and her husband approve of mechanical and/or chemical means of contraception. The respondent wants four children.

Case 48.

Couple have been married for 9 years; the wife is 30 years of age. She has been pregnant three times (two live births, one miscarriage) in under 6 years. After her first pregnancy the couple started using contraceptives (withdrawal and condom). Since then this couple have been regular users. The respondent wanted her first pregnancy as soon as possible; her second and third pregnancies were planned. The respondent plans to continue using contraceptives but will switch to anti-ovulatory tablets. She expects to have four children in her family by the time it is complete.

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* "Many people cannot afford many children".

The couple live in a poor area of the city. The husband is a storeman with a Standard 3 education; he earns R1,560 per annum. The interviewer reported that the wife, who had a Standard 6 education, is an intelligent and balanced person who runs an exceptionally neat and tidy home.

The wife is a firm believer in family planning; " 'n Mens moet kinders kry soos jy dit kan bekostig. Dis onbillik as jy hulle nie behoorlik kan versorg nie". ("A person must have the children you can afford. It is unreasonable if you cannot provide for them properly"). Both husband and wife approve of mechanical and chemical methods of contraception.

Case 49.

The respondent is 34 years of age and has been married 14 years. She has been pregnant twice (both live births) and now regards her family as complete. The couple have only used non-appliance methods of contraception, viz., rhythm and withdrawal. They commenced using contraception after the birth of their first child. Since then they have been regular users.

This couple own their own home in a middle-class suburb. The wife works part-time and the husband is a partner in a small business. The wife has a Standard 7 education and the husband matriculation. The wife believes in family planning "for financial reasons".

Case 50.

This couple (wife Methodist, husband Catholic) only use the rhythm method. They have been married for 8 years and the wife is 25 years of age. In the first 4½ years of marriage the respondent had three children.

The couple commenced using the rhythm method after their first child was born. Since then they have been regular users and intend using contraception in the future. The wife wanted her first child as soon as possible. Her other two pregnancies were completely planned. She wants to have four children in her completed family.

The couple live in a lower-middle-class suburb of Port Elizabeth. The wife has a Standard 6 education and the husband Standard 8. The husband is an artisan and the annual income is between R1,000-R1,999.

The wife approves of family planning: "If you didn't control, you'd have such a big family." Because of her husband's religion, the respondent felt ambivalent about mechanical and/or chemical means of contraception: "My husband being a Catholic, we're not supposed to use these methods. It's up to other people to choose for themselves." The couple is fecund.

In the present study less than one half (45.3 per cent) of the user couples limit themselves to appliance methods of contraception; nearly one-quarter (24.9 per cent) use mixed methods while nearly three out of every ten user couples only employ non-appliance methods. The relevant proportions in the Johannesburg Fertility Survey are very similar, viz., 50.0 per cent, 26.0 per cent and 24.0 per cent respectively. (Badenhorst, 1963, 297).

In the American study (GAF) just over half (52.0 per cent) of the users have restricted themselves to appliance methods, while 27.0 per cent of the users have used mixed methods and 21.0 per cent have used non-appliance methods exclusively. (Freedman et.al. 1959, 181). It will be noticed that the general pattern of use is reasonably similar in all three studies.

According to our data, the fecundity or sub-fecundity of couples does not affect their general choice of methods of contraception. However, other variables such as religious affiliation, home language, income and so on apparently do condition the choice of contraceptives. The respondents' religious affiliation (in nine cases out of ten the husband's is the same as the wife's) plays a greater role vis-à-vis type of contraceptive than as regards the use or non-use of contraceptives.

Our data do not indicate a differential birth rate or pregnancy rate for equivalent marriage durations on the part of couples using different types of contraceptives. The rates for those using appliance methods exclusively as well as those using mixed methods, and those using only non-appliance methods, are extremely similar; the differences are minimal and statistically totally insignificant.

Among fecund couples different types of users (in terms of our present broad categorisation) manifest differences in the number of children considered ideal. Appliance-only users indicate a lower ideal (a median of 3.8 children) than the mixed users (4.0 children) and the non-appliance-only users (4.3 children). (Median test, $X^2 = 19.06$, d.f., 2, $p < .01$). This is not surprising in view of the socio-economic differences associated with the use of different types of methods which will be discussed later in this chapter.

The fecund non-appliance-only users want more children (median of 4.1) than the other two groups, viz., users of mixed methods (3.9 children) and appliance methods-only users (3.5 children). (Median test, $X^2 = 20.17$, d.f., 2, $p < .01$).

Similarly, among fecund couples those users of appliance methods only expect fewer children by the time their family is complete than fecund users in the other two groups, viz., a median of 3.3 children as compared to 3.8 children in the case of both non-appliance-only users and users of mixed methods.

5.2. Social and Economic Correlates

Variety in the type of contraceptive technique used is associated with religious as well as socio-economic differences.

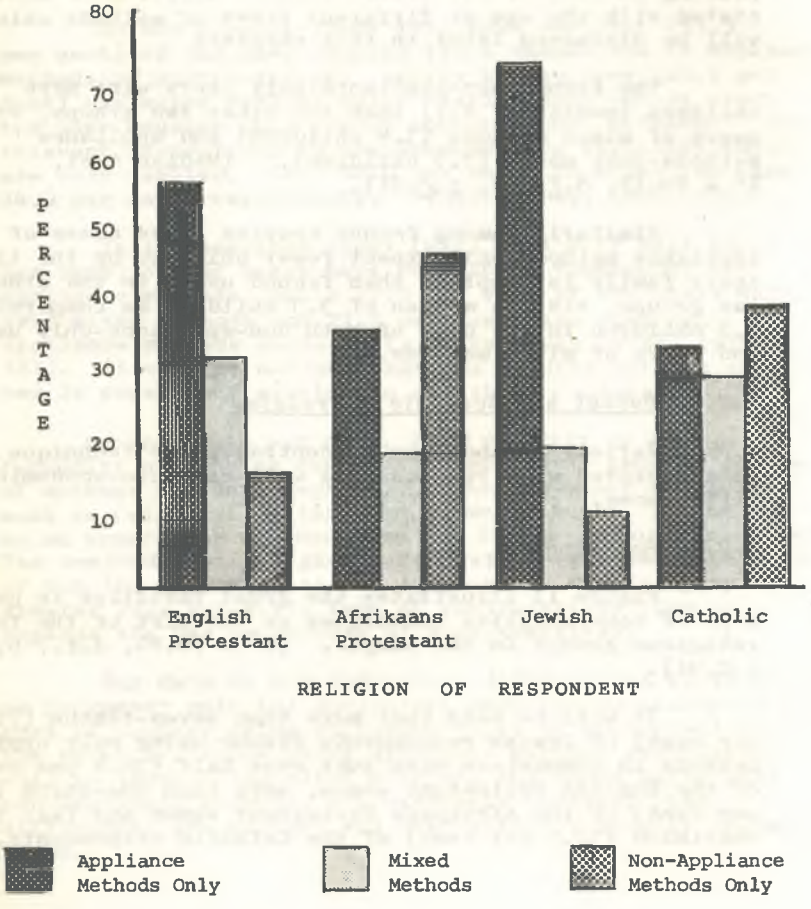
5.2.1. Religion

Figure 11 illustrates the great variation in general type of contraceptive techniques on the part of the four religious groups in the sample. ($X^2 = 70.84$, d.f., 6, $p < .01$).

It will be seen that more than seven-tenths (71.4 per cent) of Jewish respondents favour using only appliance methods in comparison with just over half (54.4 per cent) of the English Protestant women, more than one-third (36.2 per cent) of the Afrikaans Protestant women and less than one-third (32.6 per cent) of the Catholic respondents.

FIGURE 11

PERCENTAGE DISTRIBUTION OF USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED, BY RELIGION OF RESPONDENT



Catholics and English Protestant users employ mixed methods to a somewhat greater extent than Jewish and Afrikaans Protestant respondents. Proportionately, more than four times as many Catholic users than Jewish users only employ non-appliance methods of contraception (39.1 per cent : 9.5 per cent) while the ratio between Afrikaans and English Protestant users is nearly 3 : 1 (45.0 per cent : 15.4 per cent).

If we add the fecundity variable to our comparison between the general methods used by the users in the four religious groups, we observe that the overall pattern remains fairly constant for both fecund and subfecund users. (See Tables C-19 and C-20, Appendix C).

When income is held constant and the religious affiliation of the users is varied, the overall differences in general type of contraceptive used remains. (See Tables C-21, C-22 and C-23, Appendix C). Similarly, when the wife's standard of education is introduced into the analysis, the general differences remain. (See Tables C-24 and C-25, Appendix C).

5.2.2. Home Language

As has already been pointed out in the present sample, the home language represents a compound variable, i.e., it includes religious as well as socio-economic differences. Figure 12 reflects the difference in general type of contraceptive used between English and Afrikaans users. ($X^2 = 57.65$, d.f., 2, $p < .01$).

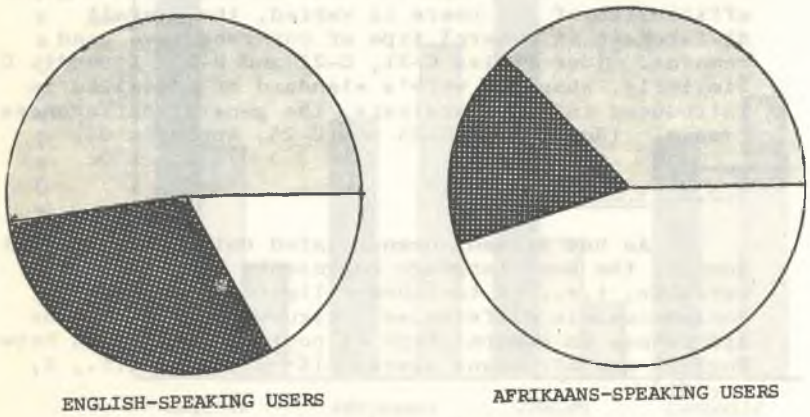
According to Figure 12 quite marked differences appear between English- and Afrikaans-speaking users as regards the broad type of methods used. Over half (52.7 per cent) of the English users use appliance methods exclusively while the relevant proportion for Afrikaans users is just over one-third (36.8 per cent). Three out of every ten Afrikaans users employ mixed methods while less than one-fifth (18.4 per cent)

of the English users belong to this category.

Among Afrikaans users, non-appliance methods are the most popular (44.8 per cent) whereas these methods are the least popular with the English users (17.2 per cent).

FIGURE 12

PERCENTAGE DISTRIBUTION OF ENGLISH- AND AFRIKAANS-SPEAKING USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED



5.2.3. Education

Table 15 shows the proportions of users in the different educational groups according to the type of contraceptives used.

TABLE 15

PERCENTAGE DISTRIBUTION OF USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVE USED, BY RESPONDENT'S STANDARD OF EDUCATION

GENERAL TYPE OF CONTRA-CEPTIVES	ALL USERS N=688	RESPONDENT'S STANDARD OF EDUCATION			
		University/ College N = 33	Matri-cula-tion N = 159	Secondary School N = 478	Primary School N = 16
Appliance Methods Only	45.3	63.6	51.6	42.7	31.2
Mixed Methods	24.9	27.3	32.1	22.4	25.0
Non-appliance Methods Only	29.8	9.1	16.3	34.9	43.8
TOTAL	100.0	100.0	100.0	100.0	100.0

$X^2 = 29.34$, d.f., 6, $p < .01$

It is clear from Table 15 that the higher the respondent's standard of education, the more she is inclined to favour the use of appliance contraceptive methods exclusively in her marriage. Less than one-tenth (9.1 per cent) of the university- and/or college-educated users restrict themselves to non-appliance methods whereas more than one-sixth (16.3 per cent) of the matriculated users, just over one-third (34.9 per cent) of those users with a secondary school education and over two-fifths (43.8 per cent) of the primary school-educated users belong to this class. The differences vis-à-vis mixed methods are minor; it is as regards the polar type of contraceptives where great differences are observable and where the progression is definite and unmistakable.

5.2.4. Income, Occupation and Marriage Duration

Users in the higher income groups show a preference for appliance methods only and mixed methods

over exclusively non-appliance methods whereas the reverse is the case among low-income users, viz., a concentration on non-appliance methods of contraception. (See Table C-26, Appendix C).

The higher the husband's occupational level, the more the user couple tends to rely on the exclusive use of appliance methods as well as mixed methods of contraception. Blue-collar couples use non-appliance methods exclusively to a greater extent than white-collar couples. (See Table C-27, Appendix C).

There is no regular pattern of association between marriage duration and the broad type of contraceptive used.

5.3. Analysis of Specific Methods of Contraception

The broad types of contraceptives which have just been discussed give one an overall picture of the patterns of use in the sample population. However, up to a point, they are too general if taken simply by themselves. Therefore, users have also been classified according to whether they ever made (or make) any use of appliance methods, the rhythm method and the method of withdrawal.

5.3.1. Use of Appliances

Seven out of every ten users in the present study report some use of appliance methods of contraception. There is no consistent trend in the use of appliances by the number of years of marriage duration.

It has been made clear that religious affiliation does not really affect actual use/non-use of contraception as much as it apparently influences the choice of method - it is here that fairly marked differences occur. These appear in the following table.

TABLE 16

PERCENTAGE ANY USE OF APPLIANCE METHOD(S) OF CONTRACEPTION, BY RELIGION OF RESPONDENT

ALL USERS	RELIGION OF RESPONDENT			
N = 688	English Protestant N = 318	Afrikaans Protestant N= 299	Jewish N = 21	Catholic N = 46
70.3	84.9	54.8	90.5	60.9

$X^2 = 71.15$, d.f., 3, $p < .01$

Table 16 indicates that Jewish users report any use of appliance methods of contraception to a greater extent than users in any other religious groups, viz., more than nine-tenths (90.5 per cent). The proportion for English Protestants (84.9 per cent) is above that of the sample (70.3 per cent) while Catholic users (60.9 per cent) and Afrikaans Protestant users (54.8 per cent) fall below the sample proportion as regards any use of appliance methods of contraception. The presence of fecundity does not bring the proportions of users of appliance methods in the four religious groups any closer to each other. If anything, it accentuates the differences somewhat. (See Table C-28, Appendix C.)

If we divide our users into two broad groups education-wise, viz., matriculation and higher and below matriculation, and then apply this two-way educational control to an analysis of those reporting any use of appliance methods of contraception, very interesting changes in pattern emerge. These are reflected in the following table.

From Table 17 it appears that "higher" education has a greater impact on Afrikaans Protestant users vis-à-vis any use of appliance methods of contraception than on users in the other religious groups. By contrast the influence of this type of education on Jewish users is negligible and on English Protestants relatively minor. As one goes up the educational scale the proportion of Catholic users reporting any use of appliance methods diminishes somewhat; it would appear that better

educated Catholics adhere to the Catholic birth control norm with rather more fidelity than their less well-educated co-religionists.

TABLE 17.

PERCENTAGE USERS REPORTING ANY USE OF APPLIANCE METHOD(S) OF CONTRACEPTION, BY GENERAL STANDARD OF EDUCATION, BY RELIGION OF RESPONDENT.

GENERAL STANDARD OF EDUCATION	ALL USERS	RELIGION OF RESPONDENT			
		English Protestant	Afrikaans Protestant	Jewish	Catholic
Matriculation and Higher (1)	84.7	93.5	70.9	94.4	50.0
Below Matriculation (2)	64.9	81.0	51.2	66.7	63.9

(1) $X^2 = 22.52$, d.f., 3, $p < .01$
(2) $X^2 = 43.67$, d.f., 3, $p < .01$

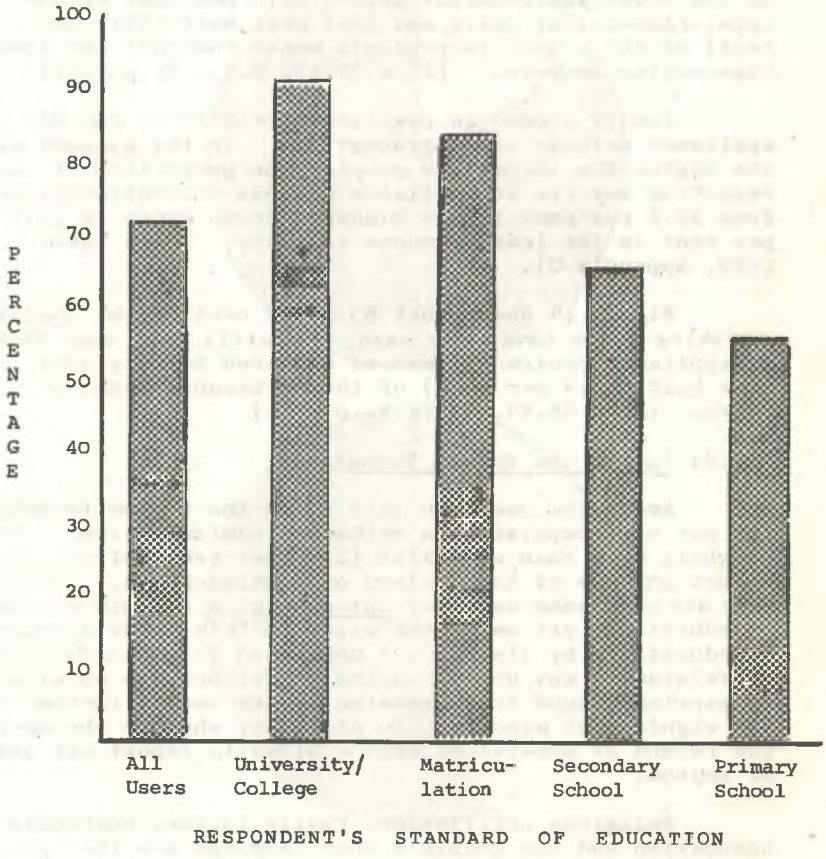
With regard to less well-educated users, the overall differences between users in the various religious groups tend to remain with little change in proportion. En passant, it should be remarked that there are too few Jewish respondents in this category for the Jewish proportion to have any real significance.

To a certain extent, any use of appliance methods of contraception is associated with standard of education. $X^2 = 27.78$, d.f., 3, $p < .01$. Figure 13 below gives details.

According to Figure 13, Matriculation seems to be the dividing line, viz., respondents with Matriculation and higher education report any use of appliance contraception in proportions (90.9 per cent and 83.6 per cent respectively) above the average users while those user respondents with a standard of education below Matriculation fall below the sample average as regards any use of contraception, i.e., 65.3 per cent of the secondary

FIGURE 13

PERCENTAGE USERS REPORTING ANY USE OF APPLIANCE METHOD(S) OF CONTRACEPTION, BY RESPONDENT'S STANDARD OF EDUCATION



school-educated users and 56.3 per cent of those user respondents who only had a primary school education.

The majority (85.9 per cent) of those users whose husbands are upper-white-collar workers report some use of appliance methods of contraception as do three-quarters of the lower-white-collar users, 67.0 per cent of the upper-blue-collar users and just over half (52.9 per cent) of those user respondents whose husbands are lower-blue-collar workers. (X^2 = 39.17, d.f., 3, $p < .01$)

Family income is positively related to any use of appliance methods of contraception. In the present study the higher the income the greater the proportion of users reporting any use of appliance methods of contraception from 90.2 per cent in the highest income group to 35.0 per cent in the lowest income category. (See Table C-29, Appendix C).

Figure 14 shows that 83.1 per cent of the English-speaking users have ever used, or still use, some form of appliance contraceptives as compared to only just over half (55.4 per cent) of the Afrikaans-speaking users. (X^2 = 58.83, d.f., 1, $p < .01$)

5.3.2. Use of the Rhythm Technique

Among the users in this study the rhythm technique was not very popular as a method of contraception. Only slightly more than one-fifth (21.4 per cent) of all users report any use of this method of contraception. Effective use of rhythm demands, inter alia, a certain standard of education, yet among the users in this study standard of education, by itself, was not found to be significantly related to any use of rhythm. Neither was duration of marriage found to be related to any use of rhythm in any significant manner. In addition, whether the users are fecund or sub-fecund only a minority report any use of rhythm.

Religious affiliation, family income, husband's occupation and the couple's home language are the variables which reveal significant differences in the proportions reporting any use of rhythm.

FIGURE 14

PERCENTAGE USERS REPORTING ANY USE OF APPLIANCE METHOD(S) OF CONTRACEPTION, BY HOME LANGUAGE OF COUPLE

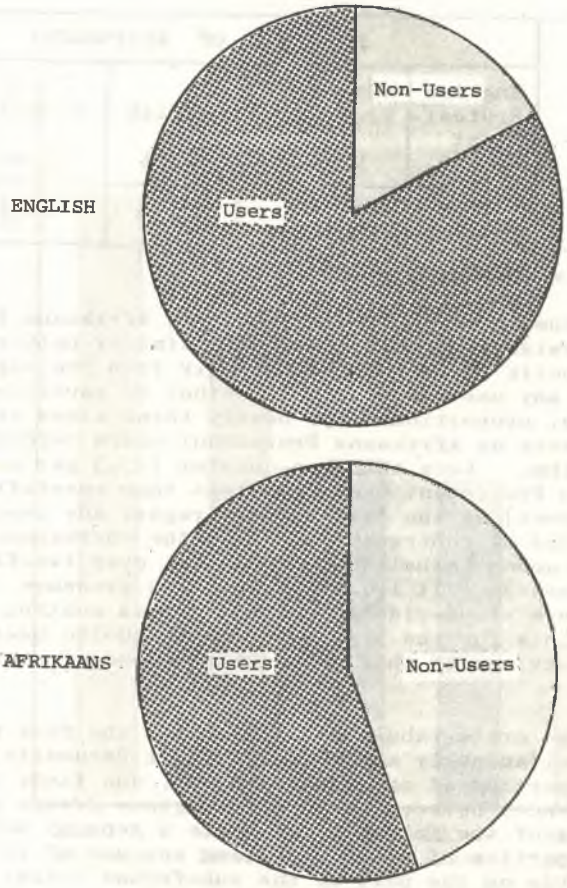


TABLE 18.

PERCENTAGE USERS REPORTING ANY USE OF RHYTHM, BY RELIGION OF RESPONDENT

ALL USERS	RELIGION OF RESPONDENT			
	English Protestant	Afrikaans Protestant	Jewish	Catholic
N = 688	N= 318	N=299	N=21	N= 46
21.4%	23.3%	15.7%	19.0%	45.7%

X^2 = 20.63, d.f., 3, $p < .01$

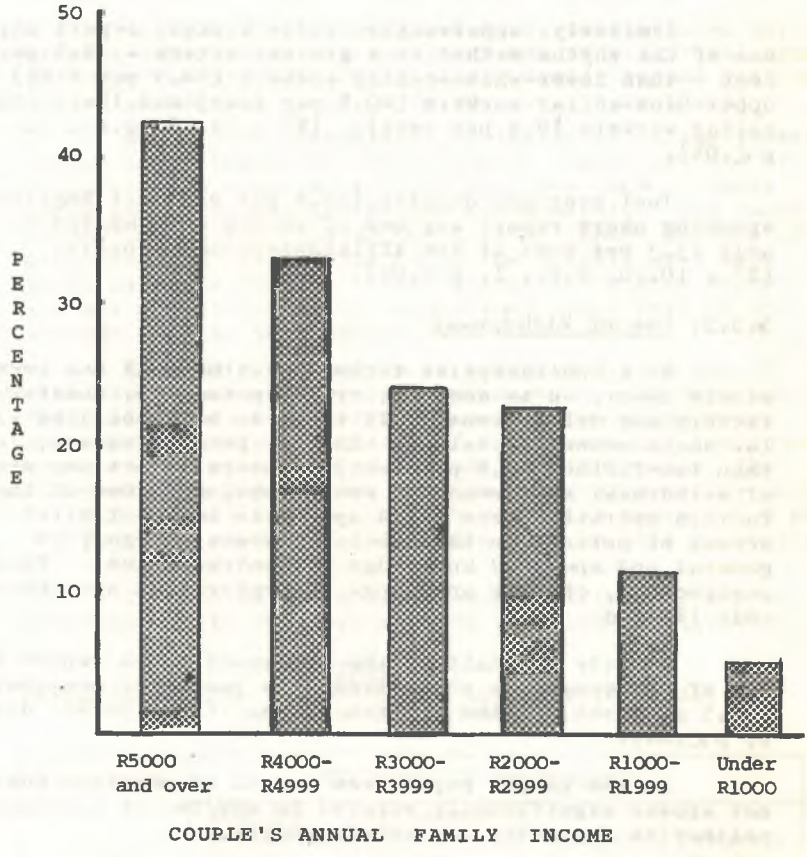
In the above table, the English, Afrikaans Protestants and Jewish users all manifest a similar pattern whereas the Catholic users deviate strongly from the overall pattern of any use of the rhythm method of contraception. For example, proportionately, nearly three times as many Catholic users as Afrikaans Protestant users report any use of rhythm. Less than one-quarter (23.3 per cent) of the English Protestant users and less than one-fifth (19.0 per cent) of the Jewish users report any use of the rhythm method of contraception while the corresponding proportion among Catholic users is well over two-fifths (45.7 per cent). It is, of course, the pressure of the Catholic norm vis-à-vis "acceptable" birth control methods which accounts for the high degree of Catholic users reporting any use of this particular method of contraception.

If we cross-tabulate the users in the four religious groups simultaneously according to their fecundity status and the reporting of any use of rhythm, one finds that the differences between the four religious groups persist in the case of the fecund users while a general decline in the proportion of users reporting any use of rhythm is noticeable on the part of the sub-fecund users, and the differences between the religious groups are not statistically significant. (See Table C-30, Appendix C).

Annual family income has a definite bearing on the proportion of users reporting any use of rhythm. (X^2= 20.93, d.f., 3, $p < .01$). This will be seen in the following figure.

FIGURE 15

PERCENTAGE USERS REPORTING ANY USE OF RHYTHM, BY ANNUAL FAMILY INCOME



In Figure 15 it will be noticed that the progression of the proportion of users reporting any use of the rhythm method of contraception is fairly regular from 41.5 per cent of the users in the highest income group to only 5.0 per cent in the lowest income category. Only those users in the two middle income groups approximate the sample norm.

Similarly, upper-white-collar workers report any use of the rhythm method to a greater extent - 32.4 per cent - than lower-white-collar workers (24.9 per cent), upper-blue-collar workers (20.0 per cent) and lower-blue-collar workers (9.4 per cent). (X^2 = 22.18, d.f., 3, $p < .01$).

Just over one quarter (25.8 per cent) of English-speaking users report any use of rhythm as compared to only 15.3 per cent of the Afrikaans-speaking users. (X^2 = 10.10, d.f., 1, $p < .01$).

5.3.3. Use of Withdrawal

As a contraceptive technique withdrawal has been widely described as ancient, crude, primitive, unsatisfactory and deleterious. It tends to be associated with low socio-economic status. In the present survey, less than two-fifths (37.8 per cent) of users report any use of withdrawal as a means of contraception. One of the factors operative here would appear to be the limited access of persons in this socio-economic category to general and specific knowledge of contraception. Their perspective, choices and range of preferences are undoubtedly limited.

Exactly one-half of the Afrikaans users report any use of withdrawal as contrasted with just over one-quarter (28.5 per cent) of the English users. (X^2 = 30.92, d.f., 1, $p < .01$).

In the sample population length of marriage does not appear significantly related to any use of withdrawal; neither is fecundity or sub-fecundity.

Analysis in terms of standard of education, income, occupation and religion reveal significant differences vis-à-vis any use of withdrawal as a means of contraception.

The more educated users clearly do not favour withdrawal as a contraceptive technique, viz., only 15.2 per cent of users in the highest educational group and 30.2 per cent of the matriculated users report any use of withdrawal; the corresponding proportions of secondary school-educated users and users with only a primary school education are 41.0 per cent and 62.5 per cent respectively. (X^2 = 16.79, d.f., 3, $p < .01$)

An even greater range of difference between the proportion of users reporting any use of withdrawal appears in Figure 16 which compares annual family income with any use of withdrawal. (X^2 = 29.76, d.f., 5, $p < .01$)

Exactly three-quarters of the users in the lowest income group (under R1,000 per annum) report any use of withdrawal as compared to only 14.6 per cent of those users whose incomes are R5,000 and upwards. All users in income categories from R2,000 upwards report any use of withdrawal in proportions below the overall user norm while users in the two lowest income categories report any use of withdrawal in proportions above that of the average user in this sample.

Husband's occupation is associated with use of withdrawal as a contraceptive measure. Less than one-fifth (18.4 per cent) of the upper-white-collar users and approximately one-third (32.2 per cent) of the lower-white-collar users report any use of withdrawal; the corresponding proportions for the upper-blue-collar users (41.9 per cent) and the lower-blue-collar users (55.8 per cent) are in excess of the sample norm in this connection. (X^2 = 43.47, d.f., 3, $p < .01$).

The following table cross-classifies any use of withdrawal with the respondent's religious affiliation.

TABLE 19.
PERCENTAGE USERS REPORTING ANY USE OF WITHDRAWAL, BY RELIGION OF RESPONDENT

ALL USERS	RELIGION OF RESPONDENT			
	English Protestant	Afrikaans Protestant	Jewish	Catholic
N= 687	N=318	N=299	N= 21	N= 46
37.8%	29.2%	50.5%	9.5%	28.3%

X^2 = 39.03, d.f., 3, $p < .01$

FIGURE 16

PERCENTAGE USERS REPORTING ANY USE OF WITHDRAWAL, BY ANNUAL FAMILY INCOME

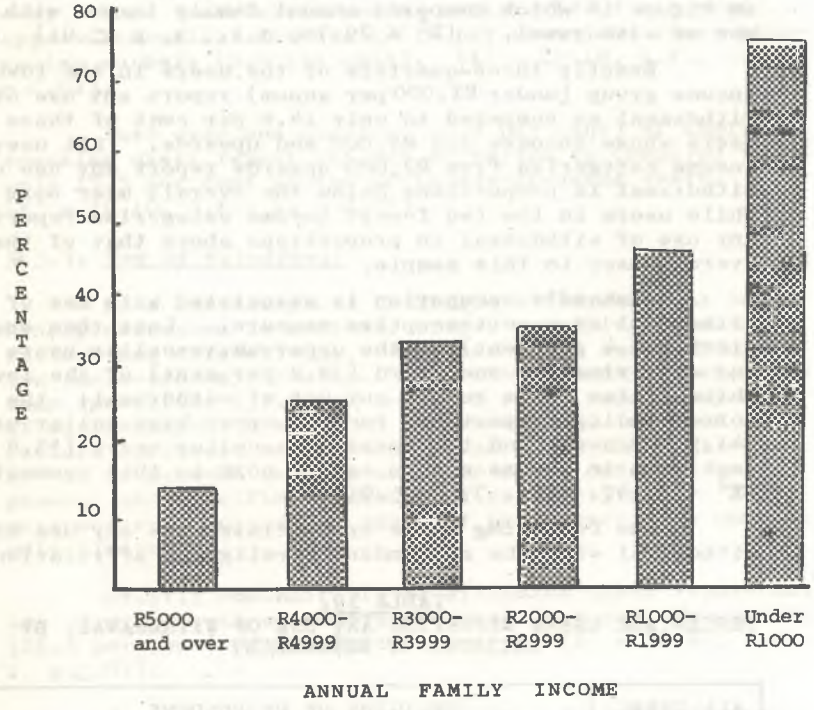


Table 19 indicates that Jewish users constitute the most under-represented group as regards reporting any use of withdrawal; less than one-tenth (9.5 per cent) belong to this category. Afrikaans Protestants are over-represented; just over half (50.5 per cent) of them report any use of withdrawal as a method of contraception. Catholic and English Protestant users report any use of withdrawal in very similar proportions - both are below the sample average. For the Catholic users, of course, withdrawal constitutes a violation of the Catholic normative pattern vis-à-vis contraception.

If we apply the control of fecundity to the above analysis no overall change in the distribution pattern occurs either in the case of fecund users or sub-fecund users. The differences between users in the various religious groups reporting any use of withdrawal remains fairly constant. (See Table C-31, Appendix C.)

A higher educational level reduces quite markedly the proportion of Afrikaans Protestant and Catholic users reporting any use of withdrawal while a lower educational level (below Matriculation) does not alter the pattern. (See Table C-32, Appendix C.).

5.3.4. Use of Anti-Ovulatory Tablet (The "Pill"):

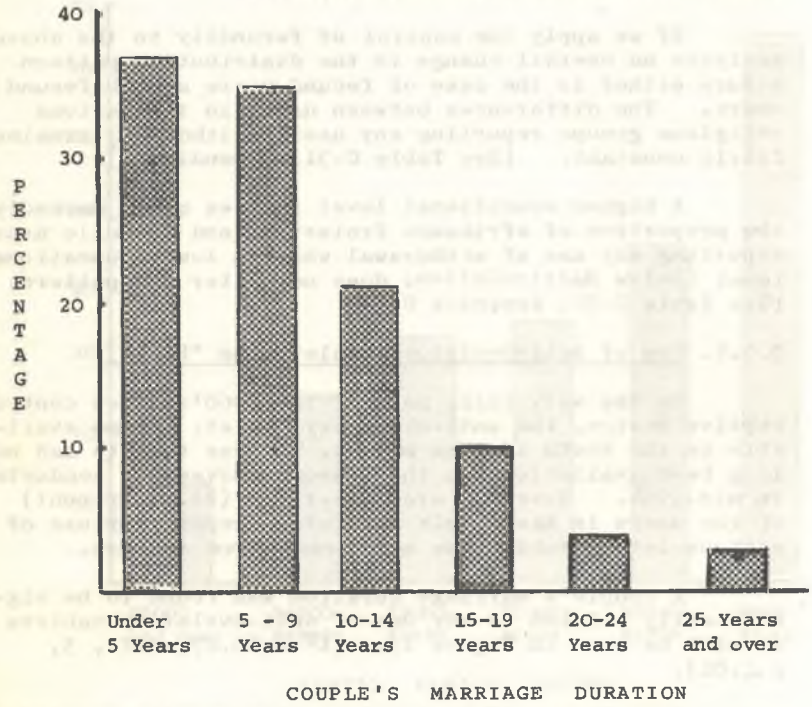
In the very early part of the 1960's a new contraceptive device, the anti-ovulatory tablet, became available on the South African market. These tablets had not long been available when the present survey was conducted in mid-1964. However, over one-fifth (22.8 per cent) of the users in the sample population report any use of anti-ovulatory tablets as a contraceptive measure.

A couple's marriage duration was found to be significantly related to any use of anti-ovulatory tablets as will be seen in Figure 17. ($X^2 = 65.67$, d.f., 5, $p < .01$).

From Figure 17 it is clear that couples married a shorter time report use of anti-ovulatory tablets in much greater proportions than the average user or couples married longer (i.e., in this case 10 years or more). As might be expected the proportion of users reporting any use of anti-ovulatory tablets declines sharply among couples who have been married 15 years or more.

FIGURE 17

PERCENTAGE USERS REPORTING ANY USE OF ANTI-OVULATORY TABLETS, BY MARRIAGE DURATION OF COUPLE



No significant difference was found between Afrikaans and English users as regards the proportions reporting any use of anti-ovulatory tablets.

In view of the differences in marriage duration groups and their use of anti-ovulatory tablets, it is not surprising to note that while over one-quarter (27.7 per cent) of the fecund users report any use of anti-ovulatory tablets less than one-tenth (8.4 per cent) of the sub-fecund users are in this category. (X^2 = 27.00, d.f., 1, $p < .01$). The sub-fecund users are an older group with a longer average marriage duration than the fecund group.

Users in the first three occupational groups in this study report any use of anti-ovulatory tablets in similar proportions close to the sample norm; it is only users in the lower-blue-collar group (12.2 per cent) who deviate from the overall user proportion. (X^2 = 11.76, d.f., 3, $p < .01$).

Approximately three in every ten user respondents in the first two educational groups report any use of anti-ovulatory tablets as compared to just less than one-fifth (19.8 per cent) of those users with a secondary school education and 17.7 per cent of those users who only completed primary school. (X^2 = 8.95, d.f., 3, $p < .05$).

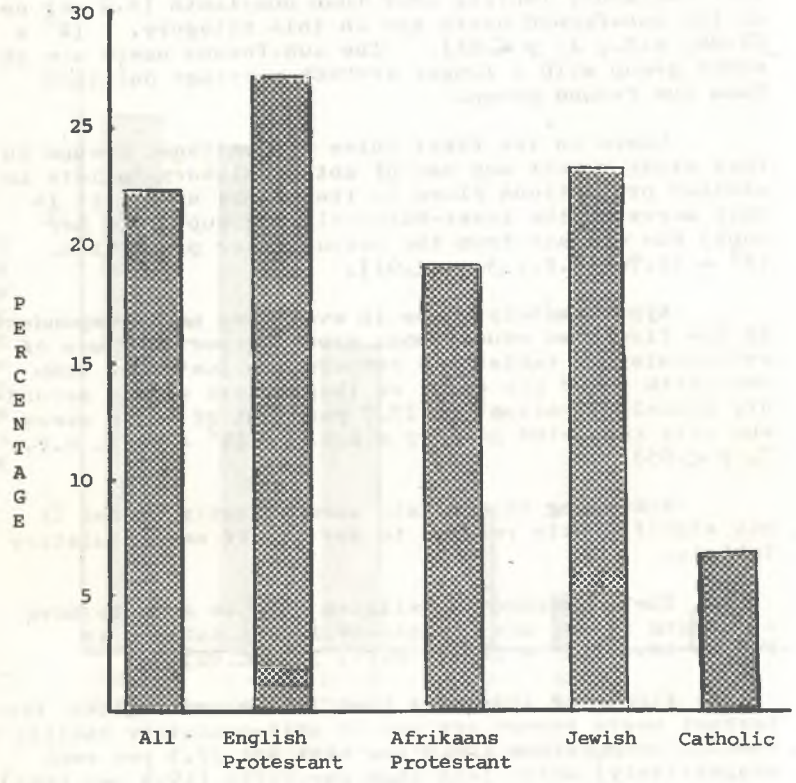
According to our data annual family income is not significantly related to any use of anti-ovulatory tablets.

The respondent's religion will be seen to have a bearing on the use of anti-ovulatory tablets in Figure 18. (X^2 = 12.23, d.f., 3, $p < .01$).

Figure 18 indicates that Jewish and English Protestant users report any use of anti-ovulatory tablets in similar proportions (26.3 per cent and 27.3 per cent respectively) while less than one-fifth (19.4 per cent) of the Afrikaans Protestant users and only 6.5 per cent of the Catholic users are to be found in this category. Undoubtedly, to a certain extent, pressures of the religious ideology operated in the case of many of the Catholic users of contraceptives.

FIGURE 18

PERCENTAGE USERS REPORTING ANY USE OF ANTI-OVULATORY TABLETS, BY RELIGION OF RESPONDENT



CHAPTER VI.

THE TIMING OF CONTRACEPTION

This chapter concerns the timing of contraception amongst the 95% of the sample who have been pregnant on one or more occasions and who have used contraceptives. For most respondents, the question of sub-fecundity obviously does not arise at the outset of their marriage or during the first few years of marriage. Therefore, for most couples, their decision to use or not to use contraception is, in a sense, made against a background - or at least a reasonably safe assumption - of fecundity. Indeed, we already know that the vast majority of couples are fecund during the early stages of marriage. For some, fecundity impairments pre-exist the actual marriage but in the beginning of marriage most husbands and wives are unaware of them. Accordingly, in most cases, this fact makes the decision as to just when to commence using contraceptive techniques a significant one in terms of socio-economic and socio-cultural factors precisely because for most couples the biologically conditioning factor of sub-fecundity is still latent.

6.1. Commencement of Contraception

All ever-pregnant respondents admitting to the use of any form of contraception were asked when they first used contraception. Not all user couples commence using contraceptives right at the beginning of their marriage although many do so. Delay (in terms of time and/or number of pregnancies) in the first use of contraception is not uncommon. Couples who commenced using contraceptives right at the outset of their marriage are known as immediate users while those who only commence employing contraceptive techniques after one or more pregnancy are known as later users. All immediate and later users have been pregnant at some or other stage of their marriage; the immediate users resorted to contraception before their first pregnancy while the later users only commenced using contraception after one or more pregnancies. In the present study under one half (45.7 per cent) of all users are classified as immediate users and over one-half (54.3 per cent) as later users.

In the Johannesburg Fertility Survey, (Badenhorst and Higgins, 1962, 287) 60 per cent of all users were classed as immediate users but this included all users not simply pregnant women as has been done in the present study. In the GAF study (Freedman et. al., 1959, 65), about half the users commenced using contraceptives before their first pregnancy.

There is some indication in our data that longer married couples delay the first use of contraception somewhat more than do couples with shorter marriage duration. That is, couples married more recently are more likely to be immediate users than those married years ago. This reflects changing patterns of contraceptive behaviour which is apparent in the following table.

TABLE 20.

PERCENTAGE IMMEDIATE USERS OF CONTRACEPTION, BY DURATION OF MARRIAGE

ALL EVER-PREGNANT USERS	DURATION OF MARRIAGE					
	Under 5 Years	5 - 9 Years	10-14 Years	15-19 Years	20-24 Years	25 or More Years
N = 658	N=118	N=179	N=138	N=105	N=81	N=37
45.7%	46.6%	50.8%	49.3%	38.1%	43.2%	32.4%

It was also found that there are differences in the age of brides vis-à-vis immediate or later use of contraceptive techniques. However, the differences are small enough to be of little importance. The median age at marriage of the immediate users (21.9 years) is higher than that of the later users (20.9 years). Median test, (X^2 = 16.35, d.f., 1, $p < .01$).

The time of commencement of use of contraception obviously has an effect on the number of pregnancies a woman will have. Use of contraception by itself will not tell us everything about fertility control; timing is even more important in the long run. We have a number of couples in this study who only became users of contraception after they had had four, five, six and more children.

Such users are not in the same fertility category as those who start using contraception from the beginning of their marriage or, at least, after the first pregnancy. As will be seen later, the most successful family planners are those who start using contraception in the early stages of their marriage.

In the present study it was found that the higher the number of pregnancies a woman had, the later she had commenced using contraceptives. (X^2 = 32.94, d.f., 5, $p < .01$). This will be seen in Figure 19 which shows the proportion of immediate users in each pregnancy category.

Figure 19 indicates that a steady decline in immediate use occurs as the total number of pregnancies increases. Women with large families are either very late starters vis-à-vis contraception or fecund non-users.

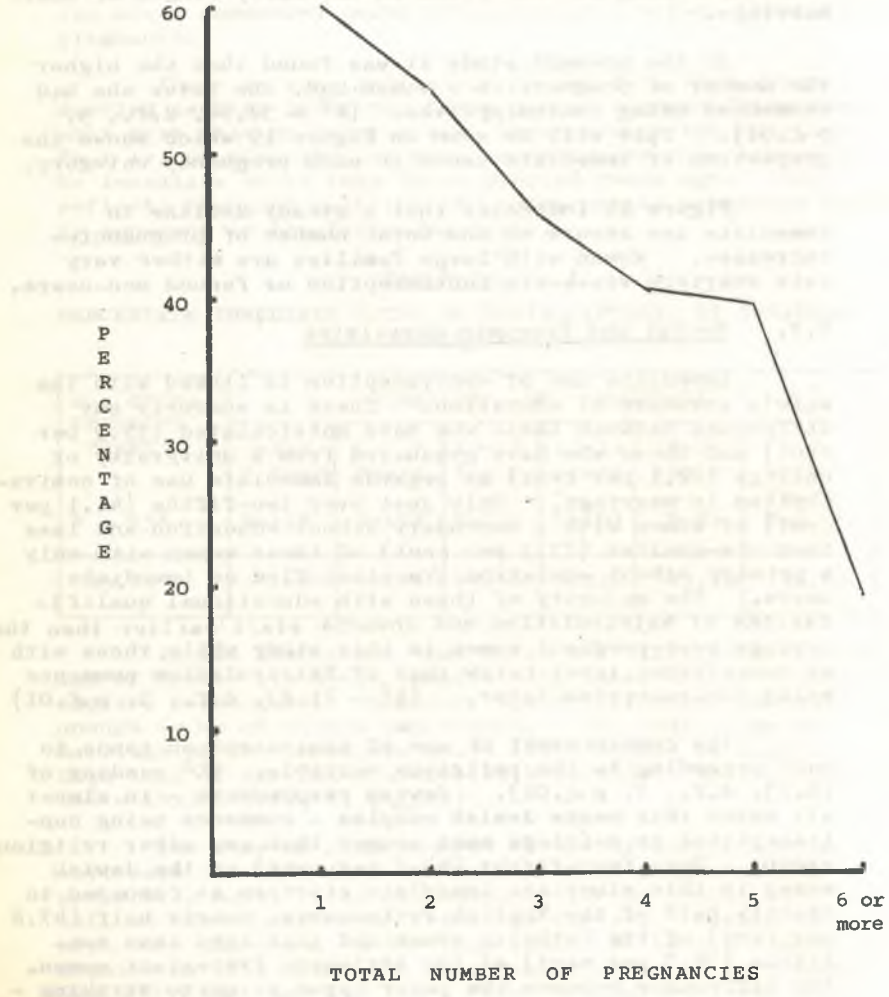
6.2. Social and Economic Correlates

Immediate use of contraception is linked with the wife's standard of education. There is scarcely any difference between those who have matriculated (59.3 per cent) and those who have graduated from a university or college (62.1 per cent) as regards immediate use of contraception in marriage. Only just over two-fifths (41.1 per cent) of women with a secondary school education and less than one-quarter (23.5 per cent) of those women with only a primary school education are classified as immediate users. The majority of those with educational qualifications of Matriculation and upwards start earlier than the average ever-pregnant women in this study while those with an educational level below that of Matriculation commence using contraception later. (X^2 = 21.83, d.f., 3, $p < .01$)

The commencement of use of contraception tends to vary according to the religious variable. (X^2 reading of 18.73, d.f., 3, $p < .01$). Jewish respondents - in almost all cases this means Jewish couples - commence using contraceptives in marriage much sooner than any other religious group. Over four-fifths (84.2 per cent) of the Jewish women in this study are immediate starters as compared to exactly half of the English Protestants, nearly half (47.8 per cent) of the Catholic women and just less than two-fifths (38.5 per cent) of the Afrikaans Protestant women. The difference between the polar types is quite striking - proportionately, more than twice as many Jewish wives than

FIGURE 19

PERCENTAGE IMMEDIATE USERS OF CONTRACEPTION, BY TOTAL NUMBER OF PREGNANCIES



Afrikaans Protestant wives are immediate starters. The Catholic and English Protestant women scarcely differ from each other or the sample pattern in the matter of first use of contraception.

White-collar couples have a higher proportion (nearly three-fifths) of immediate users than blue-collar workers (approximately one-third). (See Table C-33, Appendix C.) Upper-white-collar and lower-white-collar couples manifest a clearly similar pattern as regards the commencement of the use of contraception in marriage - 58.0 per cent and 59.8 per cent respectively are immediate users. Both blue-collar groups deviate from the sample pattern, viz., only 35.8 per cent of the upper-blue-collar and 31.3 per cent of the lower-blue-collar couples are immediate users.

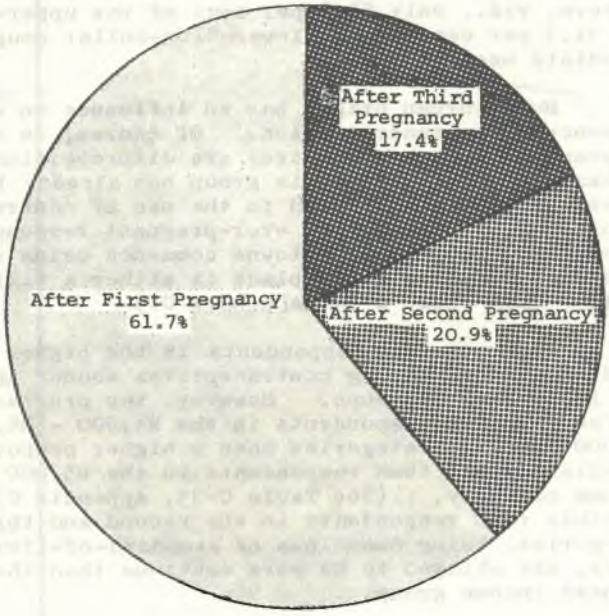
Rural-urban origin has an influence on when couples commence using contraception. Of course, in a South African context, rural whites are disproportionately Afrikaans-speaking and this group has already been seen as later starters with regard to the use of contraception than the English-speaking ever-pregnant respondents. Women born in cities and towns commence using contraception before those whose birth place is either a village or a farm. (See Table C-34, Appendix C.)

Ever-pregnant respondents in the higher income groups tend to commence using contraceptives sooner than those in the lower income groups. However, the progression is not perfect in that respondents in the R4,000 - R4,999 and R3,000 - R3,999 categories have a higher proportion of immediate users than respondents in the R5,000 and over income category. (See Table C-35, Appendix C). It is possible that respondents in the second and third income categories, being conscious of standard-of-living imperatives, are obliged to be more cautious than those in the highest income group.

From Figure 20, it will be observed that the majority (61.7 per cent) of the later users commence with contraception after their first pregnancy. Just over one-fifth (20.9 per cent) delay first use of contraception until after their second pregnancy. A minority (17.4 per cent) wait until their third or later pregnancy before having recourse to contraception.

FIGURE 20

PERCENTAGE DISTRIBUTION OF LATER USERS OF CONTRACEPTION ACCORDING TO NUMBER OF PREGNANCIES OCCURRING BEFORE FIRST USE OF CONTRACEPTION



Once determined on using contraception in their marriage, there is no significant differences of a socio-economic or socio-cultural nature between the various types of later users (e.g., those commencing use after first pregnancy or after second or after third or later pregnancy), except in regard to marriage duration and husband's occupation.

Among the later users of contraception, those with shorter marriage durations tend to commence using contraceptives sooner in terms of the number of pregnancies than those who have been married longer. The pattern is not quite regular but clear. (X^2 = 19.11, d.f., 10, $p < .05$).

Later-use shows some association with husband's occupation, but the pattern is not completely regular. (See Table C-36, Appendix C.)

Our data also indicate that as far as the later users are concerned, the younger the age at marriage the more the respondent is inclined to commence using contraception after her first pregnancy and not wait until she has had two, three or more pregnancies.

The following cases provide examples of users who commence using contraception at different periods of their married life:-

Case 51.

This Jewish couple commenced using contraception (condom only) before the wife's first pregnancy. They have been married 5 years and the wife is 23 years of age. The couple own their own home in a well-to-do suburb. The wife is matriculated and the husband has passed Standard 9. The husband is employed in the dry-cleaning business.

Both the wife's pregnancies have been planned. In 2 years' time she hopes to be pregnant again as she would like to have three children in her completed family.

The respondent feels that family planning is sensible and both husband and wife approve of mechanical and chemical forms of contraception.

Case 52.

Well-to-do couple, married 10 years, who own their own home in a select suburb. The wife is 31 years of age and has three children. The couple wanted their first child as soon as possible and contraceptives (safe period, douche, condom, diaphragm, jelly and anti-ovulatory tablets) were only used - and then regularly - after the first pregnancy. Her second pregnancy (4 years and 2 months later) was planned but her third pregnancy (3 years and 5 months) after her second one, was an "accident". The wife would like to have had four children but has now decided that her family is complete with three children.

The husband is an engineer and the couple's income falls into the top income category, viz., R5,000 or more. The wife regards family planning as essential "mostly for financial reasons". Both husband and wife approve of mechanical and chemical means of contraception because without them there is "strain on the health as well as the temper of the marriage".

Case 53.

After the wife's second pregnancy, this couple commenced using contraceptives (rhythm, douche, condom and foam tablets). They have been married 16 years and the wife is 36. All in all, this woman has had five unplanned pregnancies, one accidental pregnancy and two planned pregnancies. Three of her pregnancies have resulted in miscarriages. She regards her family of five children as complete.

Neither husband nor wife are well educated and the annual family income is between R1,000 and R1,999. The husband is a semi-skilled worker.

The wife approves of family planning: "To prevent is better than to have too many pregnancies and to try to abort." Both husband and wife approve of the use of mechanical and chemical contraceptive techniques.

Case 54.

This couple have been married 9 years and they first used contraceptives (anti-ovulatory tablets) after the wife's third pregnancy. The wife, who is 31 years

of age, has one child and was pregnant for the fourth time while being interviewed. Her second and third pregnancies ended in miscarriages. Her fourth and present pregnancy was planned; the other three were unplanned. The wife would like to have three children.

The couple live in a lower-middle-class area; the husband is a clerical worker.

The wife approves of family planning: "Omdat 'n mens dan meer voorbereid is wanneer hulle kom. Omdat geboortebeperking in sommige gevalle noodsaaklik is." ("Because a person is then better prepared when they come. Because birth control is necessary in some cases.") The couple approve of chemical and mechanical means of contraception.

Case 55.

This couple first used contraception (anti-ovulatory tablets) after the wife's sixth pregnancy. This is the respondent's second marriage. All told, she has been married 7 years. She has five children - her third pregnancy terminated in a miscarriage. She regards her family as complete.

The wife has a Standard 6 education and her husband has passed Standard 5. He is a semi-skilled worker and their annual income is in the R1,000 - R1,999 category.

The respondent said she agreed with family planning and added: "If only I wasn't so ignorant in the past; I have realised my mistakes. I have realised too late what part family planning plays in married life." Both husband and wife approve of mechanical and chemical types of contraception.

Case 56.

This couple commenced using contraception (anti-ovulatory tablets) after the wife's eighth pregnancy. This was at the doctor's suggestion. Both husband and wife have a Standard 6 education. They live in their own house in a poor area and the annual family income is between R1,000 - R1,999. The husband is an engine driver.

The wife is 25 years of age and has been married for 7 years. Over a period of 5¼ years the respondent has been pregnant eight times. Her first pregnancy terminated in a live birth and the following six pregnancies ended in miscarriages - all of them at 6 weeks. During her eighth pregnancy, one of the twins she was carrying, miscarried at 3 months; the other was born alive.

This woman has two children and expects to have two more. She would have liked a larger family but realises - in view of her pregnancy history - that this is unlikely. She does not intend using contraception in future; the couple only intend using anti-ovulatory tablets for a period of 6 months.

The wife does not believe in family planning; "They should take what God gave them; they shouldn't plan it." When pressed, she admitted that financial pressures might compel some couples to plan - thereby limiting - their families. The wife disapproves of mechanical and chemical contraceptive devices as she considers them to be unhealthy. This couple have been classified as probably sterile.

CHAPTER VII.

FUTURE USE OF CONTRACEPTION

There were 208 non-user couples in our sample and the question arises as to how many of them think they will use contraceptive devices in future. Nearly four-fifths (79.3 per cent) of them said they would never use contraception in the future; three out of every ten non-users said they would become users in the future and only a small minority (6.3 per cent) of the non-users were uncertain about their future use of contraception.

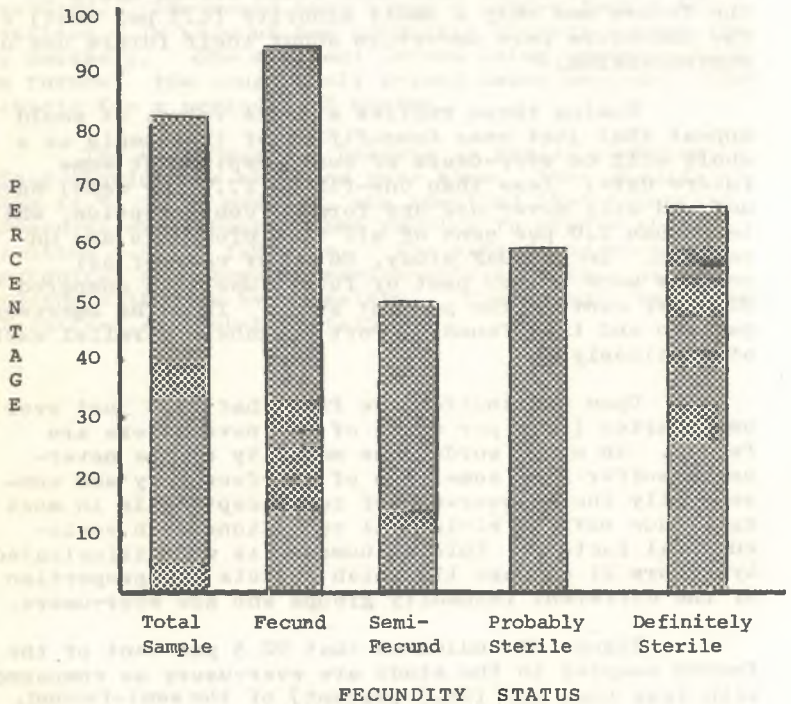
Taking these replies at face value, it would appear that just over four-fifths of the sample as a whole will be ever-users of contraception at some future date; less than one-fifth (17.9 per cent) have not and will never use any form of contraception, while less than 2.0 per cent of all the informants are uncertain. In the GAF study, 86.0 per cent of all couples were either past or future users as compared to 82.1 per cent in the present study. Thus the American pattern and that found in Port Elizabeth parallel each other closely.

Upon examination, we find that only just over one-quarter (26.1 per cent) of all never-users are fecund. In other words, the majority of the never-users suffer from some type of sub-fecundity and consequently their never-use of contraception is in most cases due more to biological conditions than socio-cultural factors. This phenomenon is well illustrated by Figure 21 on page 110 which depicts the proportion of the different fecundity groups who are ever-users.

Figure 21 indicates that 92.5 per cent of the fecund couples in the study are ever-users as compared with less than half (48.5 percent) of the semi-fecund. Just over three-fifths (60.5 per cent) of the probably sterile, and very nearly two-thirds (66.5 per cent) of the definitely sterile couples are classed as ever-users. The differences are significant statistically (X^2 = 153.05, d.f.,3, $p < 0.01$).

FIGURE 21

PERCENTAGE EVER-USER, BY FECUNDITY STATUS



The great majority of couples in this study can be classified as ever-users. Table 21 shows the composition of this ever-user population.

TABLE 21

NUMERICAL AND PERCENTAGE DISTRIBUTION OF SAMPLE POPULATION BY OVERALL USER STATUS

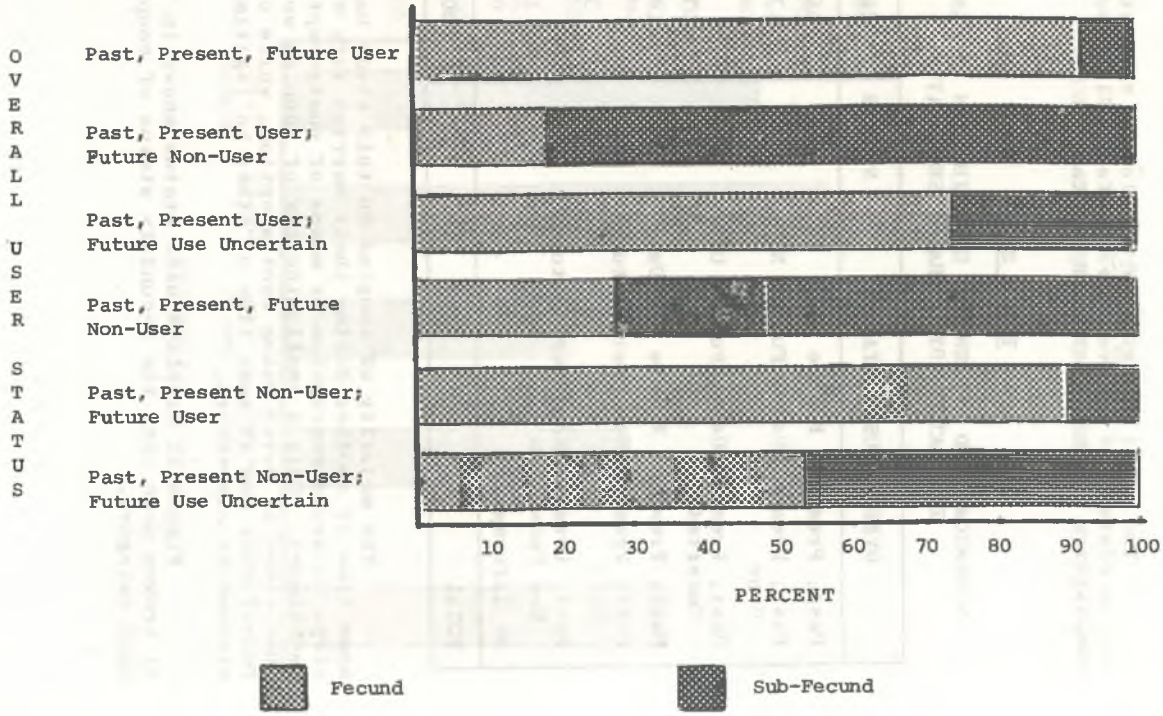
OVERALL USER STATUS	NUMBER	PERCENTAGE
Past, Present, Future User	509	56.6
Past, Present User; Future Non-User	154	17.1
Past, Present User; Future Use Uncertain	28	3.1
Past, Present, Future Non-User	165	18.4
Past, Present Non-User; Future User	30	3.3
Past, Present Non-User; Future Use Uncertain	13	1.4
No Information	1	0.1
TOTAL	900	100.0

The majority of couples in this study have at some time or another during their married life taken steps to avoid conception by means of contraceptive techniques. Only a small minority of couples see themselves as never using contraception, while over four-fifths can at some time or other be legitimately classed as ever-users.

Figure 21 displays user status shown in Table 21 broken down into the fecundity status of couples in each category.

FIGURE 22

PERCENTAGE DISTRIBUTION OF SAMPLE POPULATION ACCORDING TO OVERALL USER STATUS, BY FECUNDITY STATUS



It is clear that present use and future use of contraception is directly linked with fecundity. The great majority of the present users are fecund as are those respondents - presently non-users - who intend becoming users in the future. For example, over nine-tenths of the present users who will continue using contraception in the future are fecund as compared with 18.2 per cent of those past and present users who will not be using contraception in the future. In addition, only just over one-quarter (26.7 per cent) of those respondents who have not used, and will never use, contraception are fecund. Undoubtedly, fecundity and use of contraception are highly correlated; the Contingency Coefficient for the table on which Figure 22 is based is 0.6. (This is uncorrected because the table is asymmetrical; this is a high correlation for social science data, bearing in mind that the upper limit for the Contingency Coefficient is always below 1.00. The differences are significant as Chi Square yields a probability of $p < .01$).

If we apply our hypothetical 30-year fertility rate to fecund ever-users and fecund never-users we find significant differences. While fecundity almost certainly does not remain constant throughout marriage, we have no way of knowing what the variations will be, and so the calculations are based on the probably artificial assumption of constant fecundity. The results reveal noticeable differences between ever-users and never-users in the average number of children born and the average number of pregnancies recorded. As far as pregnancies are concerned, over a 30-year period the fecund ever-users would have an average of 8.5 pregnancies as compared with 13.0 pregnancies on the part of the fecund never-users. ($X^2 = 39.42$, d.f., 1, $p < .01$). With regard to the average number of children born, the fecund ever-users would record 7.5 children and the fecund never-users 11.3 children. ($X^2 = 50.56$, d.f., 1, $p < .01$). It is clear that permanent non-use of contraception greatly increases family size and number of pregnancies for fecund couples in comparison with that achieved by fecund couples who are ever-users.

The following are illustrative case reports on some of the never-users:-

Case 57.

Couple have been married for 12 years and live in a relatively poor part of Port Elizabeth. The wife, who is 33, has a Standard 6 level of education and the husband Standard 8. He is a semi-skilled worker and the couple's annual income is between R1,000 and R1,999.

The wife has had seven pregancies in less than 10 years - five live births (one child died at 8 months) and two miscarriages. She does not approve of mechanical and/or chemical contraceptives. The couple have never used any form of contraception and do not intend to in the future. When asked the question: "If you had a daughter and she got married, how many children would you like her to have in her family?", the respondent replied: "Two - because I know what it is to have a lot".

Case 58.

The respondent is 40 years of age and has been married for 16 years. During that time no method of contraception has been used and yet the respondent has never been pregnant.

The couple are Afrikaans-speaking, well-to-do and own their own home in a pleasant upper-middle-class area. The wife approves of family planning but does not intend using any method ever in the future. The wife would like to have four children. This couple has been classified as probably sterile.

Case 59.

The wife is 40 years of age and has been married for 16 years. The couple own their own home in a middle-class suburb; their annual income is between R3,000 and R3,999. Both husband and wife completed Standard 9 at school.

During the first 7 years of marriage the wife had two children and in 1961 had an hysterectomy. The couple have never used contraceptives and obviously do not intend using any contraception in the future. In terms of our fecundity status definitions this is a definitely sterile couple. The wife expressed wholehearted approval of family planning: "Everybody knows

how many children they can support and bring up."

Case 60.

This is a fecund couple who have never used any form of contraceptives and do not intend to do so in the future. They have been married for 6½ years and the wife is 32. The couple live in a poor area; the husband is a semi-skilled worker; the annual family income falls into the R1,000 - R1,999 category.

The wife had one child before marriage; since marriage she has been pregnant four times in five years; her third pregnancy in marriage resulted in a set of twins. One of her children has died so she now has five children at home with her, including the one born before her marriage. She is hoping for another child, yet she says that "If she could have her time over again she would like to have had four children."

This respondent disapproves very strongly of family planning. She believes that "in the old days when there was no such thing, families were much happier." Upon further questioning, she said she would only approve of family planning if the woman was unhealthy. She disapproves of chemical and/or mechanical contraceptives on the grounds of health - she believes they are harmful. The couple are fecund.

By way of comparison, the following case histories illustrate some different types of future users of contraception:-

Case 61.

Respondent has been married 4½ years and is 24 years of age. She has never used any form of contraceptives and has been pregnant four times (two live births, one miscarriage and pregnant at the time of the interview).

Couple live in an upper-middle-class suburb and the husband holds a managerial position (annual income R3,000 - R3,999). The wife has a Standard 8 education. The wife wants three children and expects to have this number. Three children will complete her family and

she intends using contraceptives after the birth of her third child.

The respondent regards family planning as "a wise idea" and both husband and wife approve of chemical and/or mechanical contraceptives. This is a fecund couple.

Case 62.

The wife, a fecund non-user, is 23 years of age and has been married for 3 years. At the time of the interview the respondent was pregnant (her first pregnancy). She had great difficulty in becoming pregnant until a minor operation was performed. After her first child is born, she intends using contraceptives. The wife would like to have four children.

Neither husband nor wife are well-educated and their annual income is between R2,000 and R2,999. The respondent approves of family planning and both she and her husband favour mechanical and/or chemical contraceptives. Both are Afrikaans Protestants who attend church twice a month.

Case 63.

Couple have been married for 9 years; the wife is 29 years of age. She has a Standard 6 education; her husband is employed as a handyman; the annual income is R1,000 - R1,999. The wife had three pregnancies (all terminating in live births including one set of twins) in $7\frac{1}{2}$ years; she was pregnant (8 months) for the fourth time when interviewed. She wants five children and intends using contraceptives in the future.

The respondent believes in having a small family: "Times are hard to rear a family on a small salary". She approves of family planning. When asked her reasons for approval, she declared: "I should know as my husband never prevented - and always living in fear! Very wise to limit the size of your family as having children at random has made life difficult."

Both she and her husband approve of appliance methods of contraception. Apparently, her husband had not always felt that way: "He now agrees. Having been

selfish, he realises his mistake and selfishness." This is a fecund couple.

Case 64.

The wife, who is 37 years of age, has been married 14 years. Both she and her husband have a Standard 6 education. The husband is a semi-skilled worker earning R1,200 per annum. When interviewed, the respondent was pregnant for the sixth time. She has four children - one pregnancy miscarried at four months. No method of contraception was ever used but the couple intend using anti-ovulatory tablets in future. In the pregnancy history of this woman one notices that her first three pregnancies are fairly well "spaced" while the latter three are close together. According to the interviewer, "This woman counts her blessings that she wasn't a very fertile woman up to the fourth pregnancy."

The respondent expects to have five children in her completed family. She prefers a small family to a large family because "times are hard these days." The wife also approves of family planning: "I agree that it should be done. I know now what it would have been like instead of struggling to make ends meet through my husband's selfishness. One should have only what one can afford; we are struggling and unhappily married."

The wife approves of appliance methods of contraception. The husband also approves of these methods: "He realises now it is a good thing to control. He has learnt his lesson the hard way, only thinking of himself."

Apart from the fecundity differences so apparent between ever- and never-users, there are also socio-economic and socio-cultural differences between these two groups. These, however, are considerably lessened when the comparison is limited to fecund respondents.

In applying the control of fecundity status to ever-use and religious affiliation, we discover that the Jewish and Catholic groups record 100 per cent ever-use while 96.9 per cent of the fecund English Protestants and 87.0 per cent of the Afrikaans Protestants are classified as ever-users. It is, therefore, clear that

couples are never-users by deliberate choice in extremely few instances. ($\chi^2 = 22.94$, d.f., 3, $p < .01$).

In order to bring out this difference, in Figure 23 on page 119, we show the proportion of ever-users for the four main religious groups in terms of all their members as well as only their fecund members.

Figure 23 indicates that being fecund makes no difference with regard to ever-use of contraception in the case of the Jewish respondents and the most difference to the Catholic respondents. English and Afrikaans Protestant respondents show a difference in the proportion of ever-users and this difference is largely maintained when fecundity is held constant.

The next figure (Figure 24 on page 120) contrasts the proportion of English and Afrikaans couples in the sample population who are ever-users - for all couples as well as for fecund couples.

In the light of Figure 24 it may be concluded that English-speaking couples are ever-users in greater proportions (89.6 per cent) than Afrikaans-speaking couples (73.2 per cent). Fecundity appears to increase the proportion of Afrikaans-speaking ever-users (86.4 per cent) to a somewhat greater extent than it does the proportion of English-speaking users (97.6 per cent). Both in respect of all couples and all fecund couples, the Afrikaans-speaking group is somewhat lower than the sample distribution vis-à-vis ever-use of contraception, while the English-speaking group is slightly higher than the sample proportions. In this connection, it should be remembered that language differences involve religious, socio-economic and rural-urban differences for many cases in the sample.

Figure 25, on page 121, underlines the fact that ever-use of contraception is positively associated with annual family income. The higher the income, the more likely the couple are to be ever-users. However, in all the income categories, the majority of couples are ever-users, viz., from 95.3 per cent of the couples in the highest income group (R5,000 or more) to 70.7 per cent of those couples whose annual family income is below R1,000.

FIGURE 23

PERCENTAGE EVER-USER FOR ALL COUPLES,
FOR FECUND COUPLES,
BY RELIGIOUS AFFILIATION

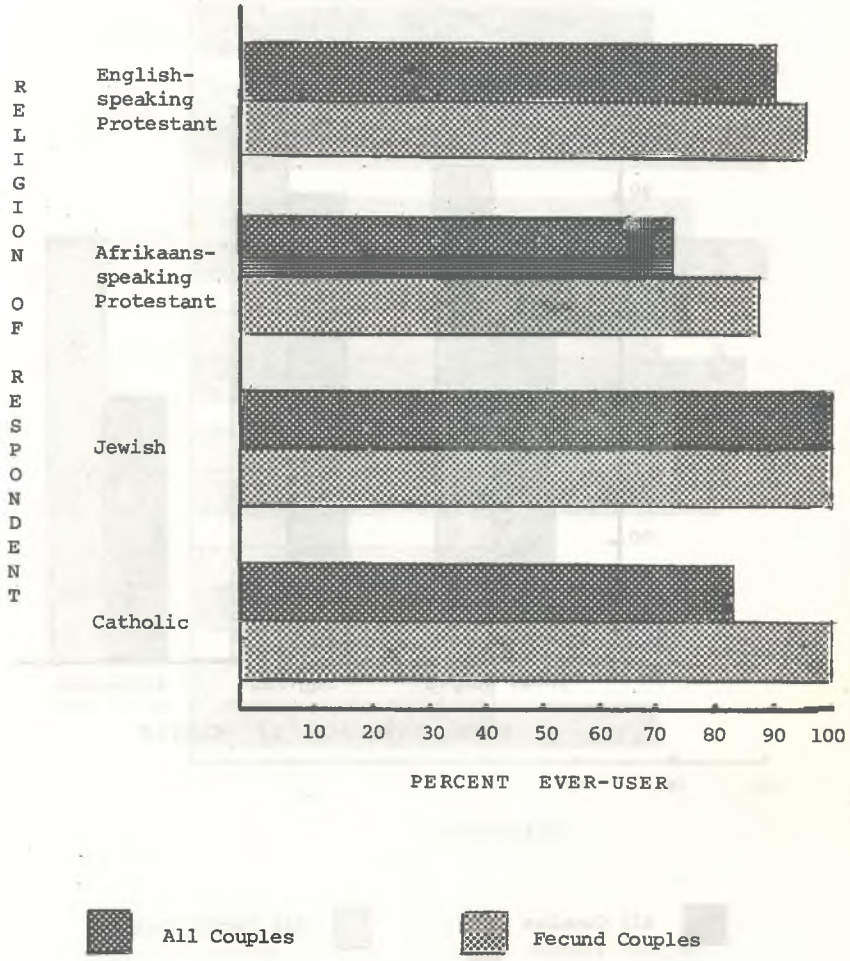


FIGURE 24

PERCENTAGE EVER-USER OF CONTRACEPTION,
ALL COUPLES, FECUND COUPLES, BY HOME LANGUAGE

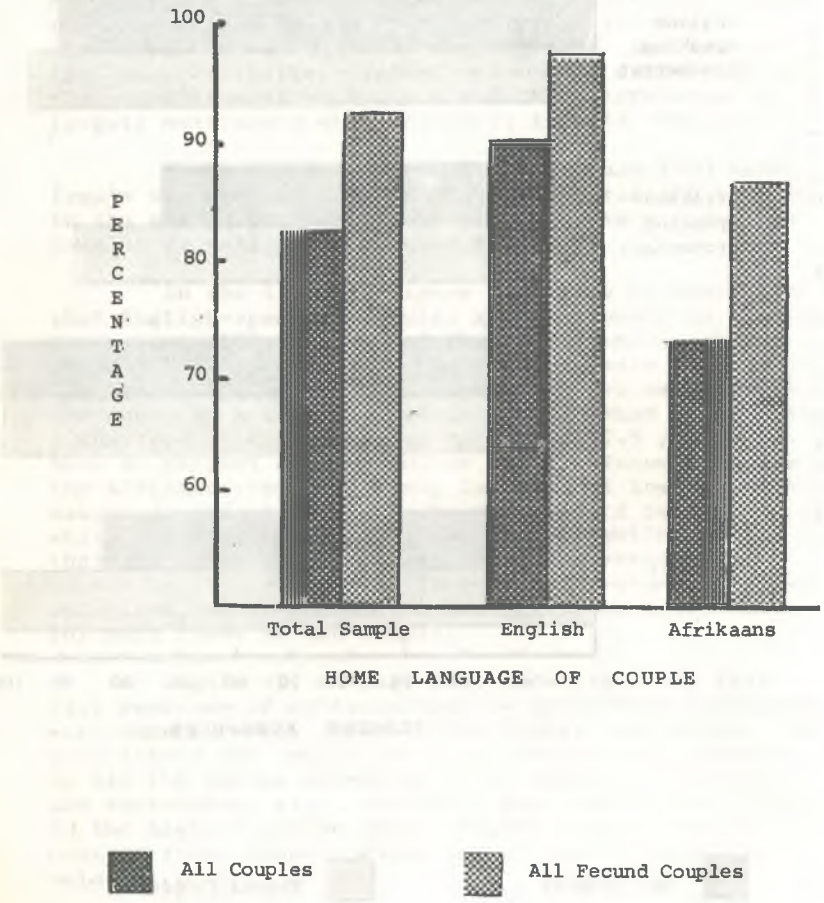
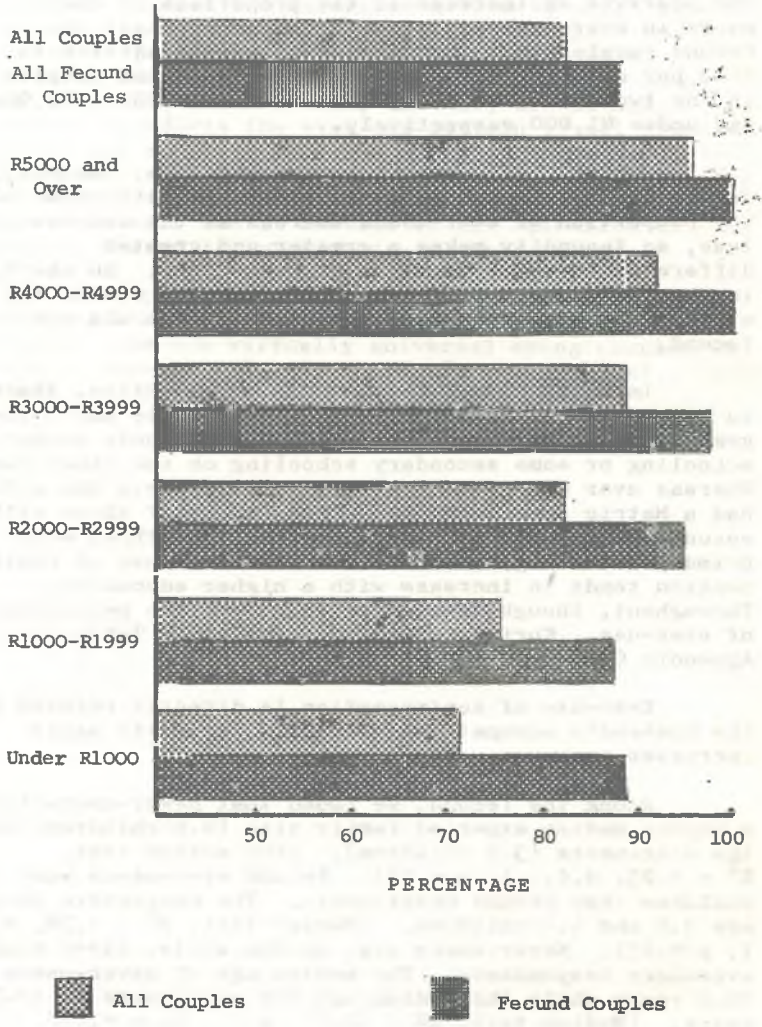


FIGURE 25

PERCENTAGE EVER-USER OF CONTRACEPTION, ALL COUPLES, FECUND COUPLES, BY ANNUAL FAMILY INCOME



In this study fecundity impairments are not significantly related to socio-economic differences but rather to differences in age and duration of marriage. Thus, when ever-use is restricted to fecund couples, one observes an increase in the proportion of ever-users in every single income category from all the fecund couples in the first two income categories to 86.2 per cent and 88.0 per cent of the fecund couples in the two lowest income groups, viz., R1,000 - R1,999 and under R1,000 respectively.

In the first three income categories, fecundity does not appear to make any considerable difference to the proportion of ever-users whereas as the incomes get less, so fecundity makes a greater and greater difference to the proportion of ever-users; in short, in the three lower income groups fecundity widens the ever-user gap between all couples and those who are fecund.

In terms of wife's standard of education, there is a notable difference between matriculants and college graduates on the one hand, and those with only primary schooling or some secondary schooling on the other hand. Whereas over nine-tenths of all couples where the wife had a Matric or higher, only four-fifths of those with secondary schooling and just over half of those with primary schooling, were ever-users. Ever-use of contraception tends to increase with a higher education. Throughout, though, fecundity increases the percentage of ever-use. Further details are given in Table C-37 in Appendix C.

Ever-use of contraception is directly related to the husband's occupational status. Fecundity again increases ever-use.

Among the fecund, we found that never-users have a higher median expected family size (4.6 children) than the ever-users (3.4 children). (For median test, $X^2 = 5.25$, d.f., 1, $p < .05$). Fecund ever-users want less children than fecund never-users. The respective medians are 3.8 and 4.4 children. (Median test, $X^2 = 5,78$, d.f., 1, $p < .05$). Never-users are, on the whole, older than ever-user respondents. The median age of never-users is 39.9 years while the median age for ever-users is 32.7 years. (Median test, $X^2 = 22.89$, d.f., 1, $p < .01$).

We can conclude that the data gathered in this study shows that socio-economic and socio-cultural differences by themselves cannot entirely explain differential past, present or future use of contraception. The factor of fecundity is omnipresent and eventually it forces most couples in all the socio-economic classes and religious groups to adopt some method of contraception. In spite of couples being forced by fecundity to resort to contraception, differences between polar types (both socio-economic and socio-cultural) remain, but they are notably reduced vis-à-vis the ever-use pattern of all couples, fecund and sub-fecund. Indeed, as far as the sample population is concerned, the majority of those couples who will never use contraception in the future, really do not have to use it because of the operation of various fecundity impairments in their regard.

Our data confirms the observation of Freedman, Whelpton and Campbell: "Attempts to avoid conception at some time are virtually universal among couples who have no fecundity impairment." (Freedman et al., (1959) p.61).

CHAPTER VIII.

TYPES OF FAMILY SIZE

This chapter discusses four types of family size studied in the sample population, viz., ideal family size, desired family size, actual family size and, finally, expected family size.

8.1 Ideal Family Size

As has already been stated all women were questioned about what they thought the ideal number of children in the average white South African family should be. The question was aimed at the respondent's general impression of a widely applicable ideal or norm rather than her own particular, private or personal ideal. In the present study the median number of children considered ideal is 4.2 children. Afrikaans wives in this study favour a higher ideal number of children (a median of 4.4 children) than do English wives (a median of 3.8 children). (Median test, $X^2 = 46.19$, d.f., 1, $p < .01$).

Wives with higher educational qualifications (university/college and Matriculation) favour a lower ideal sized family - medians of 3.9 and 3.8 children respectively - than those women with secondary school education (4.2 children) and those who enjoyed only a primary school education (4.8 children). (Median test, $X^2 = 23.75$, d.f., 3, $p < .01$).

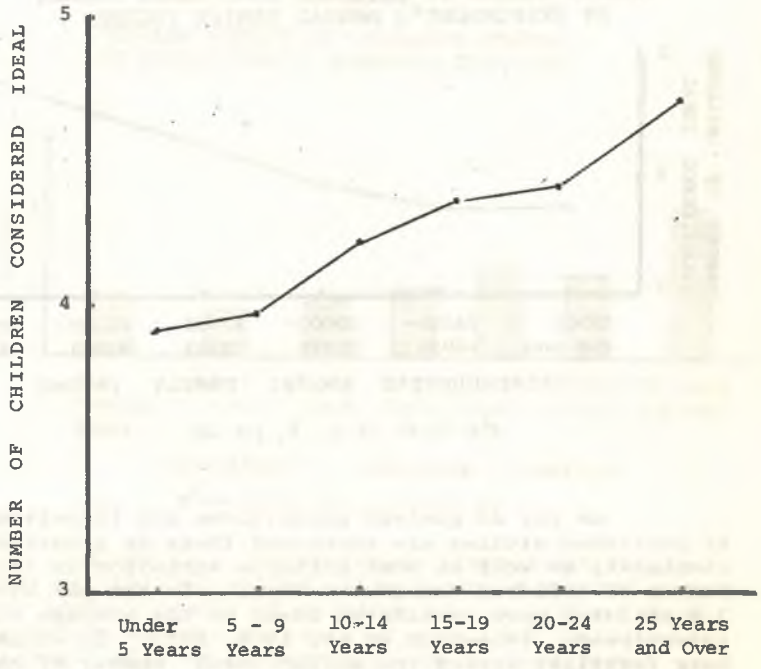
Women married longer have a greater number of children in their ideal family than those women more recently married, as is shown in Figure 26 on page 125.

Jewish respondents with an ideal of 3.5 children and English Protestant respondents with an ideal of 3.8 children both opt for ideal-sized families below the sample norm, while Afrikaans Protestant (4.4 children) and Catholic wives (4.3 children) have medians above that of the sample median of 4.2 children.

Annual family income and the number of children considered ideal are inversely related in the present study as will be seen in Figure 27 on page 126.

FIGURE 26

MEDIAN NUMBER OF CHILDREN CONSIDERED IDEAL, BY RESPONDENT'S MARRIAGE DURATION

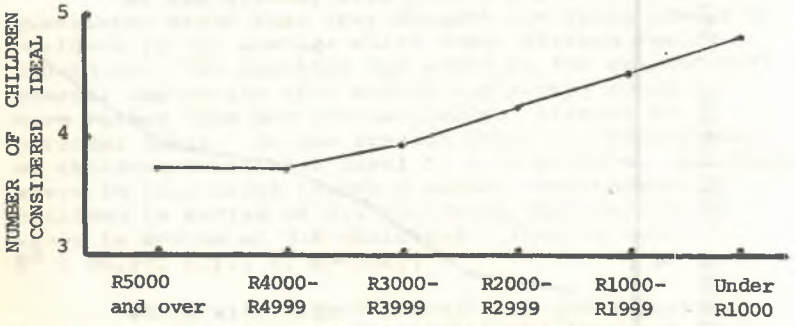


$X^2 = 28.25$, d.f., 5, $p < .01$

Wives whose husbands are white-collar workers regard 3.9 children (median) as ideal while the medians for the upper-blue-collar and lower-blue-collar groups are 4.2 and 4.5 children respectively. (For median test, $X^2 = 29.94$, d.f., 3, $p < .01$).

FIGURE 27

MEDIAN NUMBER OF CHILDREN CONSIDERED IDEAL, BY RESPONDENT'S ANNUAL FAMILY INCOME



$X^2 = 30.91$, d.f., 5, $p < .01$

As far as general populations are investigated by published studies are concerned there is a noticeable similarity as well as some definite variation in the number of children considered ideal. In the GAF study 3.4 children were considered ideal by the average couple interviewed (Freedman et al. 1959, 223). In Johannesburg fertility survey the median ideal number of children was 4.2 (Higgins, 1962, 71). In a survey of 2,000 women conducted in Santiago, Chile, in 1959, 4.1 children represented the average ideal number (Tabah, 1963, 24). In a survey of West German adults conducted in 1958, 2.6 children was found to be the mean ideal (Freedman, et al., 1959, 141).

8.2 Desired Family Size

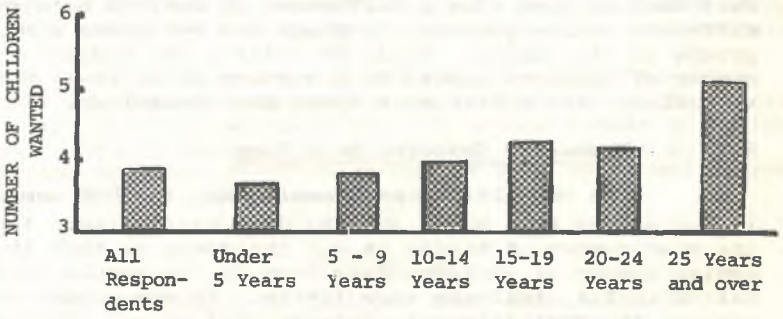
In Chapter III it was explained how we

ascertained the number of children respondents wanted. The median number of children wanted by all respondents is 3.9 children.

Some highly significant differences appear when the number of children wanted is analysed in terms of the respondent's marriage duration. (See Figure 28).

FIGURE 28

MEDIAN NUMBER OF CHILDREN WANTED, BY RESPONDENT'S MARRIAGE DURATION



$x^2 = 34.49$, d.f., 5, $p < .01$

There is a fairly steady progression in the number of children wanted, from recently married respondents (median number of children wanted 3.7) to those respondents married 25 years or more (5.6 children). The longer married respondents tend to want more children on the average than those not so long married. It is possible that there has been a general shift in attitude about the norms governing the number of children wanted in the last few decades. It is also possible that those women in the longer marraige duration categories could afford to be "unrealistic" in that for the majority of them fecundity impairments had already manifested themselves - the gap between what they wanted and what they could possibly have was a great one. This

does not apply to the same extent to women in the "younger" marriage duration categories. This, However, is clearly only a partial explanation of what our data reveals.

On the whole, the number of children wanted (the sample median is 3.9 children) is an hypothetical construct because it is based on a question asked many hundreds of women at all varied time levels of marriage. It is also hypothetical because it takes no account of fecundity impairments. Furthermore, it does not refer to the number of children the woman expects to have but rather is in the nature of a personal ideal-sized family. Information about the number of children wanted is, at best, quasi-indicative. However, its use lies in the fact that it does show a difference in outlook between different socio-economic, language and religious sub-groups in the sample. Table 22 relates the median number of children wanted to a variety of socio-economic variables: the differences speak for themselves.

8.3 Number of Children Ever Born

The unqualified statements that the 900 women in our survey have had 2,383 children born alive; that the mean number of births is 2.6 children; or that the median number of children ever born to the sample population is 2.8, tell one very little. If one wishes to compare the fertility rate between, let us say, various income groups, an ordinary mean or median is hardly revealing without the added control of marriage duration. The latter reveals the length of time the respondent has been exposed to conception and thus brings an element of demographic realism into one's comparisons. Consequently in this section of the present chapter we concentrate on our hypothetical 30-year fertility rate because it holds marriage duration constant and thus serves as a more than useful technique of comparison. One must admit, of course, that the passage of time brings fecundity impairments, pregnancy wastage and the like in its train. However, it has been found in this study that fecundity impairments are governed largely by the passage of time and are not "respecters" of socio-cultural or socio-economic differences. In other words, we assume that fecundity impairments are spread reasonably evenly and proportionately in all the sub-groups of the sample population and that where there

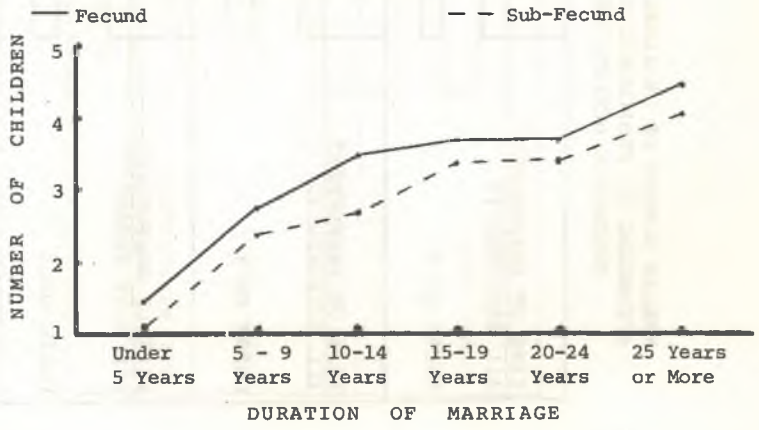
are differences, these differences are predominantly due to the differences in age and duration of marriage. It is only when one applies the control of marriage duration, that the role of socio-cultural and socio-economic factors vis-à-vis the birth-rate becomes apparent.

In terms of this hypothetical fertility rate, 6.4 children would be born on the average to each respondent in the sample population for 30 completed years of marriage. Because some women never have children, we take a reduced rate of 6.0 children as our basic fertility rate and it is against this sample standard that we compare the various sub-groups which compose the sample population. What we are calculating is a rate, not a mean: to this rate we always apply the median test. It should be remembered that the comparisons being made in this section exist between groups, not indiviuals.

The importance of the time factor, both as regards age and marriage duration, is highlighted by Figures 29 and 30 below, which depict the median number of children born alive to fecund and sub-fecund respondents in the various marriage duration groups as well as fecund respondents in the various age groups.

FIGURE 29

MEDIAN NUMBER OF CHILDREN EVER BORN ALIVE TO FECUND AND SUB-FECUND RESPONDENTS, BY MARRIAGE DURATION



X^2=154.24, d.f., 5, $p < .01$ X^2=31.84, d.f., 5, $p < .01$

TABLE 22

MEDIAN NUMBER OF CHILDREN WANTED FOR ALL RESPONDENTS AND FOR USERS ONLY ACCORDING TO RESPONDENT'S RELIGIOUS AFFILIATION, STANDARD OF EDUCATION, HUSBAND'S OCCUPATION, ANNUAL FAMILY INCOME AND HOME LANGUAGE

TYPE OF RESPONDENT	English Protestant	Afrikaans Protestant	Jewish	Catholic
ALL RESPONDENTS	3.8	4.2	3.3	4.3
	X^2 = 29.64, d.f., 3, p <.01			
USERS ONLY	3.8	4.1	3.3	4.3
	x^2 = 16.94. d.f.. 3, p <.01			

TYPE OF RESPONDENT	University/ College	Matriculation	Secondary School	Primary School
ALL RESPONDENTS	3.7	3.7	4.1	4.7
	X^2 = 15.40, d.f., 3, p <.01			
USERS ONLY	3.6	3.7	4.1	4.3
	X^2 = 10.58. d.f.. 3, p <.05			

TYPE OF RESPONDENT	Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar
ALL RESPONDENTS	3.9	3.7	4.1	4.3
	X^2 = 16.32, d.f., 3, p <.01			
USERS ONLY	3.8	3.7	4.0	4.3
	X^2 = 11.60. d.f.. 3, p <.01			

Table contd page 131.

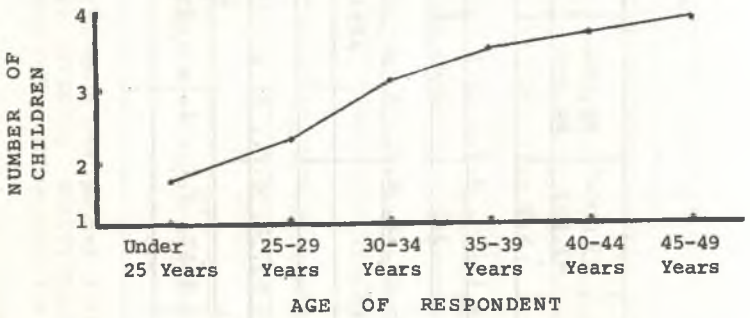
TABLE 22, continued from page 130.

TYPE OF RESPONDENT	R5,000 or more	R4,000-R4,999	R3,000-R3,999	R2,000-R2,999	R1,000-R1,999	Under R1,000
ALL RESPONDENTS	3.8	3.9	3.9	3.9	4.1	4.9
	X^2 = 14.24, d.f., 5, p <.05					
USERS ONLY	3.8	3.8	3.5	3.8	4.1	5.2
	X^2 = 21.42, d.f., 5, p <.01					

TYPE OF RESPONDENT	English	Afrikaans
ALL RESPONDENTS	3.8	4.2
	X^2 = 15.54, d.f., 1, p <.01	
USERS ONLY	3.7	4.1
	X^2 = 5.57, d.f., 1, p <.05	

FIGURE 30

MEDIAN NUMBER OF CHILDREN EVER BORN ALIVE
TO FECUND COUPLES, BY RESPONDENT'S AGE



$X^2 = 103.57$, d.f., 5, $p < .01$

Respondents who stated that their family was complete show a median of 3.4 children ever born alive while the median for those who are uncertain is 2.8, whereas for those who still intend having more children, the median is 1.9. (Median test: $X^2 = 146.96$, d.f., 2, $p < .01$).

The hypothetical fertility rate has been applied to all the major sub-groups of the sample population. When applied to all respondents, few significant differences appear between the socio-economic and socio-cultural sub-groups. When this hypothetical rate is calculated in respect of fecund respondents only, then significant differences do appear. Once the respondents are all, so to speak, on a par vis-à-vis fecundity status and duration of marriage, then socio-cultural and socio-economic differentials are more easily revealed. For example, the fertility rate for all respondents does not differ significantly for the various occupational groups in

this study, whereas significant differences appear among these occupational groups once the control of fecundity is applied. The hypothetical fertility rate (HFR) for fecund respondents in the four main occupational groups (upper-white-collar, lower-white-collar, upper-blue-collar and lower-blue-collar) are as follows: 6.2 (below average), 7.3, 7.6 and 9.7 (the latter three all above average). (X^2 = 29.9, d.f., 3, $p < .01$).

The following composite table presents the HFR of the fecund respondents in the main socio-economic and socio-cultural sub-groups of the sample population.

The HFR tells one the average number of children a given sub-group would have over a period of 30 years marriage duration if no fecundity impairments intervened and past trends continue - it is based on past experience and is a hypothetical projection into the future. For example, our data already allows us to say that, for the same marriage duration, wealthier fecund couples have had fewer children than poorer fecund couples. Our HFR forecasts what this difference will be over the space of one generation.

It is clear from Table 23 that income is very definitely inversely related to family size. Similarly rural-born respondents have a higher HFR than urban respondents. Again, women who are gainfully employed for all or most of their married life have a lower HFR than those who only occasionally work outside the home or those who never take employment outside the home. All these women are fecund and consequently use of contraception and family planning are involved in these differentials. Clearly, those fecund women more <u>au fait</u> with contraceptives and more sympathetic to family planning will have lower HFR than others. We see this in the case of income, rural-urban origin and employment history.

With regard to religious affiliation, it appears that fecund Jewish women have an exceptionally low HFR, viz., 5.9 while English Protestants and Catholics are similar and Afrikaans Protestants are higher with 8.2. It would be wrong to interpret this slight "deviation" of Afrikaans Protestants completely in a religious light - there are socio-economic factors (education, income, occupation) at play here.

TABLE 23

DISTRIBUTION OF HYPOTHETICAL FERTILITY RATE OF ALL FECUND RESPONDENTS, BY RESPONDENT'S ANNUAL FAMILY INCOME, STANDARD OF EDUCATION, BIRTHPLACE, TIME WORKED SINCE MARRIAGE, HOME LANGUAGE AND RELIGIOUS AFFILIATION

ANNUAL FAMILY INCOME					
R5,000 or More	R4,000-R4,999	R3,000-R3,999	R2,000-R2,999	R1,000-R1,999	Under R1,000
5.9	6.0	6.5	7.2	9.1	11.3
$X^2 = 65.64$, d.f., 5, $p < .01$					

RESPONDENT'S STANDARD OF EDUCATION			
University/ College	Matriculation	Secondary School	Primary School
7.3	6.7	7.9	10.5
$X^2 = 43.38$, d.f., 3, $p < .01$			

RESPONDENT'S BIRTHPLACE			
Farm	Village	Town	City
8.1	8.6	7.7	7.5
$X^2 = 27.17$, d.f., 3, $p < .01$			

Table 23 Continued /...

TABLE 23
Contd from page 134.

TIME RESPONDENT HAS WORKED SINCE MARRIAGE				
Always	Almost Always	About Half The Time	Some Of The Time	Never
4.4	6.8	6.5	7.8	8.6
$X^2 = 22.39$, d.f., 4, $p < .01$				

HOME LANGUAGE	
English	Afrikaans
6.9	8.6
$X^2 = 12.61$, d.f., 1, $p < .01$	

RESPONDENT'S RELIGIOUS AFFILIATION			
English Protestant	Afrikaans Protestant	Jewish	Catholic
7.1	8.2	5.9	7.2
$X^2 = 12.48$, d.f., 3, $p < .01$			

The use of contraception, the stage of family development when contraception is first used, the types of contraception employed, etc., have a definite bearing on the HFR as will be observed in Table 24 below. This table confines itself to fecund users. The HFR for fecund users (7.3) differs quite markedly from that for fecund non-users, viz. 11.1. (X^2 = 46.16, d.f., 1, $p < .01$.)

Granted the use of contraception, what seems to have a bearing on family size is precisely at what stage of the couple's family history they commence using contraceptives and also whether their use is regular or spasmodic. The timing is clearly of far greater importance than the type of contraceptives used. Thus far we have seen that fecundity by itself is not the sole determiner of the number of children a couple will have. The fecund obviously have more children than the sub-fecund over the same period of time. However, factors of contraception and family planning enter in. Thus, for instance, users as a group will have a higher average number of children born alive than non-users because users are overwhelmingly fecund whereas the majority of non-users are sub-fecund.

8.4 Expected Family Size

The factors involved in expected family size have already been discussed. Our figures are quasi-hypothetical because not all couples manage to actually achieve the final family they expect to have. However, as 57.9 per cent of all women interviewed regard their family as complete and do not intend having any more children, their actual family size is the same as their expected family size. As far as the remaining two-fifths of the sample is concerned, the couples concerned hope to have more children.

Today one cannot brush aside as fanciful the values and expectations about family size held by couples living in industrialised and urbanised society. The growth and availability of contraceptive techniques bring expectations and reality, as far as family size is concerned, closer and closer together. Consequently, expectations regarding family size are of prime sociological and demographic importance.

TABLE 24

DISTRIBUTION OF HYPOTHETICAL FERTILITY RATE OF ALL FECUND USERS, BY FREQUENCY OF USE, USE BEFORE FIRST PREGNANCY, AFTER WHICH PREGNANCY LATER USERS COMMENCED AND GENERAL TYPE OF CONTRACEPTION USED.

FREQUENCY OF USE	
Regular	Occasional
6.9	9.3
$X^2 = 19.50$, d.f., 1, $p < .01$	
USE BEFORE FIRST PREGNANCY	
Used	Did Not Use
6.5	8.2
$X^2 = 8.47$, d.f., 1, $p < .01$	

AFTER WHICH PREGNANCY LATER USERS COMMENCED		
After 1st.	After 2nd.	After 3rd or Later
7.7	7.7	10.1
$X^2 = 37.63$, d.f., 2, $p < .01$		

GENERAL TYPE OF CONTRACEPTION USED		
Appliance Methods Only	Mixed Methods	Non-Appliance Only
7.4	7.4	7.2
$X^2 = 8.92$, d.f., 2, $p < .05$		

With regard to the expected family size, a word of caution is necessary. In the words of the authors of the West German study: "Clearly statements about expectations cannot be accepted uncritically as indicating what the couple will do in the future. The demographer may know better than the individual couples what proportion is likely to develop fecundity impairments and what proportion will have unwanted children. Expectations may change, not only with general social and economic trends but also with the couple's own life cycle. Nevertheless, such expectation statements may be better than the demographer's guess of what size families will be for this generation." (Freedman, et al. (1959), 137).

In the present study the median expected family size for all couples, and for fecund couples only, is 3.6 children; for all user-couples as well as fecund-user couples only it is 3.5 children; the median number of children expected by sub-fecund couples is 3.4 children and for fecund non-user couples it is 4.4 children. In general, those couples married longer expect slightly more children on the average than those more recently married.

It would be misleading simply to detail the median number of children expected in the completed family for the various sub-groups in the sample population and leave it at that. The application of the joint controls of fecundity and use of contraception reveals how these two variables tend to reduce differences which appear when our analysis embraces all respondents, fecund and sub-fecund, users and non-users.

Table 25 over the page, compares the median number of children expected by (1) all couples, (2) all fecund couples, and (3) all fecund user-couples in terms of respondent's standard of education, religious affiliation and home language. The reduction in expected family size is more noticeable in the case of these sub-groups than in others in the sample population.

TABLE 25

DISTRIBUTION OF MEDIAN NUMBER OF CHILDREN EXPECTED BY ALL COUPLES, ALL FECUND COUPLES AND ALL FECUND USER COUPLES, BY RESPONDENT'S STANDARD OF EDUCATION, RELIGIOUS AFFILIATION AND HOME LANGUAGE

	RESPONDENT'S STANDARD OF EDUCATION			
TYPE OF COUPLE	University/ College	Matriculation	Secondary School	Primary School
ALL	3.5	3.3	3.7	4.3
	$X^2 = 11.86$, d.f., 3, $p < .01$			
FECUND	3.6	3.4	3.8	3.9
	$X^2 = 8.54$, d.f., 3, $p < .05$			
FECUND USER	3.6	3.4	3.6	3.3
	$X^2 = 5.41$, d.f., 3, $p > .05$			

	RELIGIOUS AFFILIATION			
TYPE OF COUPLE	English Protestant	Afrikaans Protestant	Jewish	Catholic
ALL	3.4	3.9	3.3	3.8
	$X^2 = 17.45$, d.f., 3, $p < .01$			
FECUND	3.5	3.9	3.4	3.6
	$X^2 = 9.62$, d.f., 3, $p < .05$			
FECUND USER	3.4	3.7	3.4	3.5
	$X^2 = 4.03$, d.f., 3, $p > .05$			

TYPE OF COUPLE	HOME LANGUAGE	
	English	Afrikaans
ALL	3.4	3.8
	$X^2 = 18.25$, d.f., 1, $p < .01$	
FECUND	3.4	3.9
	$X^2 = 10.67$, d.f., 1, $p < .01$	
FECUND USER	3.4	3.7
	$X^2 = 4.50$, d.f., 1, $p < .05$	

Table 25 plus other data gathered in the course of this survey, show the force of two factors, viz., fecundity and the use of contraception, in narrowing the differential median expected family size between certain sub-groups of the population. These two demographic variables remain important throughout this study. For example, when annual family income is held constant and religious affiliation varied, no significant differences appear as regards expected family size. When religious affiliation is held constant and the respondent's standard of education varied, only the Afrikaans Protestant group revealed any differences, viz., those with a higher education expected more children on average than those with a lower standard of education. Only when fecundity and use of contraception are held constant do we see more clearly the role of the socio-economic and socio-cultural variables, and in this context it appears to be a diminishing one. This finding is a most interesting one for the sociologist.

The use of contraception as such is never a totally levelling factor; the timing of first use, regularity of use as well as type of contraceptive used have a bearing on the number of children expected in a family by the time it is complete. This will be seen in Table 26 on page 141.

This table indicates that as far as all users and all fecund users are concerned, the commencement of contraception, the frequency of use and the type of methods used have a bearing on expected family size. Those couples who commence using contraceptives early on in marriage - before the first pregnancy - expect, on average, less children than those who commence using contraceptives after the first or later pregnancy. Clearly the later contraception is first resorted to, the larger the number of children expected in the completed family. Similarly, regular users expect fewer children than do those who are occasional users. Again, couples who only use appliance methods of contraception expect to have fewer children in their completed family than those who employ mixed methods or who restrict themselves to non-appliance methods of contraception.

In this study our average expected family size (3.6 children) was found to be higher than that of the GAF study (3.0 children), [Freedman et al (1959) 276] as well as that of the West German study (2.2 children) [Freedman, Baumeet and Bolte (1959) 139].

TABLE 26

DISTRIBUTION OF CHILDREN EXPECTED BY ALL USERS AND FECUND USERS ONLY, BY FREQUENCY OF USE, BY USE BEFORE FIRST PREGNANCY, AFTER WHICH PREGNANCY LATER USERS COMMENCED AND GENERAL TYPE OF CONTRACEPTION USED

TYPE OF USER	FREQUENCY OF USE	
	Regular	Occasional
ALL	3.4	3.9
	$X^2 = 7.21$, d.f., 1, $p<.01$	
FECUND	3.5	4.1
	$X^2 = 6.49$, d.f., 1, $p<.01$	

TYPE OF USER	USE BEFORE FIRST PREGNANCY	
	Used	Did Not Use
ALL	3.3	3.8
	$X^2 = 16.80$, d.f., 1, $p<.01$	
FECUND	3.4	3.8
	$X^2 = 10.10$, d.f., 1, $p<.01$	

TYPE OF USER	AFTER WHICH PREGNANCY LATER USERS COMMENCED		
	First	Second	Third or Later
ALL	3.6	3.9	5.1
	$X^2 = 25.59$, d.f., 2, $p<.01$		
FECUND	3.6	3.8	5.3
	$X^2 = 14.01$, d.f., 2, $p<.01$		

TYPE OF USER	GENERAL TYPE OF CONTRACEPTION USED		
	Appliance Methods Only	Mixed Methods	Non-Appliance Methods Only
ALL	3.3	3.7	3.7
	$X^2 = 8.70$, d.f., 2, $p<.05$		
FECUND	3.3	3.8	3.8
	$X^2 = 9.19$, d.f., 2, $p<.05$		

It would be misleading to interpret expected family size as desired family size. Even when one is certain of expected family size, viz., when the couple's family is complete, one finds that respondents sometimes feel that they have too many or, in some cases, too few children. With regard to those whose families are incomplete, some expect a larger family than they want - this is especially so among lower-class persons some of whom manifest a casual fatalism in the face of unwanted pregnancies and unchecked fertility. There are those couples, of course, who expect to have less children than they would like to have: this due, largely, to the early onset of fecundity impairments. There are, however, certain difficulties inherent in extracting this type of information from interviewees. Many appear to rationalise their position "making a virtue out of necessity" because they are reluctant to admit that they expect more children than they want. In the case of expecting less children than they want - this fact is far more readily admitted.

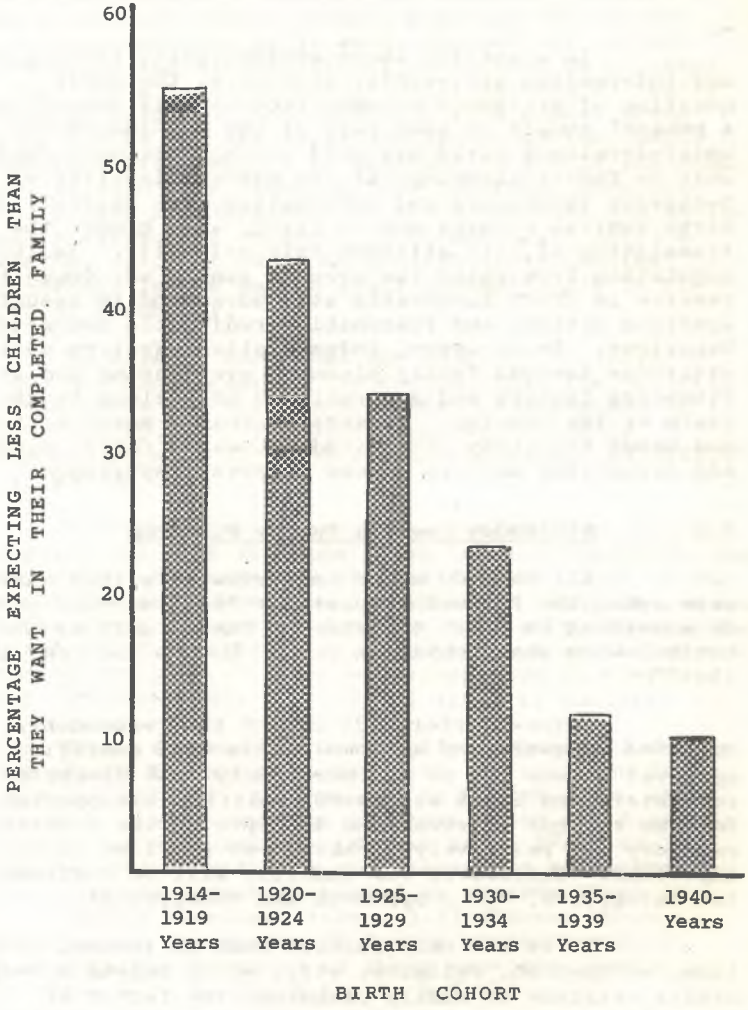
About two-thirds (66.3%) of the respondents feel that their expected family size will coincide with the number of children they actually want to have in their family by the time it is complete. Only 5.0% report that they expect more children than they want while just over one-quarter (26.7%) state that they want more children than they expect to have in their completed family.

The median number of children expected by those expecting an "excess" family size is 5.7 children; for those who expect the same number as they want, the median is 3.6 children, while the median for those expecting less children than they want is 2.9.

Figure 31 on page 143, cross-tabulates the respondent's birth cohort with the proportion expecting to have less children than actually wanted. Obviously, the longer the couple's marriage duration, the more realistic their expected family size will be and the greater will be the divergence between what is wanted and what can be realised.

FIGURE 31

PERCENTAGE RESPONDENTS EXPECTING TO HAVE LESS CHILDREN THAN THEY WANT IN COMPLETED FAMILY, BY BIRTH COHORT



$x^2 = 177.02$, d.f., 10, $p < .01$

CHAPTER IX

ATTITUDES TO FAMILY PLANNING AND ALLIED MATTERS

In a society where contraceptive techniques and information are readily available, the whole question of attitudes becomes increasingly important. A peasant couple in some part of the non-industrial under-developed world may hold strong attitudes favourable to family planning but the non-availability of the necessary techniques and information, the scarcity of birth control clinics and so forth, will hinder the translation of this attitude into actuality. In the population from which the present sample was drawn the reverse is true; favourable attitudes tend to result in specific actions and reasonably predictable demographic behaviour. In an urban, industrialised Western society, attitudes towards family planning are shaping and influencing factors and generally do not belong to the realm of the wishful. Consensus usually means action, and hence the study of attitudes towards family planning and associated matters is one of great importance.

9.1 Attitudes Towards Family Planning

All the 900 women interviewed in this survey were asked the following question: "Some married people do something to limit the size of their families and to control when their children come. How do you feel about that?"

Three-quarters (75.0%) of the respondents reported unqualified approval while 4.6% qualified their approval in one way or another. Only 6.6% disapproved completely and 12.0% expressed qualified disapproval. Both as regards approval and disapproval the "qualified" category is, relatively speaking, so small as to be unimportant. Therefore, our analysis will be confined to two categories, viz., approval and disapproval.

It is not only factors such as income, education, occupation, religion, etc., which colour a respondent's attitude to family planning; the factor of fecundity status must be taken into account. Nearly nine-tenths (88.5%) of all fecund women approve of family planning as compared to 55.3% of the semi-fecund,

76.6% of the probably sterile and 73.3% of the definitely sterile women. (X^2 = 76.53, d.f., 3, $p<.01$). There is no doubt that fecundity colours the attitude of the average respondent towards family planning and in some cases it even reduces, as it were, the pull of certain socio-economic and socio-cultural influences which alone might make for a less favourable attitude towards family planning. As will be seen, fecundity is a conditioning factor as far as all the major sub-groups of the sample are concerned with respect to attitude to family planning. However, it should be stressed that fecundity does not erase or negate the influence of socio-cultural and socio-economic factors; the response to fecundity is still a differential one. It would be foolish to assume that all sub-groups in the sample react automatically to the presence of fecundity.

We already know that the majority of those women who use contraception are fecund while the majority of the non-users are sub-fecund. This is reflected in the fact that 89.0% of the users approve of family planning as compared to 53.5% of the non-users. (X^2=122.85, d.f., 1, $p<.01$).

Favourable or unfavourable attitudes to family planning are not just opinions which respondents hold; for example, these attitudes are related to such items as the number of children a woman wants. In this study it was found that those women favourably disposed to family planning want on the average 3.8 children as compared to a median of 4.9 children on the part of those who disapprove of family planning. (Median test, X^2 = 47.66, d.f., 1, $p<.01$).

Those respondents favourably disposed to family planning expect to have an average of 3.5 children in their completed family as compared to 4.3 children which is the median number expected by those women who disapprove of family planning. (Median test, X^2=20.65, d.f., 1, $p<.01$). Confining our comparison to fecund women we find the median unchanged as regards those in favour of family planning, (viz., 3.5) whereas those interviewees who disapprove of family planning expect on the average 4.6 children in their expected family. (Median test, X^2 = 22.73, d.f., 1, $p<.01$).

Applying the control of fecundity and marriage duration, we obtain a hypothetical fertility rate (pregnancies) of 8.5 pregnancies for women who approve of

family planning and 11.6 pregnancies on the part of those who disapprove of family planning. (X^2=20.58, d.f., 1, $p < .01$). Put another way, in respect of fecund women, for every year of marriage the mean pregnancy rate was 0.3 for women who approved of family planning, 0.4 for women who disapproved of family planning.

The hypothetical fertility rate (children) of women who approve of family planning is 7.4 children, while for those who disapprove of family planning the rate is 10.2 children. (X^2=32.66, d.f., 1, $p < .01$).

Women in the younger marriage duration group are more favourably disposed to family planning. This is to a large extent due to the fact that a higher proportion of sub-fecund women are found in the higher marriage duration groups. When the comparison is limited to fecund women, then the proportion of women approving of family planning is fairly high and fairly constant in all the marriage duration groups. (See Table C-39, Appendix C).

Fecundity, it has been said, is a conditioning factor with regard to such things as use of contraceptives, attitude to family planning and so forth. This is seen in the following table which gives the proportion of all respondents as well as fecund respondents only according to annual family income.

TABLE 27

PERCENTAGE ALL RESPONDENTS AND FECUND RESPONDENTS ONLY APPROVING OF FAMILY PLANNING, BY ANNUAL FAMILY INCOME

Type of Respondent	Total	Annual Family Income					
		R5000 or more	R4000-R4999	R3000-R3999	R2000-R2999	R1000-R1999	Under R1000
ALL	79.6	92.7	91.4	83.6	82.8	75.2	79.5
FECUND	88.5	96.6	97.4	90.5	93.1	82.6	84.0

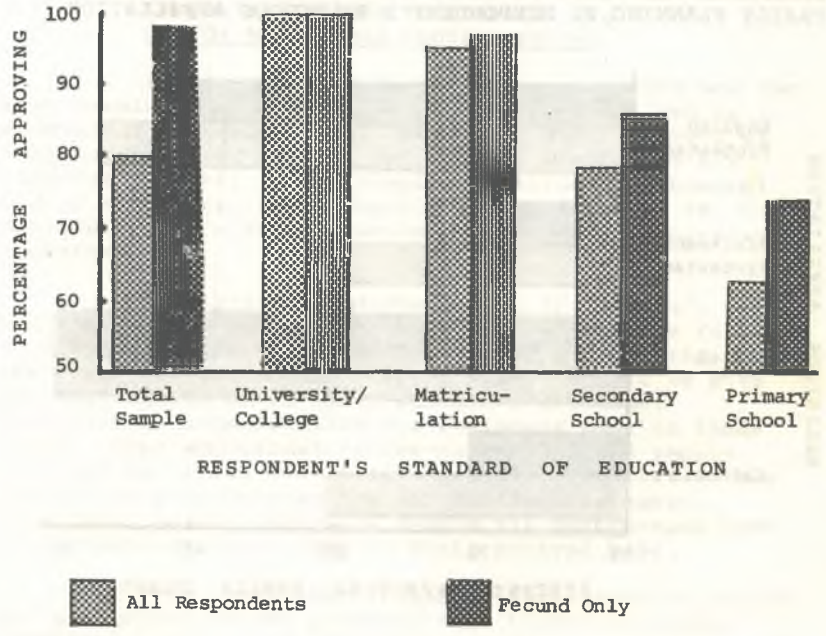
X^2 = 19.84, d.f., 5, $p < .01$
X^2 = 12,98, d.f., 5, $p < .05$

Table 27 indicates that in the case of every income sub-group, fecundity increases the proportion of those who approve of family planning. Admittedly differences remain - fecundity, of course, does not eradicate socio-economic differentials in outlook. A similar phenomenon occurs with respect to the analysis of those approving family planning in terms of husband's occupation, wife's birthplace and home language. (See Tables C-40, C-41, C-42, Appendix C).

Of all variables, none seems to influence attitude to family planning more than the respondent's standard of education. This is reflected in Figure 32, below.

FIGURE 32

PERCENTAGE ALL RESPONDENTS AND FECUND ONLY APPROVING OF FAMILY PLANNING, BY RESPONDENT'S STANDARD OF EDUCATION

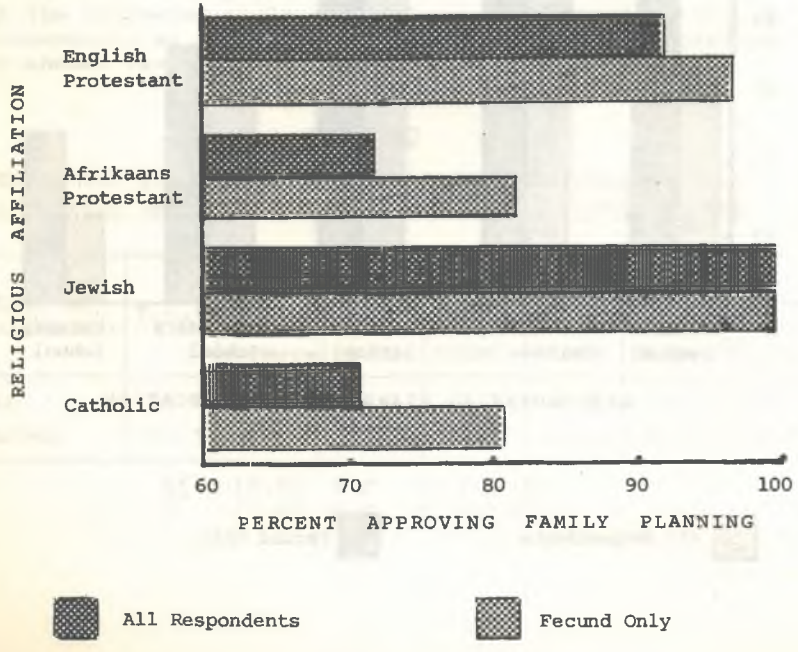


In the light of Figure 32 it appears that the higher the respondent's standard of education, the less the impact of fecundity vis-à-vis increasing the proportion of those favourably disposed towards family planning. Both as regards all respondents and fecund respondents only, women in the two higher educational categories approve of family planning in greater proportions than the sample as a whole. Conversely, secondary school educated respondents "lag" very slightly behind the sample in this respect while respondents in the lowest educational category fall noticeably below the sample average.

As might be expected, the religious affiliation of the respondent exerts an influence on her attitude to family planning. This is evident from a consideration of Figure 33, below.

FIGURE 33

PERCENTAGE ALL RESPONDENTS AND FECUND ONLY APPROVING OF FAMILY PLANNING, BY RESPONDENT'S RELIGIOUS AFFILIATION



Fecundity makes no difference to the proportion of Jewish respondents approving of family planning; they all approve whether fecund or not. Fecundity increases slightly the proportion of English Protestants who have a favourable attitude to family planning. Both as regards all respondents and those who are fecund, Catholic, and Afrikaans Protestants fall below the sample norm while the Jewish respondents and English Protestants approve of family planning in proportions above the sample norm.

Clearly, the majority of the women interviewed in this study as well as the majority of women in the various sub-groups analysed approve of family planning. In the GAF study (Freedman, et al., 1959) a similar pattern emerges although the proportions approving (74% for all respondents, 78% for fecund respondents) are not quite as high as in the present study (79.6% and 88.5% respectively).

9.2 Couple's Attitude to Chemical And/Or Mechanical Contraceptives

Family planning involves contraception and for most people this involves the use of chemical and/or mechanical contraceptives. There are other methods of contraception, of course, but in this section we are interested simply in the couple's attitude to chemical and/or mechanical contraception which, from now on, will be referred to - for convenience sake - as C/M contraceptives.

In eliciting information on the couple's attitude to C/M contraceptives, the interviewers found that 14.4% of the interviewees - chiefly belonging to the lower socio-economic classes - were unable to give any information about their husband's attitude. Husband-wife communication was obviously poor in these cases. Thus approximately one-seventh of the sample will not be considered in this section; otherwise they would form a burdensome "no information" category. Therefore, unless otherwise stated all percentages have 771 respondents (not 900) as their general base.

From those able to answer this question (85.6% of the sample) it was gathered that 60.6% of couples completely approve of C/M contraceptives - complete

approval in this instance means that both husband and wife approve. Our next category is termed partial approval. Here are included cases such as a couple approving of chemical contraceptives but not mechanical contraceptives or vice versa. Also included are cases where one spouse approves only of chemical means and the other spouse only of mechanical means, and so on. This category also includes cases where one spouse disapproves of C/M contraceptives while the other spouse either approves of both kinds or only one kind. In short, approval is neither total nor complete on the part of both husband and wife. In this group are 14.4% of the couples. Finally, there are exactly one-quarter of the couples who disapprove of C/M contraceptives.

That fecundity status plays a role in the average couple's attitude to C/M contraceptives will be seen in the following table.

TABLE 28

PERCENTAGE DISTRIBUTION OF COUPLES ACCORDING TO THEIR ATTITUDE TO CHEMICAL/MECHANICAL CONTRACEPTIVES, BY FECUNDITY STATUS

Couple's Attitude to C/M Contraceptives	All Couples N = 771	FECUNDITY STATUS			
		Fecund N = 523	Semi-Fecund N=86	Probably Sterile N = 29	Definitely Sterile N=132
Complete Approval	60.6	67.9	32.6	65.5	50.0
Partial Approval	14.4	13.4	15.1	10.4	18.2
Disapproval	25.0	18.7	52.3	24.1	31.8
TOTAL	100.0	100.0	100.0	100.0	100.0

$X^2 = 57.58$, d.f., 6, $p < .01$

The indications of Table 28 are that fecundity strengthens the tendency to approve of C/M contraceptives. Conversely, sub-fecundity - particularly the semi-fecund kind - promotes a less favourable attitude to C/M

contraceptives. It is the semi-fecund especially who find great difficulty in becoming pregnant and having children, who are the most unfavourably disposed to C/M contraceptives. While over two-thirds (67.9%) of the fecund couples completely approve of C/M contraceptives, only 45.6% of the sub-fecund are to be found in this category.

Couples who have been married longer than the average of 11.2 years for the sample are more inclined to disapprove of C/M contraceptives, whereas the younger couples tend to favour the use of C/M contraceptives. The median marriage duration of those who completely approve of C/M contraceptives is 9.7 years; for those who partially approve, it is 13.8 years and for those who completely disapprove of C/M contraceptives, 13.2 years. (Median test, $X^2=15.85$, d.f., 2, $p<.01$). This is not necessarily purely a question of outlook because fecundity and marriage duration are closely correlated.

Attitudes are related to behaviour. This is seen in the higher hypothetical fertility rate (10.0 children) for those fecund couples who disapprove of C/M contraceptives as compared to a rate of 8.6 children on the part of those couples completely approving of C/M contraceptives. ($X^2=34.18$, d.f., 2, $p<.01$).

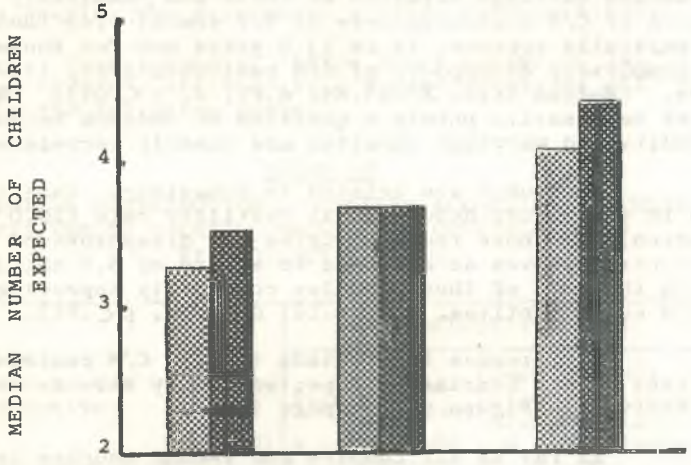
Differences in attitude towards C/M contraceptives have a bearing on expected family size as will be observed in Figure 34, on page 152.

As far as all couples and fecund couples are concerned, those who disapprove of C/M contraceptives expect to have more children on the average in their completed family than those couples who approve of C/M contraceptives. Couples who only partially approve of C/M contraceptives occupy a mid-position as far as median number of children expected is concerned.

The greatest difference in attitude to C/M contraceptives is to be found in the educational and religious sub-groups of the sample population. (See Figures 35 and 36 on page 153, showing the percentage distribution of those couples completely approving of C/M contraceptives in the educational and religious sub-groups.

FIGURE 34

MEDIAN NUMBER OF CHILDREN EXPECTED IN COMPLETED FAMILY, ALL COUPLES, FECUND COUPLES, BY COUPLE'S ATTITUDE TO CHEMICAL/MECHANICAL CONTRACEPTIVES



$x^2 = 35.61$, d.f., 2, $p < .01$
$x^2 = 16.27$, d.f., 2, $p < .01$

All Couples

Fecund Couples

FIGURE 35

PERCENTAGE ALL COUPLES AND FECUND COUPLES APPROVING CHEMICAL/MECHANICAL CONTRACEPTIVES, BY RESPONDENT'S STANDARD OF EDUCATION

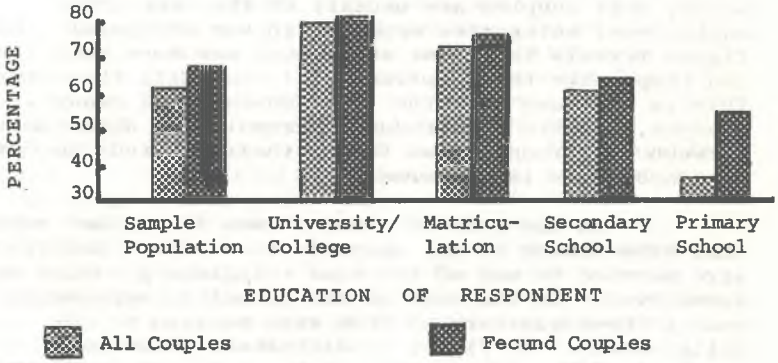
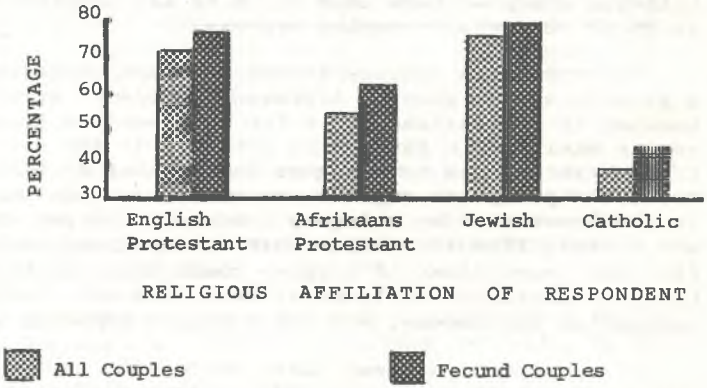


FIGURE 36

PERCENTAGE ALL COUPLES AND FECUND COUPLES APPROVING CHEMICAL/MECHANICAL CONTRACEPTIVES, BY RESPONDENT'S RELIGIOUS AFFILIATION



From Figure 35 it can be seen that the higher the respondent's standard of education the more favourably disposed the couple is to C/M contraceptives. (In this study it was found that although most husbands have slightly higher educational qualifications than their wives, most couples are usually in the same broad educational categories employed in our analysis). The figure reveals that some sub-groups are more sensitive and responsive to the pressure of fecundity than others. This is the case with the lower educational groups. However, nowhere does fecundity remove the differences between sub-groups in so far as their attitude to C/M contraceptives is concerned.

In the present study it was found that more than nine-tenths of all respondents - except Catholics - were married to men of the same religious grouping as themselves. In the case of the Catholic respondents, nearly three-quarters of them were married to co-religionists. In Figure 36 difference in outlook vis-à-vis C/M contraceptives between Jewish and Catholic couples is quite striking. In the case of all couples the proportion is over 2:1 and in the case of the fecund the proportion is nearly 2:1. The English Protestants present a pattern not too dissimilar from the Jewish group and one which is slightly more favourable to C/M contraceptives than the sample as a whole. The Afrikaans Protestant group falls somewhat below the sample pattern in this respect but this group is far more favourably disposed to the use of C/M contraceptives than is the Catholic group - where only 37.0% of all couples and 44.8% of the fecund couples approve.

English couples favour C/M contraceptives to a greater extent than do Afrikaans couples. Where the husband is occupationally in the white-collar group, the couple manifests a favourable attitude to the use of C/M contraceptives to a higher degree than do blue-collar couples. As regards income, it is only couples in the lowest income category (under R1,000 per annum) who deviate from the sample norm to any great extent. (For the proportions of couples completely approving of C/M contraceptives in terms of home language, husband's occupation and income, see Table C43 in Appendix C).

As will be seen later on in this study, a favourable attitude towards C/M contraceptives is

positively associated with family planning. One can, of course, have successful family planning without recourse to C/M contraceptives; however, this procedure is the exception, not the rule.

9.3 Family Size Preference

All interviewees were asked whether they preferred a large family or a small family. These are, of course, relative terms but in the next section data is given which pins down, so to speak, the concept "large" family. Just over half (51.2%) of the women interviewed favour a small family as compared to 41.0% who opt for a large family. A residue of 7.7% fall into the "depends" category. In cross-tabulating family size preference with the usual sociological variables such as home language, religious affiliation, family income, etc., no significant differences appear. All the sub-groups of the sample population tend to reflect very closely the sample norm as far as family size preference is concerned. The only exception is the marriage duration sub-groups as shown in Table 29.

TABLE 29

PERCENTAGE ALL RESPONDENTS EXPRESSING SMALL FAMILY SIZE PREFERENCE, BY DURATION OF MARRIAGE

ALL RESPONDENTS	DURATION OF MARRIAGE					
	Under 5 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25 Years And Over
51.2	58.2	58.4	47.3	45.3	45.5	40.3

$X^2 = 24.96$, d.f., 10, $p < .01$

The above table indicates that those women who are not so long married have somewhat stronger preferences for small families than do those married longer. The different proportions are not striking but they are statistically significant.

Fecundity appears to make no difference whatsoever to family size preference either over-all or as

regards the usual sub-groups. However, we obtained HFR of 8.3 children for those preferring large families, 7.5 for those preferring small families and 6.0 for those who said "it depends". (X^2 = 12.56, d.f., 2, $p < .01$).

Women expressing a preference for large families were found to want a median number of 4.6 children; the median number wanted by those opting for a small family was 3.5 children and for the "it depends" category the median is 4.0 children. (Median test, X^2 = 127.69, d.f., 2, $p < .01$).

There are also some differences with regard to the median number of children expected as will be seen in the following table.

TABLE 30

MEDIAN NUMBER OF CHILDREN EXPECTED IN COMPLETED FAMILY FOR ALL RESPONDENTS, FECUND RESPONDENTS AND FECUND USERS, BY FAMILY SIZE PREFERENCE

TYPE OF RESPONDENT	SAMPLE POPULATION	FAMILY SIZE PREFERENCE		
		Large	Small	Depends
All	3.6	3.8	3.4	3.3
Fecund	3.6	4.1	3.4	3.4
Fecund Users	3.5	3.9	3.3	3.3

X^2 = 12.65, d.f., 2, $p < .01$
X^2 = 21.28, d.f., 2, $p < .01$
X^2 = 19.23, d.f., 2, $p < .01$

Whether one considers all respondents, or simply all fecund respondents, or limits oneself to fecund users, in all cases those respondents expressing a large family preference expect a larger median number of children than do those who prefer a small family or who feel that family size preference depends on circumstances. However, as has already been said, these differences do not appear when family size preference is cross-classified with the usual sociological

variables - even when the control of fecundity is applied to the cross-classification.

9.4 Number of Children in a Family before it is Considered Large

All the women interviewed were asked the following question: "How many children would there have to be in a family before you would call it large?" Answers ranged from two to nine or more children; the sample median was 6.8 children. (All the averages referred to here are medians). The average for users is lower than that of non-users - 5.7 as compared to 8.2 children. (Median test, $X^2=27.98$, d.f., 1, $p<.01$). Fecundity status appears to have a bearing on the number of children required before a family is considered large; only the fecund (6.6 children) are below average semi-fecund (8.0), probably sterile (7.5) and definitely sterile (7.7). (Median test, $X^2=19.32$, d.f., 3, $p<.01$).

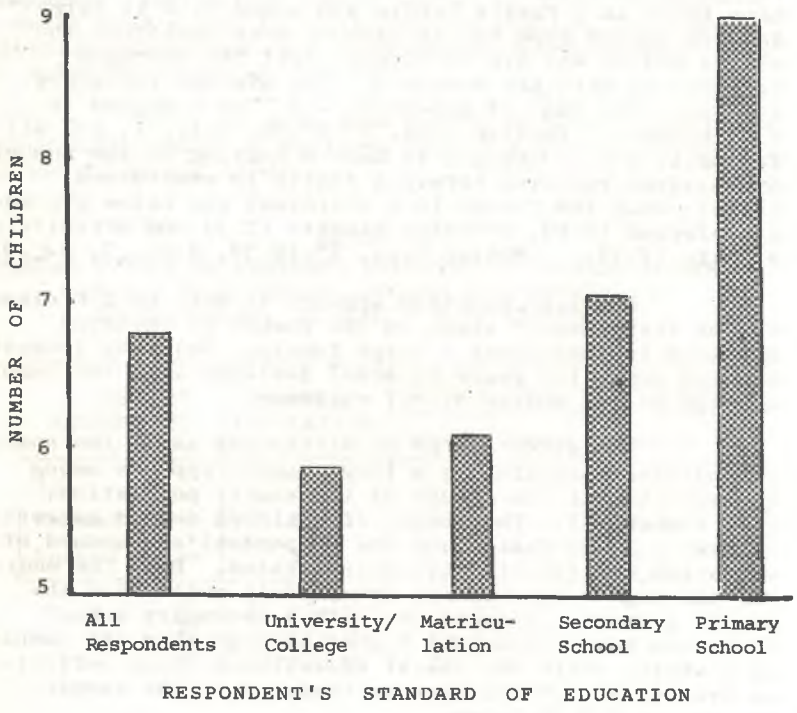
Marriage duration appears to make no difference to the respondents' views on the number of children required to constitute a large family. Only the longest married women (25 years or more) deviated from the sample average with a median of 8.7 children.

The widest range of difference as to the number of children constituting a large family appears among the educational sub-groups of the sample population. (See Figure 37). The number of children deemed necessary to make a large family and the respondent's standard of education are clearly inversely related. Both the medians for the higher educational groups fall well below the sample average. Respondents with a secondary school education have a somewhat higher average than the sample as a whole, while the lowest educational group reflects an average of 9.0 children as compared to the sample average of 6.8 children.

When replies to the question about how many children respondents feel it takes to constitute a large family are cross-classified with standard sociological variables, notable differences appear and these are reflected in Table 31 below.

FIGURE 37

MEDIAN NUMBER OF CHILDREN REQUIRED IN FAMILY
BEFORE IT IS CONSIDERED LARGE,
BY RESPONDENT'S STANDARD OF EDUCATION



$x^2 = 137.85$, d.f., 3, $p<.01$

TABLE 31

MEDIAN NUMBER OF CHILDREN REQUIRED IN A FAMILY BEFORE IT IS CONSIDERED LARGE, BY RESPONDENT'S RELIGIOUS AFFILIATION, ANNUAL FAMILY INCOME, HUSBAND'S OCCUPATION, HOME LANGUAGE AND BIRTHPLACE

RELIGIOUS AFFILIATION				X^2 READING
English Protestant	Afrikaans Protestant	Jewish	Catholic	
6.3	8.2	5.4	6.4	$X^2 = 129.05$, d.f.,3,p<.01

ANNUAL FAMILY INCOME						
R5000 or more	R4000-R4999	R3000-R3999	R2000-R2999	R1000-R1999	Under R1000	
5.6	6.2	6.5	6.8	6.9	8.9	$X^2 = 78.79$, d.f.,5,p<.01

HUSBAND'S OCCUPATION				
Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar	
6.1	6.6	7.0	8.2	$X^2 = 88.34$, d.f.,3,p<.01

HOME LANGUAGE		
English	Afrikaans	
6.3	8.2	$X^2 = 119.16$, d.f.,1,p<.01

BIRTHPLACE				
Farm	Village	Town	City	
8.3	8.3	7.1	6.5	$X^2 = 53.31$, d.f.,1,p<.01

As far as religious affiliation is concerned, only the Afrikaans Protestants exceed the sample median while the Jewish women fall below it quite noticeably. In addition, it will be seen that income is inversely related

to the number of children thought necessary for a family to be regarded as large. Furthermore, the two White-collar occupational groups fall slightly below the sample average while the two blue-collar groups exceed the sample average. Afrikaans respondents differ quite noticeably from English respondents with the former requiring on the average more children to constitute a large family than do the English whose median is below that of the sample. Finally, respondents born in a rural setting have a higher numerical concept of what a large family means than do those respondents whose birthplace is in an urban area.

9.5 Family Size Outlook for Next Generation

Sometimes a more accurate picture of a respondent's attitude to family size can be obtained by asking an indirect or quasi-projective type of question rather than by asking a clearly direct question. Consequently, the following question was included in the interview schedule: "If you had a daughter and she got married, how many children would you like her to have in her family?" The vast majority (84.8%) of the interviewees were able to quote a definite figure in reply to this question. Less than one-tenth (9.6%) felt it was the daughter's own business. The median number of children wanted for a daughter is 3.6 children. Fecundity status makes no difference as regards the number wanted.

The most significant relationship appears to lie between the woman's own pregnancy history and the number she would like a daughter of hers to have. (See Figure 38 on page 161).

It appears that the number of pregnancies the respondent has had evidently colours her feelings about her daughter's family size. There is a reasonably regular progression from a median number of 3.2 children wanted for a daughter on the part of those women who have never been pregnant to a median of 4.7 children on the part of women who have been pregnant nine times or more.

Users of contraception want a median number of 3.6 children for their daughters as compared to 3.9 children on the part of non-users. (Median test, $X^2 = 6.02$,

d.f., 1, $p<.05$). Women married longer want, on the whole, more children for their daughters than do those more recently married but the differences are not great.

FIGURE 38

MEDIAN NUMBER OF CHILDREN WANTED IN DAUGHTER'S FAMILY BY NUMBER OF PREGNANCIES RESPONDENT HAS HAD

$X^2 = 24.02$, d.f., 9, $p<.01$

English-speaking respondents want, on the average, 3.4 children in a daughter's family as compared to the median of 3.9 children wanted by Afrikaans-speaking respondents. (Median test, $X^2 = 14.15$, d.f., 1, $p<.01$). Jewish and English Protestant respondents want less than the average number of children for their daughter's family - 3.4 children in each case; the median number wanted by Catholics is the same as that wanted by the total sample, viz., 3.6 children. The median number wanted by Afrikaans Protestant respondents

is 3.8 children. (Median test, $X^2 = 14.49$, d.f., 3, $p < .01$).

Comparison of the number of children wanted for a daughter with the other variables used in this study such as education, occupation, income, etc., fail to reveal any significant differences.

9.6 Avoidance of Children

Contrary to what certain critics allege, family planning does not imply less affection for, and less care of, children but very often more and better care and genuine affection. Smaller families can never, per se, be equated with a disinterest in children or a desire to avoid having them. Family planning implies an element of rational control in a sphere in which deep emotions are inevitably involved but it does not necessarily mean negation or avoidance of children.

One of the questions asked in this study was the following: "What do you think of married couples who are able to have children but never have any?" The operative word is "never"; this means complete and permanent avoidance.

Over three-quarters (78.0%) of all respondents disapprove of avoidance of children; 14.1% qualified their disapproval by stating that for certain reasons and under particular circumstances such a drastic step might be in order. Only 7.9% gave their full approval.

In analysing the data one finds that variables such as fecundity status, use of contraception and marriage duration apparently have no bearing on the average respondent's attitude towards the complete avoidance of having children in marriage. However, socio-cultural and socio-economic factors obviously do play a part here as will be noted in Table 32 on page 163.

According to this table Jewish respondents show the greatest tolerance towards the complete avoidance of children and Afrikaans Protestants the least; both Catholic and English Protestant wives fall somewhat below the sample proportion as regards outright disapproval. In actual fact less than one-tenth of the Jewish women

approve of the complete avoidance of having children; one-third of them disapprove with qualifications.

TABLE 32

PERCENTAGE REGISTERING OUTRIGHT DISAPPROVAL OF COMPLETE AVOIDANCE OF HAVING CHILDREN, BY RESPONDENT'S RELIGIOUS AFFILIATION, STANDARD OF EDUCATION, HUSBAND'S OCCUPATION, ANNUAL FAMILY INCOME AND HOME LANGUAGE

V A R I A B L E						X^2 READING
RELIGIOUS AFFILIATION						
English Protestant	Afrikaans Protestant		Jewish		Catholic	
70.6	86.2		58.1		75.9	$X^2 = 36.13$, d.f.,6,p<.01
STANDARD OF EDUCATION						
University/ College	Matricu-lation		Secondary School		Primary School	
59.5	65.7		82.1		87.1	$X^2 = 36.77$, d.f.,6,p<.01
HUSBAND'S OCCUPATION						
Upper-White-Collar	Lower-White-Collar		Upper-Blue-Collar		Lower-Blue-Collar	
63.3	76.9		81.1		84.8	$X^2 = 25.71$, d.f.,6,p<.01
ANNUAL FAMILY INCOME						
R5000 or more	R4000-R4999	R3000-R3999	R2000-R2999	R1000-R1999	Under R1000	
62.8	64.4	72.5	77.8	85.2	79.5	$X^2 = 25.42$, d.f.,10,p<.01
HOME LANGUAGE						
English			Afrikaans			
70.6			86.5			$X^2 = 30.82$, d.f.,2,p<.01

The more highly educated the respondent is, the greater her degree of tolerance towards those couples

who deliberately avoid having any children. It is not so much a case of the higher-educated women approving of the complete avoidance of children but rather the fact that these women disapprove in a qualified manner of this avoidance; they feel there might be circumstances justifying this unusual behaviour. Over one-quarter of the university- or college-educated women qualify their disapproval as compared to less than one-fifth of the matriculated women, one-eighth of the secondary school-educated women and less than one-tenth of those women who only recieved a primary school education.

The higher the husband's occupation, the greater the degree of tolerance for complete avoidance of children on the part of the wife. Respondents in the higher income brackets are seen to be somewhat more tolerant than those in the lower income groups but the differences are in no way exceptional. Finally, the English-speaking respondents do not react against the complete avoidance of children as do the Afrikaans-speaking respondents.

CHAPTER X

BROAD TRENDS IN FAMILY PLANNING

Family planning can mean different things to different people. Strictly speaking, only users can have planned pregnancies. In the classic American study to which we often refer - colloquially known as GAF (i.e. Growth of American Families - Freedman, et al., 1959) - family planning is divided into three broad groupings:

(a) Completely Planned Pregnancies;
(b) Partially Planned Pregnancies; and
(c) Excess Fertility.

In the present survey we use these same categories.

10.1 Completely Planned Pregnancies

Generally, couples in this category are regular users of contraception. The respondent conceives only when the couple deliberately stop using contraception in order to have a child - not for any other reason. Most of the couples in this class have had one or more pregnancies but some have used contraception to avoid pregnancy entirely. We have chosen to term this type of complete planning "motive" to indicate the deliberate intent of the couple to have a child in their stopping of contraception. Another type of complete planning - "action" - which we employ later is also limited to users only and refers to those pregnancies couples wanted as soon as possible after they got married; only later did these couples use contraception. This distinction between motive and action planning is not employed in the GAF study. However, the planning of pregnancies is not exclusively a question of technique, or the use of some or other device, since it exists firstly and formally in the intentional order. Hence, we regard those pregnancies of ever-user couples which were wanted as soon as possible after marriage as planned pregnancies even though no contraception was stopped in order to facilitate impregnation. We will return to this distinction later.

In the context of this present classification - for the moment - we accept the GAF definition of completely planned as including only what we term motive planning. In this sense, the following would be an example of a

completely (motive) planned family:

Case 65

Respondent aged 37 years. Married early in 1956. Contraception was used from the beginning of the marriage. Couple has two children born in 1958 and 1960. Both were carefully planned.

Wife stated that though her ideal is three children, she would like to have two more. Finance is the stumbling block. She says her only hope of having more children is if her husband (a minister of religion) were able to move to a better parish. Their income is R1000 - R1999 per annum.

Case 66

Wife is 21 years old and couple have been married just over 3 years. She is Afrikaans-speaking and a regular church-goer. Her husband is a technician and earning R4000 - R4999 per annum. Wife approves of family planning, and is very conscious of what she terms „geldelike omstandighede" (financial circumstances). Couple has used contraception since the beginning of marriage. Respondent says she intends having three children but will only start a family when they can afford it.

These two examples of completely planned families typify a rational model, which though it can be duplicated in the sample population, cannot be said to be typical. Many couples may have one planned (motive or action) pregnancy, as well as others which are unplanned or accidental.

10.2 Partially Planned Pregnancies

This is a rather mixed group, e.g., newly-married couples and those married 25 years and more, couples with no children, and those with large families. Some couples in this category may have planned two pregnancies and also had an accidental pregnancy - they are thus considered partial planners. Most non-users have been classified as partial planners. Our action planners are

also included in this category for comparative purposes. The determining factor in this category is not that all or no pregnancies were planned by stopping contraception, but that all the pregnancies concerned were wanted. Some of the couples in this category only use contraception occasionally while others do not use it at all. The following cases demonstrate the wide variety of types subsumed under partially planned pregnancies.

Case 67

Middle-class respondent married late in 1937. At time of interview she was 49. She wanted her first two children right away and so only started using contraception after her second child was born. Her first child was born 1 year and 5 months after her marriage; the second child was separated from the first by two years. The third child was born 4 years and 10 months after the second, and her fourth and last child was born 3 years and 4 months after the third.

[According to the American study, this woman is a partial planner; in another context we will classify her as a complete planner - partially action, partially motive planning.]

Case 68

This respondent married in 1950. She is a Catholic who attends Church very irregularly while her husband is Dutch Reformed and never attends Church. She only wanted one child because she has a real fear of being inadequate to cope with more. The couple used contraception from the beginning of their married life and planned their first child which was born 5 years and 9 months later. Her second and last pregnancy was an accident, i.e., it occurred when the couple was using a method of contraception to prevent pregnancy. This child was born a year and 7 months after her first child. She does not want any more children. When she discovered she was pregnant the second time she said she was "most upset, disturbed" but later accepted it completely.

10.3 Excess Fertility

Whether a couple uses contraception or are non-users, if the wife's most recent pregnancy was unwanted then or later by either husband or wife or both, such a couple will belong to the excess fertility group. Some of the users in this group may have had some planned pregnancies while their most recent pregnancy may have been accidental as well as unwanted. However, in our survey, we found more non-users than users belonging to the excess fertility group. Some examples of excess fertility follow.

Case 69

Couple extremely religious; members of Assembly of Christ Church. Married 14 years. Husband is a semi-skilled worker (R1000-R1999). Both have Standard 6 education. Wife feels family planning is wrong because of her religious beliefs and can only be countenanced where there is poverty. Both husband and wife are strongly opposed to the use of mechanical and/or chemical contraceptives.

This couple has used contraception ("safe" period and withdrawal) since the beginning of their marriage; nevertheless they have had six children in 12½ years - only one planned. Wife was disappointed over the last pregnancy and still refuses to accept it emotionally.

Case 70

This respondent (aged 44) is an epileptic who lives in an extremely poor area. At the age of 34 for the first time she became pregnant by her third husband who is 14 years younger than she. She is most unhappily married but refuses to give her husband a divorce. Respondent stated that she married her husband on condition that they have no children but he refuses to use a contraceptive. She doesn't want children because of her epilepsy.

This respondent thinks it terribly dangerous for a woman to give birth to a baby. Her own mother nearly died at her (the respondent's) birth. The

respondent's one and only pregnancy was terminated by doctors at 3 months. She and her husband still "reject" that pregnancy.

Case 71

Fairly well-to-do respondent - her husband is a professional man - is 40 years old and has been married twice. Contraception has been used regularly in both marriages. She has been pregnant five times in 9 years; twice during the course of her first marriage and three times in her second (present) marriage. Her first and fifth pregnancies ended in miscarriage. She says that all five pregnancies occurred when she was using a method to prevent conception. This woman told our interviewer that she would have no children if she could "begin her married life all over again". She said she was glad her last pregnancy ended in a miscarriage. This respondent seem obsessed with the financial struggle large families entail although she and her husband have only two children and the annual family income was given as falling into the R4000-R4999 category.

Case 72

Respondent is an Afrikaans-speaking member of the Church of England with Standard 6 educational level, living in a lower-middle-class area. Her husband is a transport worker. Their household rent is R17-00 per month. Respondent married when she was 16 and has been married for 31 years. She disapproves of family planning except if parents are sickly. Both she and her husband disapprove of mechanical and/or chemical contraceptives. („Dit is nie reg, normaalweg nie. Jy behoort kinders te ontvang soos jy hulle kry." i.e., "It is not right, normally speaking. You should accept children as you get them.") Couple have never used any form of contraception. In the period of 30 years this respondent has been pregnant 15 times (seven live births, eight miscarriages). She told the interviewer that she would prefer to have had two children and felt "very depressed" (baie bedruk) when she was pregnant for the fifteenth time.

10.4 General Incidence of Broad Family Planning

The following table compares the American study GAF and the present study in terms of the percentage distribution of the three broad planning categories.

TABLE 33

PERCENTAGE DISTRIBUTION OF ALL COUPLES IN AMERICAN AND PORT ELIZABETH STUDIES BY BROAD PLANNING STATUS.

BROAD PLANNING STATUS	AMERICAN STUDY N = 2713	PORT ELIZABETH STUDY N = 900
Completely Planned	19	23.5
Partially Planned	66	72.3
Excess Fertility	13	2.8
No Information	2	1.4
Total	100	100.0

It will be seen that the differences are not great except in the case of excess fertility. It should be remembered that the American sample was country-wide and so included rural dwellers, whereas the Port Elizabeth sample was completely urban.

With regard to the present study we observe that nearly one-quarter of the couples has planned their fertility completely. This is a significant minority, but when we remember that 76.8% of all couples in our study were classified as being ever-users of contraception, it is clear that use of contraception and complete fertility planning are by no means synonymous.

As regards the number of children wanted, the complete planners with a median of 3.5 children differ significantly from the partial planners with 4.2 children. (Median test, $X^2 = 26.78$, d.f., 1, $p. < .01$) On the whole, respondents in the completely planned category have been married a shorter time with a median of 9.1 years than respondents who are classed as partial planners

(13.9 years); the median marriage duration of the excess fertility group is 15.1 years. (Median test, $X^2 = 11.90$, d.f., 1, $p < .01$).

The fact that the partial planners have a much higher median marriage duration than the complete planners leads one to expect a lower proportion of fecund women among the partial planners. This was found to be the case, viz., just over three-fifths (61.1%) of the partial planners are fecund as compared to nearly four-fifths (79.6%) of the complete planners. ($X^2 = 24.85$, d.f., 2, $p < .01$).

When we examine the complete planners, and those partial planners who are users, in the light of the broad type of contraceptive techniques employed, no notable differences emerge. For example, both groups employ appliance methods exclusively in fairly similar proportions, 51.4% and 43.2% respectively. In this instance, the X^2 reading is not significant.

Complete planners show a greater period of time between marriage and successive children than do partial planners, as Table 34 shows :

TABLE 34

MEDIAN SPACING IN YEARS BETWEEN MARRIAGE AND SUCCESSIVE CHILDREN BY BROAD PLANNING STATUS

MARRIAGE AND SUCCESSIVE CHILDREN	BROAD PLANNING STATUS		X^2 READING
	Completely Planned	Partially Planned	
Marriage - First Child	2.1	1.2	47.35,d.f.,2, p<.01
First Child - Second Child	3.0	2.2	24.52,d.f.,2, p<.01

Complete planners have a lower hypothetical fertility rate (total pregnancies, not total number of children) than partial planners, viz., 5.7 and 8.1 pregnancies respectively. ($X^2 = 5.07$, d.f., 1, $p < .05$).

Amongst ever-pregnant users, 91.8% of the complete planners commenced using contraceptives before their first pregnancy as compared to only 26.8% of the partial planners. (X^2 = 221.19, d.f., 2, $p < .01$).

10.5 Social and Economic Correlates

Religious affiliation makes a distinct impact on broad planning status. While over one-quarter (27.7%) of the English Protestants are classed as complete planners, two-thirds of the Jewish respondents (66.6%) and less than one-fifth of the Afrikaans Protestant (19.2%) and Catholic (18.6%) respondents are to be found among the complete planners.

Table 35 shows that differential planning status does not eradicate the religious differences vis-à-vis contraceptive techniques already alluded to in the course of this study.

TABLE 35

PERCENTAGE OF COUPLES REPORTING EXCLUSIVE USE OF APPLIANCE METHODS OF CONTRACEPTION, BY RESPONDENT'S RELIGION, BY BROAD PLANNING STATUS

BROAD PLANNING STATUS	RELIGION OF RESPONDENT				X^2 READING
	English Protestant	Afrikaans Protestant	Jewish	Catholic	
Completely Planned	59.4	39.8	78.6	30.0	28.73; d.f., 6, $p < .01$
Partially Planned	53.4	34.2	57.1	31.4	50.02; d.f., 6, $p < .01$

Only in the case of Jewish respondents is there a marked drop in the proportion of users of exclusively appliance methods of contraception as far as partial planners are concerned. However, this is, numerically speaking, a very small group of respondents. The overall

impression of this table is that the "religious" patterns regarding the type of contraceptives used remains constant whether one is examining complete planners or partial planners. The same is true when any use of appliances is examined. (Table C-44 in the Appendix provides details).

The following table reflects the median spacing between marriage and successive children for English and Afrikaans Protestants in terms of their broad planning status.

TABLE 36

MEDIAN SPACING BETWEEN MARRIAGE AND THE BIRTH OF SUCCESSIVE CHILDREN, BY RESPONDENT'S RELIGION, BY BROAD PLANNING STATUS

SPACING BETWEEN MARRIAGE AND SUCCESSIVE CHILDREN	BROAD PLANNING STATUS		X^2 READING
	Completely Planned	Partially Planned	
	ENGLISH PROTESTANTS		
Marriage - First Child	2.3	1.3	20.69, d.f., 1, $p < .01$
First Child - Second Child	2.8	2.3	5.32, d.f., 1, $p < .05$
	AFRIKAANS PROTESTANTS		
Marriage - First Child	2.0	1.1	19.56, d.f., 1, $p < .01$
First Child - Second Child	3.4	2.1	13.55, d.f., 1, $p < .01$

When we hold religious affiliation constant - only for the two largest groups of English and Afrikaans Protestants, and vary the general planning status, we observe that both the complete planners and the partial

planners among Afrikaans Protestants have their first child sooner than their counterparts among English Protestant respondents. As regards the median spacing between the first child and the second child, it will be seen that the Afrikaans Protestant complete planners take longer, on the average, than their English counterparts to have a second child. In neither religious group does the respondent's religious affiliation act as a levelling agent; the difference vis-à-vis actual spacing between marriage and successive children on the part of the complete planners and the partial planners remains clear-cut.

Planning status appears to count for more than religious affiliation with respect to the median number of children wanted by interviewees. (See Table C-45, Appendix C). It is already clear that English-speaking respondents have relatively more complete planners than the Afrikaans-speaking respondents, with 28.9% and 18.5% respectively. (X^2 = 15.42, d.f., 2, $p < .01$).

Once we introduce the elements of fecundity and use of contraceptives into our analysis of English and Afrikaans respondents, then the differences in the general planning status of the two groups tend to diminish considerably, viz., 36.2 per cent of the English fecund users and 31.1% of the Afrikaans fecund users are classed as complete planners. Similarly, if we hold approval of family planning constant and vary home language, no significant differences emerge.

Generally speaking, the higher the respondent's annual income the greater the degree of complete planning. There is scarcely any difference in the proportion of the two white-collar occupational groups that are in the completely planned category whereas a noticeable difference occurs between the two blue-collar groups. In terms of husband's occupation, complete planners amount to 33.1% of the upper-white-collar group, and 34.4% of the lower-white-collar group. By contrast, only 23.8% of the upper-blue-collar group and 10.4% of the lower-blue-collar couples are complete planners. In the sample as a whole 23.5% of the couples were complete planners. (X^2 = 41.80, d.f., 3, $p < .01$).

Respondents in the two higher educational categories are complete planners to a greater extent than secondary school-educated respondents, and to a much

greater extent than respondents who only received a primary school education. Thirty-two per cent (32.4%) of the women who had a university or college education, and 37.8% of the matriculants, as against only 20.4% of those with special education and 3.0% of those from primary school were complete planners. (X^2 = 31.37, d.f., 3, $p < .01$).

10.6 Comparison with American GAF Study

The triple classification of family planning used in this chapter simply gives one an overall view of family planning patterns in the sample population. However, though it is useful up to a point, it is, in fact, an over-simplification. Far more refinement and restriction is needed in order to obtain a clearer view of the nature and extent of family planning patterns of the 900 couples in the present study.

The triple classification fails to distinguish between users and non-users. This is its greatest weakness because non-users cannot be said to plan pregnancies in the sense understood by this study.

The well-known GAF study has divided all respondents into users and non-users and categorised them according to their family planning status. As far as this study is concerned, strictly speaking, non-use means non-planning so we do not regard non-users as planners at all.

The more refined classification which the previously mentioned American study (Freedman et al, 1959, 86) employs, comprises the following:

(1) Completely Planned: same as in previous classification.

(2) Number Planned: the last pregnancy, but not all of the previous pregnancies, began when contraception was stopped in order to have a child. The number of pregnancies and the spacing of at least the last pregnancy were planned with contraception.

(3) Quasi-planned: the last pregnancy was wanted sooner or later but was not planned by stopping contraception in order to have a child.

(4) Excess Fertility: the last pregnancy was not wanted then or later by the wife, the husband, or both.

While our data were originally coded and tabulated in terms of this four-fold classification, later analysis convinced the writer that this classification was unsuitable for the purposes of this study. In addition, this particular classification appears too cumbersome for the purpose of the present study as will become clear in the following chapter which deals with family planning success. However, for the sake of comparison between the GAF study and the present study, we employ the four-fold classification used in the American study.

TABLE 37

PERCENTAGE DISTRIBUTION OF ALL USERS IN AMERICAN GAF STUDY AND PORT ELIZABETH STUDY, ACCORDING TO GENERAL FAMILY PLANNING STATUS

GENERAL FAMILY PLANNING STATUS	AMERICAN STUDY	PORT ELIZABETH SURVEY
Completely Planned	27	49.5
Number Planned	22	12.3
Quasi-planned	36	33.0
Excess Fertility	13	2.9
Not Ascertained	2	2.3
Total	100	100.0
	N=1901	N=691

The Port Elizabeth sample has relatively more family planners than the American study. However, we must bear in mind the Port Elizabeth study relates only to one urban area - in fact to one of the principal urban areas of South Africa, and this alone could explain the differences.

CHAPTER XI

THE NATURE AND INCIDENCE OF PLANNING SUCCESS

11.1 Types of Planning Success

Two elements figure prominently in family planning. These are fecundity status and use of contraception. Both these elements are closely related to each other. Most couples use contraception because they have to; use of contraception is a response to their generally fecund condition. Most non- and never-users do not need to use contraceptive devices because of the presence of fecundity impairments. Those who avoid contraception for moral, religious or aesthetic reasons are in a minority. In the American study (Freedman et al, 1959) non-users were considered as planners although of a separate kind. In the present study, family planning in the strict sense is regarded as being essentially bound up with the use of contraception. So far, in this study, the greater the degree of planning evidenced, the higher the fecundity and the higher the incidence of use of contraception. Therefore, we concentrate on all users as well as all ever-pregnant users. On the strict level of planning, there are three main categories of family planners. These are defined as :

11.1.1 Completely Successful Planners

This consists of those with spacing and planning of all pregnancies. Conceptually it consists of three sub-groups:

(a) those who from the outset of their marriage, plan their conceptions by means of the discontinuation of contraception;

(b) those who want their first and sometimes their second child as soon as possible and do nothing to prevent conception, but immediately after the birth of this child become users. We feel these people are planners because the absence of contraception is deliberate

and intentional; in this study most of these couples had only been married a few years;

(c) There are those who have their first child as soon as possible, then start using contraception and successfully plan one, two, three or more pregnancies by use of contraception. This type of couple accounted for 50.6% of all users of contraceptives.

11.1.2 Partly Successful

The planning picture of these respondents is a mixed one. They might have one or more completely planned pregnancies followed or preceded by one or more accidental pregnancies. Couples in this category might have one or more completely planned pregnancies plus one or more unplanned pregnancies. Of all the pregnancies reported by this group, 51.2% were planned. In total 31.2% of all users fell into this category.

11.1.3 No Successful Planning

Although the respondents in this category are users, they report no planned pregnancies. This category includes a few cases where the exact nature of the planning status of some of the reported pregnancies was impossible to determine. We find 18.2% of all users in this category.

Some examples of different types of planners are as follows :

Case 73

Respondent, aged 22, has been married less than a year. Contraceptives have been used right from the start of the marriage (withdrawal and condom). Both husband and wife approve of family planning. In the wife's own words: "It is a sin to bring children into the world if you can't look after them and care for them."

The wife hopes to plan her first pregnancy soon and would then like three more children at two-year intervals.

Both husband and wife, who attend church weekly, are English-speaking Protestants. The wife works full-time; her husband is an eletrician. Their annual income falls into the R3000-3999 category. Both have a Standard 8 education.

This couple, on the evidence available, is classed as fecund users and complete planners. Of course, in time, re-classification may be necessary.

Case 74

Couple (wife Methodist, husband Catholic) have been married 8 years; the wife is 25 years of age. They rent a house in a lower middle-class suburb. The husband is an artisan earning R1000-R1999 per annum. The wife passed Standard 6 and the husband Standard 8.

Both approve of family planning although they disapprove of mechanical and/or chemical means of contraception. They wanted their first child as soon as possible and after it was born they commenced using contraception (rhythm only) which they use regularly. Two more pregnancies have occurred when the rhythm method was purposely stopped.

The wife plans to have a fourth and last child in about two years' time. The couple are fecund and are completely successful planners.

Case 75

This couple is definitely sterile (menopause); they have been married for 20 years. The wife is 46 years of age. From the beginning of their marriage they have only used the safe period. Both approve of family planning.

Their first child was born after 4 years 11 months of marriage; the second child 4 years and 1 month after the first. Both pregnancies were planned, i.e., they occurred when contraception was deliberately stopped. The wife only wanted two children but $1\frac{1}{2}$ years after the birth of the second child, her third child was born. This was an accidental pregnancy; in her own words: "I was careless in working out dates." Consequently

this couple is classed as partly successful planners.

The couple live in a middle-class suburb of Port Elizabeth. They own their own home. The husband has a managerial position in the commercial world. They are English Protestants who seldom attend church.

Case 76

Afrikaans Protestant fecund couple with secondary school education. The woman is 40 years of age and has been married for 13 years. Her husband is a policeman earning R1000-R1999 per annum. They rent a house in a lower-middle-class suburb.

The wife approves of family planning; she feels children should be planned for in the light of one's income whereas her husband is fatalistic and regards family planning as sinful: „Omdat dit 'n sonde is. Die Here sal vir jou gee wat reg is." ("Because it is a sin. The Lord will give you what is right.")

The couple started using contraceptives (withdrawal and condom) at the outset of their marriage but the first three pregnancies were accidental although the respondent alleges that her husband deceived her because he wanted children. „My man verneuk my want hy wil kinders hê." ("My husband cheats me because he wants to have children.") Her fourth and most recent pregnancy was definitely planned. The wife regards her family as complete. The couple are partly successful planners.

Case 77

The respondent has been married twice (marriage duration of 16 years). She is 40 years of age. She has a Standard 9 education and is employed part-time as a flat caretaker. The wife approves of family planning but could not say what her husband's attitude was.

Contraception was used from the beginning of the first marriage. However, all five pregnancies (three children, two miscarriages) were accidental, i.e., took place when contraception (condom and tampon) were being used. Consequently this couple is classed as "unsuccessful" planners - though they use contraceptives they have no planned pregnancies to their credit but rather five accidental pregnancies.

11.2 Fecundity Control

Couples who plan most successfully are those who are highly fecund; they obviously have to be more meticulous in their use of contraceptives than the less fecund users. Nearly four-fifths (78.2%) of the completely successful planners are fecund as compared to 71.7% of the partly successful planners and 67.2% of those who evidence no successful planning. These differences are significant (X^2 = 7.06, d.f., 2, $p<.05$), but not strikingly so. They are not of such significance to warrant a continual application of the control of fecundity status to our analysis of data in this chapter. This conviction is strengthened by the fact that when the three categories employed on the strict level of planning are sub-divided and analysed in terms of fecundity status, the differences revealed are minor and are not statistically significant in terms of chi-square readings.

More than half (53.5%) of the fecund users are completely successful as compared to less than one-third (30.2%) who are only partly successful and (16.3%) of the fecund users with no successful planning to their credit. The other groups (i.e. all users and all ever-pregnant users) manifest a similar pattern.

11.3 Ideal, Desired and Expected Family Size

The median number of children considered ideal by all the women interviewed in this study is 4.2 children. This is also the median number of children considered ideal by the partly successful planners as well as those users without any successful planning. The median for the completely successful planners is somewhat lower, viz., 4.0 children. (Median test, X^2 = 7.19, d.f., 2, $p< .05$).

Among the ever-pregnant users, those women who are completely successful vis-a-vis their family planning want less children (median, 3.7 children) than those who are only partly successful (4.3 children). (Median test, X^2 = 27.15, d.f., 2, $p< .01$).

On the average, ever-pregnant users who are completely successful in their family planning, expect to have fewer children in their completed family (median,

3.3 children) than either the partly successful planners (4.0 children) and those without any successful planning (3.5 children). (Median test, $X^2 = 25.96$, d.f., 2, $p < .01$). In this connection, it must be remembered that couples without any successful planning are less fecund than couples in the two major planning categories. (The percentage fecund among completely successful planners is 78.6%; in the case of the partly successful planners it is 71.7%, and 67.2% of the unsuccessful planners are classed as fecund. ($X^2 = 7.35$, d.f., 2, $p < .05$).

11.4 Contraceptive Frequency

With regard to frequency of use of contraception, the completely successful and the partly successful planners manifest an almost identical pattern, viz., 80.8% and 80.0% are regular users as compared to only 56.2% of the unsuccessful planners. ($X^2 = 31.99$, d.f., 2, $p < .01$). By itself, however, regular use of contraception does not mean effective use from a planning point of view. The motivation, use and fecundity levels of the completely successful group and the partly successful group are close and similar but the effectiveness vis-à-vis use is clearly greater in the case of those couples all of whose pregnancies have been successfully planned. An almost identical pattern emerges when the analysis is confined to ever-pregnant users.

11.5 Type of Contraception

Successful planning does not depend only on fecundity, motivation and use of contraception; the type of contraceptive technique used also has a bearing on the planning status of couples because not all methods of contraception are equally effective. Table 38 analyses the three groups in terms of the type of contraceptive used. In this context, three main categories are employed, viz., those who used appliance (chemical or mechanical) methods exclusively; those who, while using appliance methods, also make (or have made) use of non-appliance methods such as rhythm and withdrawal; finally, there are those who use or have used non-appliance methods exclusively.

TABLE 38

PERCENTAGE DISTRIBUTION OF ALL USERS ACCORDING TO PLANNING SUCCESS BY TYPE OF CONTRACEPTIVE METHODS EMPLOYED

TYPE OF CONTRACEPTIVE METHOD(S) EMPLOYED	PLANNING SUCCESS		
	Completely Successful N = 341	Partly Successful N = 212	No Successful Planning N = 122
Appliance Methods Only	51.6	39.6	38.5
Mixed Methods	20.8	30.2	27.1
Non-Appliance Methods	27.6	30.2	34.4
Total	100.0	100.0	100.0

$X^2 = 11.85$, d.f., 4, $p < .05$

The main difference revealed by Table 38 above lies between the completely successful planners and the other two groups. The completely successful planners use appliance methods exclusively to a greater extent than do either of the two other groups. The partly successful and unsuccessful planners reveal a very similar pattern vis-à-vis type of contraceptive used. From the data gathered, it appears that it is not so much a question of the type of contraceptive used but rather its regularity and exclusiveness, e.g., there is no significant difference between the three groups on the issue of any use of appliance methods: what is significant is the exclusive use of appliance methods. In all three groups the majority of couples have at some stage or other used appliance methods but the completely successful planners are least likely to switch from one broad type to another or use both appliance and non-appliance methods on an interchangeable basis.

In the case of the ever-pregnant users, the completely successful planners use appliance methods exclusively to a somewhat greater extent than the other

two groups (i.e., the partly successful and the unsuccessful planners) viz., 50.8% as compared to 39.9% and 39.0% respectively. These differences are not significant. (X^2 = 8.86, d.f., 4, $p > .05$).

Of all contraceptive means in contemporary use the rhythm method is probably least effective. The completely successful planners avoid using the rhythm method to a somewhat greater extent than do other groups. Among users, over four-fifths (83.6%) of the completely successful planners, 71.7% of the partly successful planners, and just over three-quarters (76.2%) of the unsuccessful planners report non-usage of rhythm - this means these couples have never used this method of contraception. (X^2 = 10.89, d.f., 2, $p < .01$).

Looked at another way, as far as the ever-pregnant users are concerned, only 16.1% of the completely successful planners as compared to 28.6% of the partly successful planners report any use of rhythm. (X^2 = 11.90, d.f., 2, $p < .01$).

On the average, the completely successful planners use a lesser number of different types of contraceptives than do other groups. The differences, while small, are significant. The median number of different types of contraceptives used by all users is 1.9 while the relevant median for the completely successful planners is 1.8, for the partly successful planners the median is 2.0 and for the unsuccessful planners 1.9 different types. (For the median test, X^2 = 7.43, d.f., 2, $p < .05$). It is clear that the completely successful planners achieve greater economy and less variation in their planning than other groups.

11.6 Commencement of Contraception

Very often we encounter cases where the respondent says she wanted her first child as soon as possible. Therefore, nothing was done to prevent conception. After the first child was born, the couple planned their next pregnancies by means of recourse to contraception, and they only stopped using contraceptives when they actually wanted a further child.

Where a couple wants a child as soon as possible

this is termed action planning. We have had a number of cases where the first pregnancy has been conceived on an action basis and the succeeding pregnancies on a motive basis, i.e., deliberate stoppage of contraception for the sole purpose of becoming pregnant.

More than one-half (54.2%) of the completely successful planners commence using contraceptives before their first pregnancy as compared to just over one-third (34.7%) of those couples defined as partly successful planners. (X^2 = 19.08, d.f., 2, $p < .01$). Immediate use of contraceptives is associated more with completely successful family planning than with only partly successful family planning.

With respect to later users of contraception, we find that those couples classed as unsuccessful planners delay first use of contraception more than do the completely successful and the partly successful planners, e.g., nearly one-third (32.7%) of those later users classed as unsuccessful planners only commenced using contraceptives after their third or later pregnancy as compared to 14.3% and 14.4% in the case of the completely successful and the partly successful planners respectively. (X^2 = 13.79, d.f., 4, $p < .01$).

11.7 Spacing of Children

Successful planning involves, inter alia, a closer convergence between the ideal spacing between marriage and successive children and the actual spacing thereof. The completely successful planners show a longer interval between marriage and successive children than the partly successful planners and those who are unsuccessful from a planning point of view. The differences - all of which are statistically significant - appear in Table 39 below.

These differences are partly a function of the precise time when couples commenced using contraceptives as well as the somewhat different fecundity levels of the three groups.

TABLE 39

MEDIAN NUMBER OF YEARS BETWEEN MARRIAGE AND SUCCESSIVE CHILDREN, BY PLANNING SUCCESS

MARRIAGE AND SUCCESSIVE CHILDREN	ALL RESPON-DENTS	PLANNING SUCCESS		
		Completely Successful	Partly Successful	No Successful Planning
Between Marriage and First Child	1.4	1.5	1.3	1.1
	For median test, X^2 =7.94, d.f., 2, $p < .05$			
Between First and Second Children	2.4	2.7	2.2	1.9
	For median test, X^2 = 16.17, d.f., 2, $p < .01$			
Between Second and Third Children	2.6	3.0	2.5	2.0
	For median test, X^2 = 8.42, d.f., 2, $p < .01$			

11.8 Hypothetical Fertility Rate

For the same marriage duration, the completely successful planners have less pregnancies than either the partly unsuccessful or the unsuccessful. On a thirty-year basis this would be, hypothetically, 6.1, 8.3 and 8.4 pregnancies respectively. At the time of the study the median total number of actual pregnancies for the three groups was 2.7, 4.1 and 3.3 pregnancies respectively. (Median test, X^2 = 81.96, d.f., 2, $p < .01$).

Limiting our consideration to fecund users, we obtain a hypothetical fertility rate (HFR) of 6.5 children for the completely successful planners for 30 years of marriage; the rate for the partly successful is 8.2 children and for those without any successful planning, 8.3 children. (X^2 = 17.28, d.f., 2, $p < .01$). The difference is significant and suggests that in the long

run the completely successful planners will have smaller families than the partly successful and the unsuccessful planners.

When our consideration is extended to all users (i.e., ever-pregnant and never-pregnant) we obtain an HFR of 5.7 children (completely successful planners), 7.4 children (partially successful planners) and 6.9 children (no successful planning). These differences are not significant. The particular and overall change is largely due to the removal of the control of the vital factor of fecundity.

For the same marriage duration, completely successful planners have less children ever born alive than either partly successful or unsuccessful planners. The partly successful have slightly more children than those with no successful planning to their credit; this is due, no doubt, to the fact that this latter group is somewhat less fecund than the other two planning groups. The median number of children ever born alive and the median marriage duration for the three groups appear in the following table.

TABLE 40

MEDIAN NUMBER OF CHILDREN EVER BORN ALIVE AND MEDIAN NUMBER OF YEARS MARRIED, BY PLANNING SUCCESS

PLANNING SUCCESS	MEDIANS	
	No. of Children Ever Born Alive	No. of Years Married
Completely Successful	2.4	9.7
Partly Successful	3.5	12.2
No Successful Planning	2.8	11.0

(X^2 reading for median test on number of children ever born alive = 65.61, d.f., 2, $p < .01$)

When we calculate the hypothetical number of children these three groups would have over a 30-year

period, we find that the completely successful have a figure of 5.3 children; partly successful 7.3 children and those with no successful planning to report 7.0 children. (X^2 = 5.29, d.f., 2, $p < .01$).

One would expect the completely successful planners to record a higher planned pregnancy rate than the partly successful group. This has been found to be the case, viz., a median number of 2.8 planned pregnancies in the case of the completely successful planners and 2.4 planned pregnancies in the case of the partly successful planners. (The X^2 reading for the median test is 9.11, d.f., 1, $p < .01$). When we apply a hypothetical 30-year marriage duration to the data, the gap between the two groups widens and we obtain an average of 6.1 and 3.7 planned pregnancies respectively. (X^2 = 88.38, d.f., 1, $p < .01$).

Limiting attention to ever-pregnant users, we obtain an HFR vis-à-vis planned pregnancies as follows:-

Completely Successful Planners : 6.6 planned pregnancies

Partly Successful Planners : 4.4 planned pregnancies

(X^2 = 5.96, d.f., 1, $p < .05$)

Differences in fecundity appear to be the reason for the above difference.

11.9 Accidental and Unplanned Pregnancies

The question of accidental pregnancies (conception occurs when attempts at contraception are being made) only applies to the partly successful planners and those couples having no successful planning. The accidental pregnancy rate - seen as a median - is strikingly similar, viz., 0.7 and 0.8 respectively. The difference between these two planning groups is to be found in the differential rate of unplanned pregnancies - medians of 1.9 and 3.1 respectively. (Median test, X^2 = 10.04, d.f., 1, $p < .01$). It must be remembered that couples who are sub-fecund have greater difficulty in planning their pregnancies than do those who are more fecund. Though the fecundity levels between these two

planning groups do not differ greatly, they do differ to a degree and this is partly reflected in the median number of unplanned pregnancies reported by the two groups.

CHAPTER XII

DEGREES OF SUCCESSFUL FAMILY PLANNING AND THEIR SOCIO-CULTURAL CORRELATES

12.1 Incidence of Planning Among User Sub-groups

As one might expect, the planning patterns of users vary from one sub-group to another. The greatest variation is found among the religious sub-groups and the least among the income sub-groups. Planning status and religious affiliation are cross-classified diagrammatically in Figure 39 below.

It is clear that the Jewish and Catholic users are poles apart in their planning patterns. More than twice as many Jewish as Catholic users are completely successful planners. (76.2% : 37.0%). Just over half (54.0%) of the English Protestants and less than half (47.6%) of the Afrikaans Protestants belong to this category.

One-third of the English Protestants, 45.6% of the Catholic users, 27.9% of the Afrikaans Protestants and only about one-seventh (14.3%) of Jewish users are partly successful planners. Nearly one-quarter (24.5%) of the Afrikaans Protestant users fail to achieve any successful planning as do 17.4% of the Catholic, 12.7% of the English Protestant and less than one-tenth (9.5%) of the Jewish users. This is to a considerable extent a function of differential contraceptive usage.

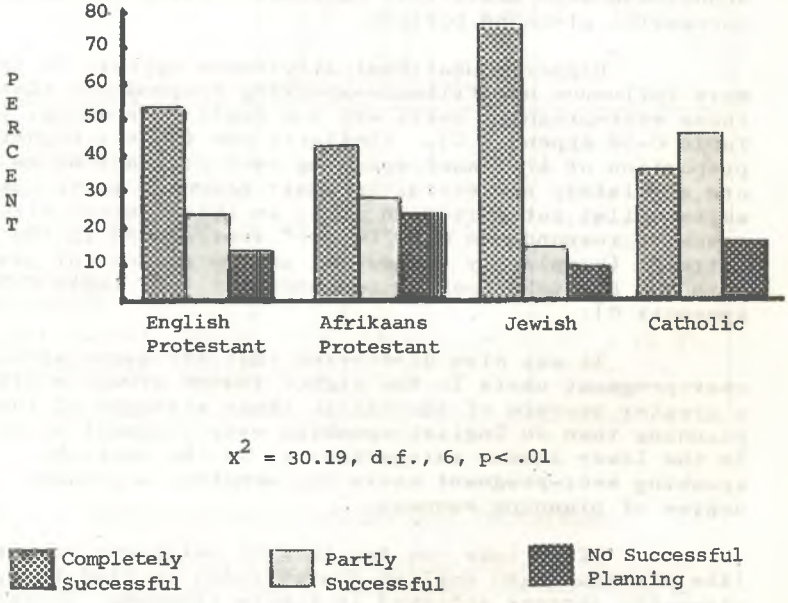
It is interesting to note that when the cross-classification is applied to ever-pregnant users and fecund users, the pattern as revealed in Figure 39 remains exceptionally constant.

When we simultaneously cross-classify occupation and religion with degree of planning success, only in the case of those ever-pregnant users who are in the upper-white-collar group do any significant differences occur, suggesting that religious differences reflect socio-economic differences. However, the results obtained by cross-tabulating the husband's occupational status with planning success are rather puzzling and unexpected,

viz., couples in the lower-white-collar and upper-blue-collar categories are more successful in family planning than are the upper-white-collar users; only the lower-blue-collar users are more unsuccessful. (See Table C-47 Appendix C). Even when the control of fecundity is applied, the pattern and ranking remain largely unaffected. This, therefore, indicates the importance of religion as a factor in its own right.

FIGURE 39

PERCENTAGE DISTRIBUTION OF ALL USERS, BY RELIGIOUS AFFILIATION, BY DEGREE OF PLANNING SUCCESS



Afrikaans Protestant and Jewish ever-pregnant users in the highest occupational category achieve a fairly similar degree of success in their planning; their degree of success is above that of the sample norm while the Catholic and English Protestant ever-pregnant users in the upper-white-collar group fall below the sample norm as regards degree of planning success achieved. It is possible, of course, that the small numbers involved in this analysis have led to some distortion.

English-speaking users are somewhat more successful at family planning than are Afrikaans-speaking users. (See Table C-48 Appendix C). In the case of fecund users, these differences are reduced.

Matriculated users are slightly more successful at family planning than are university/college users. (See Table C-49 Appendix C). Those users with secondary school education adhere to the general user pattern as regards success at family planning while the primary school-educated users fall noticeably below the overall successful planning pattern.

Higher educational attainment appears to exert more influence on Afrikaans-speaking respondents than on those ever-pregnant users who are English-speaking. (See Table C-50 Appendix C). Similarly one finds a higher proportion of Afrikaans-speaking ever-pregnant users who are completely successful in their planning in the upper-white-collar category. In fact, in this context Afrikaans-speaking respondents are "better" represented in the extremes (completely successful and no successful planning) than the English-speaking respondents. (See Table C-51, Appendix C).

It was also discovered that Afrikaans-speaking ever-pregnant users in the higher income groups achieve a greater measure of success in their attempts at family planning than do English-speaking ever-pregnant users. In the lower income categories, it is the English-speaking ever-pregnant users who manifest a greater degree of planning success.

If we take our two largest religious sub-groups (the Afrikaans and English Protestants) we find that, vis-a-vis success achieved in family planning, it is only

in the case of the Afrikaans Protestant ever-pregnant users that educational status produces significant differences. The planning patterns of the higher-educated Afrikaans Protestants differ significantly - the degree of success achieved is greater - from the less-educated Afrikaans Protestants while this phenomenon is largely absent in the case of the English Protestant ever-pregnant users. This appears in Table 41 below.

TABLE 41

PERCENTAGE DISTRIBUTION OF ENGLISH AND AFRIKAANS PROTESTANT EVER-PREGNANT USERS ACCORDING TO DEGREE OF PLANNING, BY RESPONDENT'S LEVEL OF EDUCATION

RELIGION TOTAL AND LEVEL OF EDUCATION	DEGREE OF PLANNING SUCCESS			X^2 READING
	Completely Successful	Partly Successful	No Successful Planning	
English Protestant				
Higher (N=101) 100.0	51.5	38.6	9.9	$X^2 = 1.92$, d.f., 2, $P > .05$
Lower (N=195) 100.0	49.7	34.9	15.4	
Afrikaans Protestant				
Higher (N=48) 100.0	68.8	14.6	16.6	$X^2 = 12.43$, d.f., 2, $p < .01$
Lower (N=235) 100.0	42.1	31.5	26.4	

12.2 Differential Contraceptive Techniques

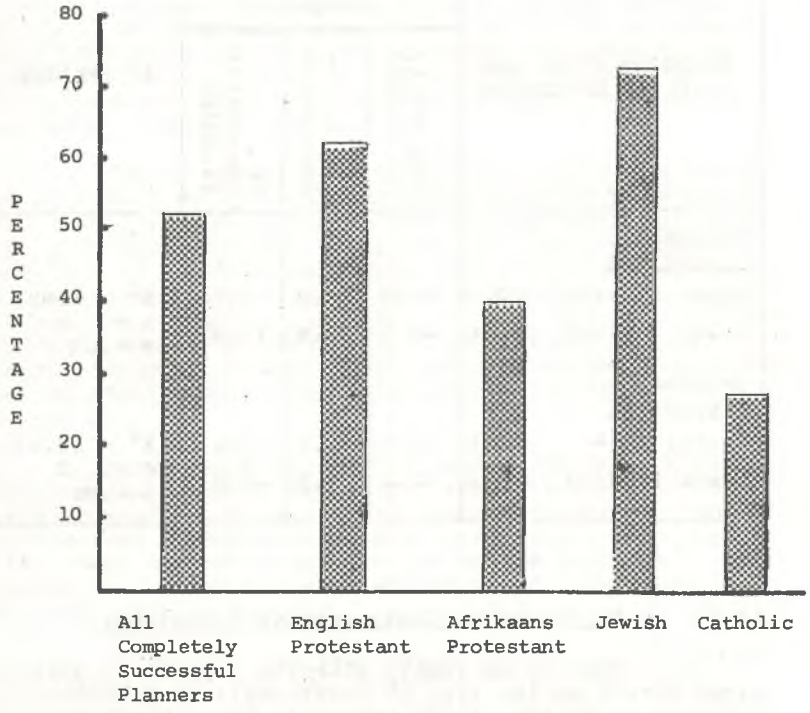
Success in family planning depends to quite a large extent on the type of contraceptive techniques employed by users. It is precisely here where the

religious sub-groups differ and consequently their degree of planning success varies accordingly.

Completely successful planners tend to favour the exclusive use of appliance methods of contraception but this is not the case with regard to all the religious sub-groups in the sample. This is reflected in Figure 40.

FIGURE 40

PERCENTAGE COMPLETELY SUCCESSFUL PLANNERS USING EXCLUSIVELY APPLIANCE METHODS OF CONTRACEPTION, BY RESPONDENT'S RELIGION



$x^2 = 37.19$, d.f., 6, $p < .01$

Completely successful planners among Afrikaans Protestant and Catholic ever-pregnant users deviate markedly from the user pattern in that they use non-appliance methods of contraception to a far greater degree than do their Jewish and English Protestant planning counterparts, the majority of whom report exclusive use of appliance methods of contraception.

The indications are that over half (53.3%) of the ever-pregnant Catholic users employ non-appliance methods exclusively chiefly because of religious prohibitions; in the case of the Afrikaans Protestants the fact that over two-fifths (42.0%) are in this user cate- is less a matter of religious scruple - though some trace of this does exist - but rather a function of a below-average level of educational, economic and occupational attainment.

Among the completely successful users, only Catholics report any use of rhythm (50.0%) to any notable extent; the proportions for English Protestant, Afrikaans Protestant and Jewish respondents are 12.9% 15.9% and 18.8% respectively. (X^2 = 11.70, d.f., 3, $p < .01$). With regard to any use of withdrawal as a means of contraception among completely successful planners, this is reported by over two-fifths (42.8%) of the Afrikaans Protestants, 37.5% of the Catholics, 31.2% of the English Protestants and only 12.5% of the Jewish respondents. (X^2 = 8.67, d.f., 3, $p < .05$).

Table 42 gives the proportion of users in the four main religious groups reporting any use of appliance methods of contraception according to their degree of successful planning.

The immediately striking factor about this table is the rapid and systematic increase in the use of appliance methods of contraception by Catholic users in proportion to their lack of success in family planning. Here we find a definite inverse relationship between success in family planning and any use of appliance methods of contraception. Failure to achieve success with the rhythm method and, to a considerably lesser extent, with the method of withdrawal leads in the case of many Catholics to their experimenting - later in their married life - with appliance methods of contraception. In the case of the Afrikaans Protestant users, the increase

in any use of appliance methods is only minor.

TABLE 42

PERCENTAGE USERS REPORTING ANY USE OF APPLIANCE METHODS OF CONTRACEPTION, BY RESPONDENT'S RELIGION BY DEGREE OF PLANNING SUCCESS

DEGREE OF PLANNING SUCCESS	RELIGION OF RESPONDENT				X^2 READING
	English Protestant	Afrikaans Protestant	Jewish	Catholic	
Completely Successful	85.9	44.7	87.5	43.8	$X^2 = 58.85$, d.f., 3, $P < .01$
Partly Successful	84.8	51.2	-	61.9	$X^2 = 25.36$, d.f., 2, $p < .01$
No Successful Planning	82.1	52.9	-	94.4	$X^2 = 16.84$, d.f., 2, $p < .01$

In the occupational sub-groups, one finds that the upper-white-collar ever-pregnant users in the first two planning categories use appliance methods exclusively to a greater extent than the other sub-groups; the proportions using only appliance methods among the other three occupational sub-groups is very much on a par. (See Table C-52 Appendix C). Educational level makes some difference to completely successful planners vis-à-vis the type of contraception they employ. (See Table C-53 Appendix C). The better-educated respondents rely exclusively on appliance methods of contraception to a greater degree than do the less well-educated respondents. However, there is evidence to suggest that completely successful planning acts as a quasi-levelling factor in this context.

In all planning categories, English and Afrikaans ever-pregnant users manifest quite different patterns of contraceptive usage. These differences appear in Table 43.

TABLE 43

PERCENTAGE DISTRIBUTION OF EVER-PREGNANT USERS BY DEGREE OF PLANNING SUCCESS, BY TYPE OF CONTRACEPTION USED, BY HOME LANGUAGE

TYPE OF CONTRACEPTION USED	COMPLETELY SUCCESSFUL PLANNING		X^2 READING
	English	Afrikaans	
Appliance Methods Only	58.2	40.5	$X^2 = 23.02$, d.f., 2, $p < .01$
Mixed Methods	24.9	18.2	
Non-Appliance Methods Only	16.9	41.3	
Total	100.0	100.0	
	PARTLY SUCCESSFUL PLANNING		
Appliance Methods Only	46.3	31.6	$X^2 = 26.30$, d.f., 2, $p < .01$
Mixed Methods	37.4	19.0	
Non-Appliance Methods Only	16.3	49.4	
Total	100.0	100.0	
	NO SUCCESSFUL PLANNING		
Appliance Methods Only	50.0	32.9	$X^2 = 10.77$ d.f., 2, $p < .01$
Mixed Methods	32.0	20.0	
Non-Appliance Methods Only	18.0	47.1	
Total	100.0	100.0	

It is evident from the above table that no matter what similar planning success Afrikaans- and English-speaking respondents achieve, the broad type of contraception employed by each sub-group varies greatly. The indications are that this differential usage stems, firstly, from a socio-economic gap between these language sub-groups and, secondly, from a differential religious outlook.

Between those completely successful planners in the highest and lowest income sub-groups, there is a considerable difference in the exclusive use of appliance methods of contraception. However, the differences between the other sub-groups is not particularly great and there is no evidence of clear-cut progression. Overall the differences are not significant.

12.3 The Spacing of Births

The test of family planning success does not lie solely in the couple's ability to have the number of children that they wanted or not to have unwanted children but also to have these children when they want them - in short, to space and time them according to a plan deemed rational by the couple concerned.

In this section we only deal with the spacing of the first two births after marriage; to go any further would be statistically hazardous in view of the many incomplete families in the sample.

With regard to the median interval between marriage and the birth of the first two children, the religious sub-groups in both the completely successful and the partly successful planning categories do not differ significantly from each other. As far as completely successful planners are concerned, all the religious sub-groups reflect a longer median interval between marriage and the birth of the first child than does the average respondent interviewed in this survey. With regard to the partially successful planners, the Jewish and English Protestant respondents are above the sample median spacing while the Afrikaans Protestants and Catholics fall below it. These two latter groups, it will be remembered, tend to be late starters in the matter of contraceptive usage.

All religious sub-groups except the Catholic completely successful planners show an above average interval between the birth of the first and second children, e.g. the average women interviewed had a median interval of 2.4 years while that of the Jewish and English Protestant completely successful planners is 2.7 years, that of their Afrikaans Protestant counterparts 2.9 years and that of the Catholics 2.3 years. The partly successful planners in all religious groups fall below the sample average in this regard - they have their second child sooner.

Completely successful planning does not only depend on the use of contraception but also at what stage of family-building contraception is commenced. As will be seen in the following chapter some couples prefer to have their first child as soon as possible and then to prevent and/or space further pregnancies. In terms of our definition, completely successful planning does not per se imply a lengthy median interval between marriage and the birth of the first child. This emerges in the next table.

It will be noted in Table 44 that a longer median interval between marriage and the birth of the first child is found among the completely successful planners in the higher socio-economic groups. The difference between the language groups is not significant.

The median interval for English-speaking partly successful planners is 1.6 years and for their Afrikaans-speaking planning counterparts 1.1 years. ($X^2 = 6.21$, d.f., 1, $p < .05$). Apart from this, no significant differences in the first birth interval are found in the case of the partly successful planners in the various socio-economic sub-groups dealt with in Table 44.

In Chapter VI it was stated that the majority (61.7%) of later users of contraception become users after their first pregnancy. This factor has a bearing on the median interval between the birth of the first and second children both with regard to completely successful as well as partly successful planners. Socio-economic as well as planning differences appear to have a bearing on the spacing of births in this context.

TABLE 44

DISTRIBUTION OF MEDIAN INTERVAL BETWEEN MARRIAGE AND BIRTH OF FIRST CHILD OF COMPLETELY SUCCESSFUL PLANNERS BY HUSBAND'S OCCUPATION, ANNUAL FAMILY INCOME, EDUCATIONAL LEVEL OF RESPONDENT, AND HOME LANGUAGE

ALL RESPONDENTS (YEARS)	HUSBAND'S OCCUPATION				X^2 READING
	Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar	
1.4	2.3	1.9	1.3	1.0	$X^2=20.57$, d.f., 3, $p < .01$
	ANNUAL FAMILY INCOME				
	High	Medium	Low		
1.4	2.3	1.5	1.3		$X^2=10.51$, d.f., 2, $p < .01$
	EDUCATIONAL LEVEL OF WIFE				
	Higher	Lower			
1.4	1.9	1.4			$X^2=4.75$, d.f., 1, $p < .05$
	HOME LANGUAGE				
	English	Afrikaans			
1.4	1.6	1.4			$X^2=1.80$, d.f., 1, $p > .05$

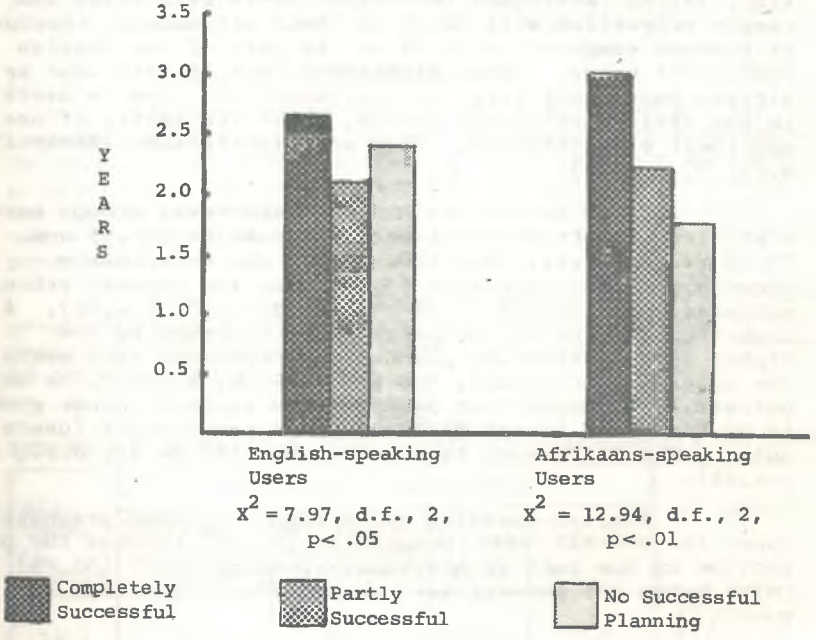
If, for example, one holds occupational status constant and varies planning status, one finds significant differences vis-à-vis median birth interval in the case of the different types of planners in the upper-white-collar and lower-blue-collar sub-groups. (See Table C-54 Appendix C). The differences with respect to planners in the lower-white-collar and upper-blue-collar sub-groups are neither great nor significant. The table also shows that completely successful planners in all four occupational sub-groups have similar median birth intervals as do the partly successful planners.

The differences in median interval (first and second children) between various types of planners in the higher educational group are much greater than those obtaining between planners in the lower educational group. (See Table C-55 Appendix C). This is consistent with what we already know about use of contraception and its commencement with regard to the various educational categories in the sample.

Afrikaans-speaking users in the various planning success categories manifest a wider range in the median interval between the birth of the first and second children than do English-speaking users. (See Figure 41.) It will be remembered that a higher proportion of English users commence using contraception at the outset of marriage while the Afrikaans users are more inclined to commence using contraceptives after later pregnancies. In a certain sense, the greater leeway that they have to make up is partly reflected in Figure 41.

FIGURE 41

DISTRIBUTION OF MEDIAN INTERVAL BETWEEN BIRTH OF FIRST CHILD AND SECOND CHILD BY HOME LANGUAGE, BY DEGREE OF PLANNING SUCCESS



On the whole, income is not significantly associated with differential birth spacing between first and second

children in the different categories except in the medium income group (R2000-R3999) where the median interval is 2.8 years (completely successful), 2.4 years (partly successful) and 1.7 years (no successful planning). (X^2=12.92, d.f., 2, $p < .01$). As far as spacing between, say, first and second children is concerned, the planning variable does not reveal any significant differences between users in the various religious sub-groups.

12.4 Planned Pregnancies

Every pregnancy recorded in this survey has been classified as planned, unplanned or accidental (i.e., conception occurred when contraception was being used). Just under three-fifths (59.4%) of all pregnancies reported by users were planned. Notable differences in the proportion of planned pregnancies occur in the case of users in the religious sub-groups of the sample. Jewish respondents report the greatest proportion of planned pregnancies (84.7%) while Catholic users record the lowest proportion viz., 52.2%. Afrikaans Protestant users fall below the sample proportion with 52.2% of their pregnancies recorded as planned compared to 65.7% on the part of the English Protestant users. These differences fit in with what we already know about types of contraceptives used by users in the various religious groups, their regularity of use and their effectiveness. They are significant. (X^2=49.13, d.f., 3, $p < .01$).

Users in the two higher educational groups have a greater proportion of planned pregnancies (70.6% and 73.1% respectively) than those users who only have a secondary school education (57.5%) and the primary school-educated users (40.0%). (X^2=44.14, d.f., 3, $p < .01$). A higher proportion of the pregnancies reported by the higher income users are planned in comparison with users in the lower income groups; the progression, however, is not perfect. It ranges from 74.6% of the highest income group to 40.4% of the lowest having planned pregnancies (users only). The difference is significant. (X^2=36.18, d.f., 5, $p < .01$).

English-speaking users report planned pregnancies above the overall user proportion (65.9%) whereas the proportion on the part of Afrikaans-speaking users (51.2%) falls below the general user norm. (X^2=42.75, d.f., 1, $p < .01$).

As far as occupational groups are concerned, there is very little difference in the proportion of planned pregnancies, amongst upper and lower-white-collar workers, with about two-thirds of their pregnancies being planned and these groups reflect the user norm. However, both blue-collar groups deviate somewhat from this norm, with 56% planned pregnancies for upper-blue-collar workers, and 51% for lower-blue-collar workers. (X^2=38.38, d.f., 3, $p < .01$).

Apropos the proportion of pregnancies that are planned a rural/urban differential was found to exist. Respondents born on farms or in villages reflect lower proportions (about half) than do those whose birthplace is a town or city (about three-fifths). The difference is significant. (X^2 = 17.64, d.f., 3, $p < .01$).

Those women who have always been economically active since marriage exhibit the highest proportion (75%) of planned pregnancies. The differences between those users who have been economically active since marriage only intermittently (57.1%) and those who have never worked outside the home are insignificant (61.2%).

12.5 Accidental Pregnancies

Approximately one-seventh (14.1%) of all the pregnancies reported in the present study were accidental. In terms of our definition, only users can have accidental pregnancies. The mean number of accidental pregnancies for partly successful planners is 0.6, while for those users reporting no successful planning it is 0.9 accidental pregnancies.

In cross-classifying the proportion of accidental pregnancies with our standard sociological variables, only religious affiliation was shown to be significant. Table 45 provides details:

TABLE 45

PERCENTAGE ACCIDENTAL PREGNANCIES BY RESPONDENT'S RELIGION

ALL USERS N=2041	RELIGION OF RESPONDENT				X^2 READING
	English Protestant N=910	Afrikaans Protestant N=901	Jewish N=59	Catholic N = 167	
14.1	14.1	11.9	15.3	24.6	X^2 = 19.78, d.f., 3, $p < .01$

In the light of the above table, it appears that only the Catholic users deviate from the sample standard in the matter of accidental pregnancies, in that nearly one-quarter of the pregnancies reported by Catholic users are classed as accidental. This is consistent with what we know of the atypical - vis-à-vis the present sample population - reliance by Catholic users on the rhythm method of contraception.

12.6 Planning Success and Expected Family Size

In the previous chapter it was noted that completely successful planners expect, on the average, to have fewer children in their completed family than partly successful planners and those users who have been unsuccessful at family planning.

If we hold planning success status constant and vary home language, we find no significant difference in the median number of children expected between English and Afrikaans users in the completely successful and partly successful planning categories. However, when home language is held constant and degree of successful planning varied, significant differences appear which will be seen in the following table.

TABLE 46

DISTRIBUTION OF MEDIAN NUMBER OF CHILDREN EXPECTED IN COMPLETED FAMILY BY HOME LANGUAGE, BY DEGREE OF PLANNING SUCCESS

ALL RESPONDENTS	AFRIKAANS-SPEAKING USERS			X^2 READING
	Completely Successful	Partly Successful	No Successful Planning	
3.6	3.4	4.3	3.9	$X^2 = 14.17$, d.f., 2, $p < .01$
	ENGLISH-SPEAKING USERS			
3.6	3.1	3.8	3.2	$X^2 = 14.90$, d.f., 2, $p < .01$

Degree of planning success appears to be, *prima facie*, more of a determining factor vis-à-vis expected family size than home language. It should be noted that users without any successful planning to their credit are less fecund than users in the other two planning categories.

Users in the higher educational category (i.e. university/college and matriculated women) show a much more restricted range of expected family size, irrespective of their degree of planning success, than users in the lower educational category (secondary school- and primary school-educated women). It should be noted that within the partly successful category, there are obviously some users who are more competent vis-à-vis use of contraception and family planning than others and it is here that one would expect a higher educational status to exert an influence towards, relatively speaking, more effective planning which would result in a smaller expected family size.

Differences in median expected family size in the two main planning categories of the occupational, income and religious sub-groups do not reveal any particularly significant differences. On the whole, planning category appears more decisive than the socio-economic variable in question. (See Table C-56, Appendix C).

12.7 Planning and Hypothetical Fertility Rates

The measure known by the abbreviation, H.F.R., has already been discussed in the broad context of family planning. Here it is applied to the two chief types of planners (completely successful and partly successful) in the various sub-groups of the sample population. Table 47 provides details.

One must remember that the H.F.R. is profoundly hypothetical and that it, so to speak, freezes the total pregnancy position in the light of marriage duration at the moment of interviewing and projects this uniformly into the future. It also takes no account — it cannot, of course — of possible and inevitable changes in fecundity status; moreover it inflates already established differences. However as long as its

essentially hypothetical nature is borne in mind, this rate can serve as a useful basis for comparison between groups - not individual respondents.

TABLE 47

HYPOTHETICAL FERTILITY RATES (H.F.R.) FOR TOTAL PREGNANCIES FOR VARIOUS SOCIO-CULTURAL GROUPS IN EVER-PREGNANT USER POPULATION, BY DEGREE OF PLANNING SUCCESS

DEGREE OF PLANNING SUCCESS	ANNUAL INCOME					
	R5000 or more	R4000-R4999	R3000-R3999	R2000-R2999	R1000-R1999	Under R1000
Completely Successful	5.1	6.0	5.9	6.5	7.7	8.4
Partly Successful	6.9	7.1	7.8	8.6	11.1	8.7
	C.P. X^2=17.82, d.f., 5, $p < .01$			P.P. X^2=20.02, d.f., 5, $p < .01$		

	RESPONDENT'S STANDARD OF EDUCATION			
	University/ College	Matriculation	Secondary School	Primary School
Completely Successful	8.4	6.1	6.8	4.1
Partly Successful	10.3	8.2	9.1	8.0
	C.P. X^2=20.59, d.f., 3, $p < .01$		P.P. X^2=13,23, d.f., 3, $p < .01$	

	OCCUPATION OF HUSBAND			
	Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar
Completely Successful	5.6	6.7	6.9	7.7
Partly Successful	7.7	8.8	10.3	8.5
	C.P. X^2=6.97, d.f., 3, $p > .05$		P.P. X^2=12.55, d.f., 3, $p < .01$	

Continued/..

TABLE 47 (Continued)

DEGREE OF PLANNING SUCCESS	RELIGION OF RESPONDENT			
	English Protestant	Afrikaans Protestant	Jewish	Catholic
Completely Successful	6.3	7.1	6.9	6.7
Partly Successful	8.4	9.6	8.8	9.1
	C.P. X^2=4.24, d.f., 3, $p > .05$		P.P. X^2=10.95, d.f., 3, $p < .01$	

	HOME LANGUAGE	
	English	Afrikaans
Completely Successful	6.4	6.9
Partly Successful	8.6	9.9
	C.P. X^2=2.53, d.f., 1, $p > .05$	P.P. X^2= 8.27, d.f., 1, $p < .01$

[NOTE: C.P. = Completely Planned and P.P. = Partially Planned.]

In all the various sub-groups used in Table 47, it will be observed that those respondents who are only partly successful planners have a higher hypothetical fertility rate than their counterparts in the completely successful planning category.

In the religious, language and occupational sub-groups, completely successful planning acts as a quasi-levelling agent – the internal differences are neither great nor significant. As regards the educational and income groups, within the completely successful planning group we find significantly different hypothetical fertility rates as regards total pregnancies.

It is a mistake to equate completely successful planning, in the sense defined in this study, with a

small average number of pregnancies or births. Completely successful planning does not necessarily imply this; a couple may plan one child or many - control and spacing, not size, is the essence of completely successful planning. On the whole, of course, completely successful planners do have fewer pregnancies and children than partly successful planners or couples who do not plan at all and they certainly have considerably fewer pregnancies and live births than the fecund non-users in the sample.

It will be noted in Table 47 that in the case of partly successful planners all the sub-groups differ significantly - though not always greatly - from each other. On the whole, completely successful planning imposes more of a pattern, more control and uniformity, on the hypothetical fertility rate vis-à-vis total number of pregnancies. Among the partly successful planners socio-cultural differences pertaining to type of contraception used, time contraception was started and even attitude to family planning appears to be given freer rein.

It will be noticed that in this section no rates are given for the no successful planning category. This is chiefly due to the fact that in this category a higher degree of sub-fecundity exists than in the other two planning categories and also because there are many genuine cases of unsuccessful planning among these users. Thus the category contains diverse elements vis-à-vis our hypothetical fertility rate.

The next table gives the H.F.R. in respect of planned pregnancies for the various socio-cultural groups according to their degree of planning success.

It will be remembered that the median number of planned pregnancies for the entire sample is 2.1 pregnancies. As is to be expected, the completely successful planners have a higher H.F.R. in all sub-groups than the counterparts of those sub-groups in the partly successful planning category.

In the light of Table 48, among the completely successful planners only the educational and income sub-groups differ significantly in terms of their planned pregnancies H.F.R., viz., $X^2 = 15.09$, d.f., 3, $p < .01$, and $X^2 = 11.70$, d.f., 5, $p < .05$ respectively.

TABLE 48

HYPOTHETICAL FERTILITY RATES (H.F.R.) FOR THE GROUP WITH PLANNED PREGNANCIES BY VARIOUS SOCIO-CULTURAL GROUPS IN EVER-PREGNANT USER POPULATION, BY DEGREE OF PLANNING SUCCESS

PLANNING SUCCESS	RELIGION OF RESPONDENT			
	English Protestant	Afrikaans Protestant	Jewish	Catholic
Completely Successful	6.3	7.1	6.9	6.7
Partly Successful	4.5	4.4	6.3	3.5

	HOME LANGUAGE	
	English	Afrikaans
Completely Successful	6.4	6.9
Partly Successful	4.5	4.4

	ANNUAL INCOME					
	R5000 or more	R4000-R4999	R3000-R3999	R2000-R2999	R1000-R1999	Under R1000
Completely Successful	5.1	6.0	5.9	6.5	7.7	8.4
Partly Successful	4.5	3.8	3.5	4.3	5.1	3.6

	RESPONDENT'S STANDARD OF EDUCATION			
	University/ College	Matriculation	Secondary School	Primary School
Completely Successful	8.4	6.1	6.8	4.1
Partly Successful	6.0	5.0	4.3	3.1

Continued/

TABLE 48 (Continued)

PLANNING SUCCESS	OCCUPATION OF HUSBAND			
	Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar
Completely Successful	5.6	6.7	6.9	7.7
Partly Successful	4.6	4.2	4.7	3.7

The differences in the educational sub-groups are the more clear-cut and progressive and the relationship is a direct one. As is often the case with income, this variable is somewhat erratic and the differences are irregular and, consequently, difficult to interpret.

As far as the partly successful planners are concerned, only the educational sub-groups ($X^2 = 9.56$, d.f., 3, $p < .05$) and the religious sub-groups ($X^2 = 8.77$, d.f., 3, $p < .05$) differ significantly - but not greatly - with regard to the H.F.R. for planned pregnancies. The Jewish sub-group has a much higher rate than the other religious sub-groups while the Catholic partly successful planners fall below the norm for this planning group. The educational groups show a positive relationship between education and hypothetical fertility rate with respect to planned pregnancies.

In all the sub-groups comprising the user population, except the lowest income group (which is small and possibly statistically distorted), the completely successful planners evidence a lower hypothetical fertility rate than the partly successful planners as far as actual number of children born is concerned. This phenomenon is reflected in Table 49, which calculates the hypothetical fertility rate not from pregnancies, but from children born.

In analysing the sub-groups in terms of the H.F.R. for both the completely successful and the partly successful planners, such as Afrikaans Protestant C.P. (6.1) and P.P. (8.1), $X^2 = 7.36$, d.f., 1, $p < .01$)

significant differences are obtained. Jewish respondents also differ ($X^2 = 5.60$, d.f., 1, $p < .05$). Similarly, women in the highest education category differ in their H.F.R. according to their planning status ($X^2 = 6.26$, d.f., 1, $p < .01$). A significant difference is also obtained in the case of the two types of planners in the lowest education sub-group ($X^2 = 6.41$, d.f., $p < .01$). In the vast majority of cases it will be found that the two types of planners differ in all the various sub-groups from each other significantly vis-à-vis H.F.R. for actual number of children.

When attention is focussed on completely successful planning one notes that a certain levelling takes place in some sub-groups such as the religious, educational, home language and occupational sub-groups. The X^2 readings for H.F.R. are not significant. Only in the case of annual family income are significant differences found between the income sub-groups. The higher the income the lower the H.F.R. for actual number of children. ($X^2 = 17.80$, d.f., 5, $p < .01$).

Quite a different pattern emerges when the partly successful planners are examined as to their H.F.R. In regard to every variable, significant differences are found; hence, we cannot speak of any levelling process here. Partly successful planners are far from being a perfectly homogeneous group - they are more heterogeneous vis-à-vis attitude to family planning and competent, rational use of contraception than are the completely successful planners who are, by and large, more at one on these matters; they are also more efficient in effecting their planning desires and achieving set goals.

Considering partly successful planners only one finds a significant difference in H.F.R. for English-speaking couples (7.0) and Afrikaans-speaking couples (8.4). ($X^2 = 11.26$, d.f., 1, $p < .01$). The religious sub-groups also differ to a significant extent. ($X^2 = 14.93$, d.f., 3, $p < .01$). The differences between the H.F.R. for the educational sub-groups, while significant ($X^2 = 16.53$, d.f., 3, $p < .01$), is irregular, atypical and quite unexpected. The differences observable in the income sub-groups are also irregular and without progression. ($X^2 = 17.80$, d.f., 5, $p < .01$). Occupation, too, reveals differences among the partly successful planners. ($X^2 = 19.95$, d.f., 3, $p < .01$).

TABLE 49

HYPOTHETICAL FERTILITY RATE CALCULATED FROM THE ACTUAL NUMBER OF CHILDREN BORN FOR VARIOUS SOCIO-CULTURAL GROUPS IN EVER-PREGNANT USER POPULATION, BY PLANNING SUCCESS

EDUCATION OF RESPONDENT							
University/ College		Matricu-lation		Secondary School		Primary School	
C.P.	P.P.	C.P.	P.P.	C.P.	P.P.	C.P.	P.P.
7.0	8.6	5.3	6.6	5.9	7.6	4.1	6.5

HOME LANGUAGE			
English		Afrikaans	
C.P.	P.P.	C.P.	P.P.
5.4	7.0	6.0	8.4

ANNUAL INCOME											
R5000 or more		R4000-R4999		R3000-R3999		R2000-R2999		R1000-R1999		Under R1000	
CP	PP	CP	PP	CP	PP	CP	PP	CP	PP	CP	PP
4.4	6.1	4.4	6.4	5.0	6.0	5.7	7.1	6.7	9.1	8.0	7.0

RELIGION OF RESPONDENT							
English Protestant		Afrikaans Protestant		Jewish		Catholic	
C.P.	P.P.	C.P.	P.P.	C.P.	P.P.	C.P.	P.P.
5.6	7.0	6.1	8.1	5.1	7.6	5.3	7.0

OCCUPATION OF HUSBAND							
Upper-White-Collar		Lower-White-Collar		Upper-Blue-Collar		Lower-Blue-Collar	
C.P.	P.P.	C.P.	P.P.	C.P.	P.P.	C.P.	P.P.
4.7	6.6	5.6	7.1	6.1	8.2	6.8	7.3

[NOTE: C.P. = Completely Successful Planning; and
P.P. = Partly Successful Planning.]

In general, it can be hypothesised that completely successful planners in all sub-groups will have

fewer pregnancies and also fewer children and more planned pregnancies - for the same marriage duration - than the partly successful planners in those same sub-groups. The range of difference is usually greater among the sub-groups in the partly successful planning category than among these same sub-groups in the completely successful planning category. It may be averred that completely successful planning exhibits a homogeneity and levelling which partly successful planning status appears to lack.

CHAPTER XIII

STRICT PLANNING STATUS

This chapter limits itself to a consideration of those ever-pregnant users who plan their pregnancies either (i) on a completely motive basis, or (ii) a completely action basis, or (iii) are known as mixed planners, i.e., some pregnancies are planned on an action basis and others on a motive basis. It concerns the 479 respondents (53.2% of the sample) who can thus be regarded as strict planners.

13.1 Definitions

Motive planning implies a deliberate, intentional, premeditated attempt by couples to plan one or more pregnancies exclusively by means of contraception. Action planning, on the other hand, is reserved for those ever-pregnant users who "plan" one or more pregnancies - without the use of contraception - before becoming users. The action planners usually wish to have one or two - and sometimes more - pregnancies as soon as possible after marriage. Then they become users and may space their remaining pregnancies or refrain from having any pregnancies at all. As far as action planning is concerned, in this chapter we only deal with complete action planners and mixed planners (some action, some motive). Clearly, in the sample, there were future-user women who were in the process of having their pregnancies "as soon as possible" after marriage but because they had not yet used any form of contraceptive, they were not eligible for consideration in terms of strict planning status which is confined to ever-pregnant users.

All pregnancies reported by motive and action planners are planned pregnancies while three out of every ten pregnancies reported by mixed planners are either unplanned or accidental; most of their pregnancies are, however, planned.

Though motive and action planning have the same end product, so to speak, they are nevertheless conceptually distinct and will be treated as such.

Couples who commence using contraception at the

outset of marriage and later on deliberately stop using contraceptives in order to have a child are known as motive planners.

Couples who commence planning on an action basis and later plan on a motive basis are termed mixed planners.

Completely action planners are mainly those who have been married for a relatively short period of time. Most of these couples will in all likelihood become mixed planners in due course.

In this chapter we omit any consideration of those couples who are users but who have been unsuccessful at their family planning attempts. Here we do not distinguish between fecund and sub-fecund because most of the couples under consideration are fecund. Furthermore, added controls would reduce the numbers, especially in cross-classification with the usual sociological variables. In addition, by including both fecund and sub-fecund, a better picture of family planning over a period of time will emerge. Furthermore, if we limit our analysis in this chapter to fecund couples only, we thereby exclude those respondents who may have planned all their pregnancies either on a motive basis or an action basis or on a mixed basis until the onset of one or other form of sub-fecundity rendered this planning largely superfluous.

It is important to note that we are regarding the planning couples at one specific moment of time, and consequently our categories are impermanent and, possibly even shifting. We cannot predict the future behaviour of these planners with any degree of certainty. Completely motive planners may remain so for the rest of their reproductive career or they may warrant reclassification as mixed planners. Completely action planners may remain so or become mixed planners. Mixed planners can only remain classified as they are.

13.2 Characteristics of Strict Planners

Just over half (50.3%) of ever-pregnant users plan on a mixed basis, while nearly two-fifths (38.4%) are classified as completely motive planners, and just

over one-tenth (11.3%) belong to the completely action category.

It will be appreciated that to a certain extent our classification of a particular respondent depends on at what precise stage in family building and/or marriage duration she was interviewed. Respondents who plan their pregnancies on a completely motive basis as well as those who plan on an action basis have both been married for a shorter period (medians: 9.8 years and 9.0 years respectively) while the mixed planners are longer-married respondents (12.2 years). (X^2 = 6.08, d.f., 2, $p < .05$).

Completely action planners and completely motive planners are younger on the average than the sample as a whole while women whose planning is mixed are older than the average. The median age of the sample is 33.7 years while the median for completely action planners is 30.3 years and for completely motive planners it is 32.1 years; the median age of mixed planners is 34.9 years. (Median test, X^2 = 10.66, d.f., 2, $p < .01$).

All respondents were questioned about their family completion status. As would be expected a higher proportion of the mixed planners - being older and longer married - regarded their families as complete, whereas less than half (46.3%) of the completely action, and over half (52.7%) of the completely motive planners feel that their families are complete. Family completion status distribution appears in the following table.

TABLE 50

PERCENTAGE DISTRIBUTION OF EVER-PREGNANT USERS, BY STRICT PLANNING STATUS, BY FAMILY COMPLETION STATUS

FAMILY COMPLETION STATUS	ALL RESPONDENTS N = 899	STRICT PLANNING STATUS		
		Completely Motive N = 184	Completely Action N = 54	Mixed N = 241
Complete	57.9	52.7	46.3	71.4
Incomplete	36.5	41.3	50.0	24.1
Uncertain	5.6	6.0	3.7	4.5
Total	100.0	100.0	100.0	100.0

X^2 = 23.12, d.f., 4, $p < .01$

13.3 Family Size of Strict Planners

With regard to H.F.R. (actual children) the differences between our three planning status groups is not significant, viz., complete motive (5.0 children) complete action (5.8 children) and mixed (7.3 children). (X^2 = 4.53, d.f., 2, $p > .05$).

The H.F.R. (total pregnancies) is as follows:

Complete Motive = 6.1
Complete Action = 6.5 (X^2 = 5.19, d.f., 2, $p > .05$)
Mixed = 8.3

In terms of planned pregnancies, the H.F.R. for the three groups does not differ significantly, viz., complete motive (6.1), complete action (6.5) and mixed (6.0). This is very hypothetical in that it posits class fixity over 30 years as well as constant fecundity for the same period.

Respondents who plan on a mixed basis expect, on the average, to have more children in their completed family than do other strict planners, viz., 3.8 children as compared to medians of 3.1 children and 3.3 children in the case of the completely motive and the completely action planners. (Median test, X^2 = 23.12, d.f., 2, $p < .01$). Only the mixed planners exceed the sample average of 3.6 children.

All three classes of strict planners have a lower median ideal family size than the average respondent. However, the differences between these three classes vis-à-vis ideal family size is insignificant, viz., completely motive (3.9 children), completely action (3.8 children) and mixed (4.1 children). (Median test, X^2 = 4.92, d.f., 2, $p > .05$).

On the average, mixed planners say they want more children (median 4.2 children) than the average woman interviewed (3.9 children) - this may, of course, be a rationalization. The median number wanted by the completely motive planners (3.6 children) and the completely action planners (3.7 children) falls below the sample norm and these two classes differ significantly from women who plan their pregnancies on a mixed basis. (X^2 = 19.44, d.f., 2, $p < .01$).

13.4 Use of Contraception

All the women investigated in this chapter are users. However, their patterns vis-à-vis time of commencement of use differ quite significantly.

All completely motive planners commence using contraceptives from the outset of marriage whereas all action planners deliberately refrain from using any form of contraception until after the birth of the first child. Three out of every ten (30.3%) mixed planners are immediate users. Only completely action planners and those who plan on a mixed basis qualify as later users. Nevertheless the patterns of commencement of use of these two strict planning groups differ quite appreciably. Mixed planners commence use of contraception well before the action planners. Nearly three-quarters (73.8%) of respondents who plan on a mixed basis commence using contraceptives after their first pregnancy, while only 44.0% of the completely action planners are found in this category. Action planners clearly delay first use of contraception to a greater extent than the mixed planners, e.g., nearly one-third (32.0%) of the completely action planners report use of contraception only after the third or later pregnancy whereas the corresponding proportion for mixed planners is 8.3%. Differences are significant. (X^2 = 20.34, d.f., 2, $p < .01$).

No particularly significant differences emerge when the three classes of strict planners are analysed in terms of the type of contraceptives used. In all three classes, appliance methods are preferred to non-appliance methods. Respondents who plan on a mixed basis report the use of rhythm to a somewhat greater degree than the completely motive and the completely action planners but the differences are statistically insignificant.

13.5 Spacing of Births

Women who plan their pregnancies on a completely action basis and mixed planners tend to have their first child much sooner (a median of 1.2 years in both cases) than completely motive planners (median interval of 2.1 years). (Median test, X^2 = 36.36, d.f., 2, $p < .01$). The average interval for the whole sample is 1.4 years.

In comparing the median interval between the birth of the first child and that of the second child for all three planning groups one finds that the mixed planners conform to the sample norm, viz., 2.4 years while the median for completely action planners is 2.1 years and the median for completely motive planners is 3.0 years. (Median test, $X^2 = 17.63$, d.f., 2, $p < .01$).

13.6 The Influence of Social Factors

The higher one ascends the scale of family planning of rational intention and effective execution as measured by frequent use of contraception, the less influence do socio-economic and socio-cultural factors appear to have. Commitment to family planning acts as a type of common denominator and leveller.

One significant factor does emerge from analysing strict planning status in terms of standard socio-economic variables, viz., women who have been gainfully employed since marriage manifest a much higher degree of completely motive planning than women in the other work and non-work categories. More than three-quarters (76.7%) of "ever" working women are classified as motive planners - this is much higher than the norm (38.4%). Women in the other employment sub-groups do not differ significantly from each other or from those who have never worked. (For full particulars, see Table C-57 Appendix C).

Respondent's standard of education, annual family income and ownership/non-ownership of property apparently do not alter the general pattern of strict planning status as far as ever-pregnant users are concerned. However, husband's occupation exhibits an irregular relationship with strict planning status - the difference between the two white-collar sub-groups is insignificant with the lower-white-collar women manifesting a very slight edge on the upper-white-collar women as regards degree of completely motive planning (47.9% and 43.1% respectively). The difference in strict planning status between the upper-blue-collar and lower-blue-collar respondents is again minimal but both blue-collar sub-groups fall below the norm as regards motive planning (32.7% and 26.2%). As one descends the occupational scale so the incidence of completely action

planning increases. (See Table C-58, Appendix C).

Jewish respondents reveal a strict planning status distribution quite different from all other sub-groups in the sample, viz., 70.6% are completely motive planners, 29.4% plan on a mixed basis and there are no completely action planners among ever-pregnant Jewish women. The difference in strict planning status between the other three religious groups in the sample is statistically without significance.

As far as strict planning is concerned, an almost identical pattern emerges when English and Afrikaans subjects are compared. Of the English ever-pregnant users, 37.6% are classified as completely motive planners and the relevant proportion of Afrikaans respondents is 38.9%. Just over half (50.9%) of the English ever-pregnant users plan their pregnancies on a mixed basis as compared to just under one half (49.4%) of the Afrikaans sub-group.

When educational level and home language were held constant and strict planning status varied, no significant differences were found on the lower educational level (respondents with exclusively secondary school or primary school education). On the higher level (matriculation and/or university/college), Afrikaans ever-pregnant users showed a much higher degree of motive planning (60.5%) than their English counterparts (39.6%). ($X^2 = 4.09$, d.f., 1, $p < .05$). A similar comparison was made with home language and income level but no significant differences were noted.

Some interesting differences appear when strict planning status and home language are held constant while type of contraceptive used is varied. English ever-pregnant users whether they plan on a motive or a mixed basis differ from the Afrikaans user pattern vis-à-vis type of contraception employed in that they use either appliance methods exclusively or mixed methods, to a greater extent than the average user. They use non-appliance methods only to a lesser extent.

When strict planning status is held constant, we see notable differences vis-à-vis type of contraception used between English and Afrikaans ever-pregnant users, both among completely motive planners and those

who plan on a mixed basis.

In the completely motive planning class, nearly three-fifths (59.5%) of the English respondents and just over one-third (36.8%) of the Afrikaans respondents report exclusive use of appliance methods of contraception. Approximately one in ten (10.7%) of the English women use only non-appliance methods, whereas these are used by over two-fifths (40.8%) of the Afrikaans women who plan their pregnancies on a completely motive basis.

Among mixed planners, the two main language sub-groups differ quite noticeably in their contraceptive use pattern. For instance, just over half (52.3%) of the English ever-pregnant wives use only appliance methods as compared to just over a third (35.1%) of the Afrikaans wives. Approximately three in ten English respondents (31.3%) make use of mixed methods and the relevant proportion for the Afrikaans respondents is 20.2%. Just less than one-sixth (16.4%) of the English respondents limit themselves to non-appliance methods of contraception whereas the corresponding Afrikaans proportion is 44.7%.

Since the English- and Afrikaans-speaking couples numerically constitute two of the largest and most important sub-groups in the sample population, it is worth analysing their strict planning status further. It should also be remembered that the difference between these two sub-groups is not merely linguistic but religious as well.

As far as all users are concerned, motive planners have a shorter median marriage duration than mixed planners. However, the Afrikaans users deviate from this pattern in that, in all three planning sub-groups, they have a below average median marriage duration. The median marriage duration for English motive planners (9.9 years) and Afrikaans motive planners (9.8 years) is much closer than between English mixed planners (13.3 years) and Afrikaans mixed planners (9.8 years). This latter difference is statistically significant, i.e., $X^2 = 5.99$, d.f., 1, $p < .05$). On the average the action planners of both language sub-groups have been married fairly much the same length of time.

As far as ideal family size is concerned, significant differences appear between the median average of English and Afrikaans motive planners (3.6 and 4.3 children respectively). (X^2 = 6.98, d.f., 1, $p < .01$). In the case of the mixed planners, the difference between the two language sub-groups is not so great, viz., the English average is 4.0 children while that of the Afrikaans users 4.4 children is considered ideal. (X^2 = 5.44, d.f., 1, $p < .05$). The difference between the English action planners (3.7 children considered ideal) and their Afrikaans counterparts (3.9) is slight. On the whole, strict family planning status does not unduly change the overall English/Afrikaans differences as regards the number of children considered ideal.

When motive planning is held constant, English users are seen to want less children (3.4) than Afrikaans users, for whom the median number of children wanted is 3.9. (X^2 = 5.31, d.f., 1, $p < .05$). Between the mixed planners of both language sub-groups no significant differences occur (English - 4.1, and Afrikaans - 4.3 children wanted). Similarly, the median for English action planners (3.6 children) is very close to that of their Afrikaans counterparts, viz., 3.7 children wanted.

The status of completely motive planning does not place English and Afrikaans users on a par vis-à-vis the size of their completed family - the median number expected by the English-speaking motive planners is 2.9 (sample median, 3.6 children) while for the Afrikaans-speaking motive planners it is 3.4 children. (X^2 = 4.83, d.f., 1, $p < .05$). In the case of mixed planners, English users (3.6 children) and Afrikaans users (4.0 children) do not differ significantly. (X^2 = 2.85, d.f., 1, $p > .05$). Among the completely action planners, the English users (3.3 children) and the Afrikaans users (3.2 children) are close to each other, and both are below the sample norm as regards the number of children expected in the completed family.

As regards the Hypothetical Fertility Rate based on the number of children ever born, there is no significant difference on the motive planning level between English (4.7) and Afrikaans (5.5) users and both are below the sample average (6.0). (X^2 = 3.22, d.f., 1, $p > .05$). Among the mixed planners, the language sub-groups do differ significantly (English: 6.9 and Afrikaans: 8.1 children). (X^2 = 8.70, d.f., 1, $p < .01$). The

action planners are not considered here because this would be unrealistic in that it is extremely unlikely that any woman would continue completely action planning for her whole reproductive life.

The H.F.R. (calculated from the total number of pregnancies) reveals that English motive planners (5.9) and Afrikaans motive planners (6.7) fall below the sample average (7.6); the difference between these two sub-groups is significant at the 5.0% level of confidence. ($X^2 = 4.86$). In the case of both language sub-groups who plan on a mixed basis, an above average H.F.R. is obtained (English: 7.9, Afrikaans: 9.4). ($X^2 = 4.37$, d.f., 1, $p < .05$).

In restricting H.F.R. to planned pregnancies among mixed planners, there is scarcely any difference between the two language groups, viz., Afrikaans: 5.6, English: 5.5 pregnancies.

We already know that mixed and action planners reveal striking differences as regards the timing of the first use of contraception. However, when we hold strict planning status constant and vary home language, a constant picture emerges and no significant differences appear. In short, both English and Afrikaans mixed planners have an almost identical pattern of first use of contraception. Although Afrikaans users who plan on an action basis, delay first use somewhat more than do English action planners, the differences are not statistically significant and the original overall pattern remains intact.

It has already been noted that among users planning on a mixed basis, there are some unplanned pregnancies. Among English mixed planners 12.4% of all pregnancies are unplanned while the corresponding proportion for Afrikaans mixed planners is 27.2%. ($X^2 = 28.66$, d.f., 1, $p < .01$). This is of course, partly a function of the greater employment of non-appliance and mixed methods of contraception by Afrikaans users. Successful planning is highly correlated with the exclusive use of appliance methods of contraception.

Finally, as regards the question of family size preference, there are no significant differences between the language sub-groups whether they plan on a motive or a mixed basis.

CHAPTER XIV

FINDINGS AND CONCLUSIONS

In this chapter the major findings of the study are summarised and some general conclusions drawn. It will be seen that not all the tentative hypotheses outlined in the first chapter have been confirmed by the data; in fact, some have been disproved while analysis of the data compelled modification of others. These revised tentative hypotheses appear at the end of the section dealing with the main findings of the survey.

14.1 Summary of Main Findings

14.1.1 Major Findings

Certain major findings have emerged from the analysis of the data gathered in the present survey:-

1. Family size and world view (cultural conceptions) are clearly related.
2. The extent of family planning is an indication of the process of rationalization of behaviour in the population from which the sample was drawn.
3. In family planning there are degrees of rationality, as there are also sub-cultural variations.
4. The prevalence of family planning is related significantly to the couple's sub-culture - the couple's attitude toward family planning stems largely from their sub-cultural orientation.
5. The success in family planning is connected in a significant way with the couple's educational attainments.
6. The types of contraceptives used to achieve family planning - except in the case of Catholic respondents - bear a strong relation to the couple's socio-economic status.
7. Use of contraception does not automatically

imply successful family planning; this is determined by the presence of important intervening socio-economic variables.

8. The assumed functional interdependence between religious sub-cultures and various aspects of family planning is considerably weaker than was assumed at the outset of this study.

9. The strongest impression made by this study is the fact that once respondents are committed in act to family planning, socio-economic and socio-cultural differences tend to lessen but not to disappear entirely. Family planning is a quasi-leveller. However, the differential acceptance of family planning is socially and culturally conditioned.

10. Family planning embraces a number of different types of planners who are conceptually and actually distinct, and these are related to socio-economic differences.

11. The question of the couple's fecundity status is of pivotal importance vis-à-vis use of contraception and family planning.

12. Family planning is, to a degree, inversely related to family size.

The main findings of this study will now be summarised under specific headings before proceeding with the general conclusions to which these findings give rise.

14.1.2 Fecundity and Sterility

The majority of the 900 married women interviewed in the course of this study are fecund. Impairments to fecundity increase with age and marriage duration. Fecundity, as such, is not related in any significant manner to socio-economic or socio-cultural variables.

In comparison with other studies our data reveal

a high incidence of sterility (18.0%) in the sample population and this was seen to result largely from surgical operations. Women whose sterility is due to an operation manifest a greater degree of planning than those women whose sterility is due to other causes. With regard to accidental pregnancies and the use of contraception, the different types of sub-fecund or sterile women do not differ significantly.

Family planning is highly correlated with fecundity and the use of contraception - those who "need" to control fertility tend to do so.

Fecund women have a lower foetal death rate than sub-fecund women. The foetal death rate is very high in the case of those definitely sterile women whose sterility is due to a surgical operation. The sterility in many cases is post hoc, after a history of pregnancy problems.

Sub-fecund women favour a higher ideal family size than fecund women - fecund women want less children than sub-fecund women. With regard to the number of children expected in the completed family, fecund and sub-fecund respondents do not differ greatly. Furthermore, the fecund wives are most satisfied with the number of children they expect to have eventually, while this is not the case with many sub-fecund women. The degree of fit between numbers wanted and the number of children they actually expect achieved by fecund wives is somewhat higher than that achieved by sub-fecund wives.

Fecund women are more favourably disposed to family planning than are sub-fecund women in this study. It was seen that sub-fecundity plays a highly determining role in the decision not to use contraceptives.

Fecund non-users have a higher birth rate than sub-fecund non-users.

14.1.3 Use of Contraception

The use of some form of contraception would appear to be a widely-accepted norm in the sample population. Non-users are mostly sub-fecund. Thus, non-use of contraception does not, *per se*, imply an above-average number of pregnancies but rather an above-average incidence

of fecundity impairments. The greater the degree of sub-fecundity the less need there is for the employment of contraceptive devices. On the other hand, use of contraception is unequivocally associated with fecundity.

Great differences in expected family size were observed between fecund users and fecund non-users. Among the fecund respondents, use of contraception does make a difference to the number of children the average woman would normally have during her reproductive span; fecund non-users show a notably higher average. Clearly, to a considerable extent contraception implies family limitation.

Seven out of every ten Catholic users violate the Church's prohibition of all forms of "artificial" contraception. Religious affiliation does not make the difference we had originally hypothesised. The differences between the religious sub-groups composing the sample population are centred upon methods rather than actual use of contraception. In the case of Afrikaans Protestants differential use vis-à-vis method is due largely to socio-economic factors, whereas in the case of Catholics this is much less so but rather due to the operation of a definite religious norm. Differential usage remains even when the controls of income and education are applied.

A higher proportion of English-speaking than Afrikaans-speaking respondents use contraception.

Educational status is the variable most powerfully associated with use of contraception. Higher socio-economic status, urban birth and membership of the economically-active population are positively associated with use of contraception.

The majority of users employ contraception regularly, the rest occasionally. Regular users who are fecund have a lower fertility rate (pregnancies and children born alive) than fecund occasional users. Jewish and English Protestant respondents use contraception more regularly than Afrikaans Protestant and Catholic respondents who are more inclined towards occasional use. The regular users of contraception are more likely to be found in the higher socio-economic categories.

Approximately one-half of all users employ

appliance methods of contraception exclusively. Among the fecund users those reporting exclusive use of appliance methods of contraception have numerically lower family size ideals and expectations than fecund users employing other types of contraception.

Standard of education and socio-economic status are positively associated with the exclusive use of appliance methods of contraception. Use of anti-ovulatory tablets ("the pill") is inversely related to marriage duration; it is mainly used by the younger married women. These tablets are particularly favoured by the better educated women and among the religious sub-groups; only the Catholics deviate from the sample norm in that only a small minority of Catholic users employ "the pill".

The most successful planners commence using contraceptives early in their marriage. Generally speaking, the higher the pregnancy rate the later the couple commenced using contraceptives. The more highly educated respondents were, the sooner they commenced with contraception. The religious sub-groups differ quite strikingly with regard to first use of contraception in marriage. Jewish respondents are the first to start and they are well in advance of English Protestants and Catholics, while the Afrikaans Protestants delay longest before becoming users. Urban-born respondents and those of higher socio-economic status are much more inclined than others to begin with contraception very early in marriage.

Looking to the future, it was discovered that more than four out of every five women interviewed would be able to be classified as a user before her reproductive career was ended. The majority of never-users suffer from some type of sub-fecundity. Present use and future use of contraception was closely linked with fecundity status.

Non-use on the part of fecund couples greatly increases family size and the pregnancy rate as compared to that of the fecund ever-users. Among the fecund (i.e., the majority of the sample) the vast majority of all the religious sub-groups will eventually terminate their reproductive careers in the user category. Catholics were found to be the most responsive to the pressure of

fecundity; as the implications of fecundity manifest themselves so their employment of contraception increases notably. Afrikaans-speaking respondents show more sensitivity to fecundity - it makes them more inclined to become users - than English-speaking respondents but the latter have a higher incidence of contraceptive use. Similarly, in the lower income classes the presence of fecundity strongly increases the proportion of ever-users as compared to users. A like phenomenon appears among respondents in the lowest occupational class.

14.1.4 Family Size

Women who have been married longer tend to favour a numerically higher ideal family size than the more recently married women. Jewish and English Protestant wives express a lower preference vis-à-vis ideal family size than the Afrikaans Protestant and Catholic wives. In the present study ideal family size is inversely related to educational standard and socio-economic status.

With regard to personally desired family size, the longer married women want more children than those who have not been so long married. Users want somewhat fewer children than non-users. Use of contraception does not appear to erase socio-cultural and socio-economic differences in this respect. Catholics and Afrikaans Protestants deviate upwards from the sample norm while Jewish respondents and English Protestants deviate downwards. Desired family size is, as one might expect, inversely related to socio-economic status and educational standard.

Only when respondents are on a par fecundity-wise, do socio-economic and socio-cultural differences manifest themselves with regard to actual family size. Birth rate is inversely related to educational standard and socio-economic status in the sample population. In this context only the Afrikaans Protestant respondents deviate from the sample norm with a higher birth rate and the Jewish respondents with a below average birth rate.

What particularly emerges is that the time of commencement of use of contraception has a greater

bearing on birth rate than the actual use of contraception itself. In general, the sooner contraception is commenced the lower the birth rate.

Fecund non-users expect to have larger families than any other group in the sample. Fecundity and the use of contraception combine to narrow the gap between the various socio-economic and socio-cultural sub-groups in the sample population with regard to expected family size. As far as religious sub-groups are concerned, only Afrikaans Protestant wives vary from the sample pattern in that their expectations about family size are higher.

Not only is the timing of contraception an important factor but frequency of use has a significant bearing on expected family size. Earlier and regular use are positively associated with a below average expected family size.

The majority of the 900 women interviewed purport to be satisfied with their expected family size while just over one-quarter want more children than they expect to have and only one in twenty expect more than they want.

14.1.5 Attitudes to Family Planning

The great majority of women in all the sub-groups of the sample approve of family planning. Those who approve of family planning tend on the whole to have a lower birth rate than those who disapprove. Approval of family planning is negatively associated with desired and expected family size.

In all the sub-groups the presence of fecundity increases the proportion approving of family planning, especially in the lower socio-economic and less well-educated sub-groups. Although fecundity clearly increases the proportions of Afrikaans Protestant and Catholic respondents approving of family planning, these two sub-groups still fall below the sample norm. While the presence of fecundity is undoubtedly a conditioning factor, it does not eradicate socio-cultural and socio-economic differences.

The presence of fecundity strengthens the proportion of couples approving of the use of chemical

and/or mechanical contraceptives. Hence, younger married couples are more favourably disposed than older married couples. Those couples who approve of chemical and/or mechanical contraceptives have a lower birth rate than those who disapprove. The same applies in the case of expected family size.

The respondent's standard of education and socio-economic status are positively associated with approval of chemical and/or mechanical contraceptives. While most sub-groups are sensitive to the pressure of fecundity, this factor in no sense removes the differential degree of approval among the various sub-groups. The most striking differences occur among the religious sub-groups where we find a minority of Catholics approving of chemical and/or mechanical contraceptives as compared to a majority of respondents in the other religious sub-groups. Afrikaans Protestants do not approve to the same extent as Jewish and English Protestant women but they do approve to a noticeably greater extent than do the Catholic respondents.

In general, a positive attitude towards family planning usually involves a correspondingly favourable attitude to the use of chemical and/or mechanical contraceptives, except in the case of Catholic respondents - only half of those Catholic women who approve of family planning are favourably disposed to the use of chemical and/or mechanical contraceptives.

14.1.6 Family Size Attitudes

Family size preference (large or small) is not significantly related to socio-economic or socio-cultural variables. Only when the data are analysed in terms of the respondent's marriage duration does it appear that there is a stronger preference for the small family among the younger married women.

Ideas of what constitutes a large family differ for users (below average) and non-users (above average). Educational level and socio-economic status are inversely related to ideas about what number of children constitute a large family. On this question the number favoured by Catholic, English Protestant and Jewish respondents is below average, whereas the number considered necessary

to constitute a large family by the Afrikaans Protestant respondents was well above average. Likewise, women of farm and rural origin required more children to constitute a large family than did town- and city-born respondents.

A woman's own pregnancy history appears to influence the number of children she would like a daughter of hers to have. The higher the pregnancy rate the more children are wanted for a daughter. Users want fewer children for their daughters than do non-users. Fecundity status appears to play no role in this question.

Comparison of the number of children wanted for a daughter with variables such as standard of education, husband's occupation and annual family income failed to reveal any significant differences. English-speaking respondents are slightly below average and Afrikaans-speaking respondents somewhat above average in this matter. Afrikaans Protestant women want more children for their daughters than do women in the other religious sub-groups; Catholic women reflect the average and English Protestant and Jewish women are slightly below average.

Fecundity status, use of contraception and marriage duration appear to have no bearing on a woman's attitude to those couples who practise complete and permanent avoidance of children. The general attitude of the sample is one of disapproval. In this connection Jewish respondents show the greatest amount of tolerance and Afrikaans Protestants the least, while the English Protestant and Catholic respondents occupy an intermediate position. Tolerance for couples who avoid having children entirely is also positively associated with educational standard and socio-economic status.

14.1.7 Levels of Successful Family Planning

In terms of broad planning categories, the family planning patterns found in the present sample closely approximate those found by the American demographers Freedman, Whelpton and Campbell (1959), in their nationwide study of 2713 married women except in so far as the American study revealed a notably higher incidence of excess fertility.

In general, it can be said that the more fecund a couple is the more successfully they plan their families.

Completely successful planners have lower family size expectations both in the ideal and the actual order than less successful planners.

Both completely and partly successful planners manifest a very similar pattern of regularity of contraceptive use as compared to the unsuccessful planners who use contraception occasionally rather than regularly.

The completely successful planners place greater reliance on the exclusive use of appliance methods of contraception than other types of planners. Furthermore, the completely successful planners use fewer particular methods on the average than other planners.

Completely successful planners report a high degree of immediate use of contraception in marriage as compared to other planners. Unsuccessful planners delay first use of contraception longer than other planners.

Couples who achieve complete planning success space the births of successive children more widely than other planners.

In the case of the completely successful planners one finds a lower pregnancy rate as well as a lower birth rate; unsuccessful planners have the highest rate of pregnancy wastage. All the indications are that completely successful planners will have smaller families on the whole than either the partly successful planners or those couples who are entirely unsuccessful. On the average the completely successful planners are younger in terms of marriage duration than the other types of planners.

Of all the sociological variables employed in this study, the wife's religious affiliation reveals the greatest range in differential planning success. Jewish users achieve by far the greatest degree of successful planning, while Catholic users are the least successful, and English Protestant and Afrikaans Protestant users occupy an in-between position.

Educational status is correlated with planning success - the lowly educated have the least successful planning. As regards the main language groups, the planning success of Afrikaans-speaking respondents increases with higher educational standard and improving socio-economic position to a much greater extent than is the case with English-speaking respondents.

The pull of variables such as educational standard and annual family income appears to be more powerful in the case of Afrikaans-speaking users.

With reference to the type of contraception used by successful planners, Catholic and Afrikaans Protestant users differ markedly from the sample pattern - both these religious sub-groups evidence a much greater reliance on non-appliance methods of contraception. What is interesting is that Catholic users, who are only partly successful in their planning attempts, use appliance methods of contraception to a far greater extent than their co-religionists who are completely successful planners. Failure with the rhythm method compels some Catholic users to switch to appliance methods of contraception late in their reproductive career, and by that time they already have a history of unsuccessful planning.

The more highly-educated completely successful planners rely more on the exclusive use of appliance methods of contraception than do those completely successful planners with a lower standard of education.

English-speaking and Afrikaans-speaking users in the same planning category, (whether completely successful or partly successful or unsuccessful), show considerable variation in the type of contraception employed. Whatever the planning category, English-speaking users show a preference for the exclusive use of appliance methods of contraception, whereas Afrikaans-speaking users rely disproportionately on non-appliance methods.

With regard to the spacing of births, Catholic planners are the least successful while the other religious sub-groups manifest an above average (lengthier) spacing pattern as compared to the sample as a whole. Higher-educated completely successful planners have a higher median interval between births than other completely successful planners.

In respect of the actual number of planned pregnancies, Catholic and Afrikaans Protestant users fall below the sample norm, whereas English Protestant and Jewish users reveal an above average pattern. Educational standard and socio-economic status are both positively associated with the number of planned pregnancies achieved.

Among all the sub-groups in the sample only the Catholic users have an above average accidental pregnancy rate.

Degree of planning success seems to be a more influential factor with regard to expected family size than is the couple's home language. The more highly-educated users have a more restricted range vis-à-vis expected family size in all planning groups than less well-educated users. In like manner planning category appears to be more decisive as regards expected family size than socio-economic status.

In all sub-groups the partly successful planners manifest a higher pregnancy rate than their counterparts in the completely successful planning category. On the whole, completely successful planners have smaller families than the partly successful planners, whatever their sub-group. Family size is not, however, the over-riding criterion of planning: rather, the essence of planning is control and spacing, not size.

Among partly successful planners socio-cultural and socio-economic differences do appear to influence the type of contraception used whereas this is much less the case with the completely successful planners.

In terms of the hypothetical fertility rate, planned pregnancies appear highly correlated with standard of education in both the completely successful and partly successful planning categories. In all sub-groups, completely successful planners have a lower birth rate than partly successful planners. Although, within the same planning class a differential rate is evident, the range of differences in birth rate is greater among the partly successful planners in all sub-groups than it is in the corresponding sub-groups among the completely successful planners.

14.1.8 Strict Planning Status

Among the ever-pregnant younger users, two distinct types emerge, viz., the motive planners who commence using contraception at the beginning of marriage, and the action planners who want their first pregnancy (or additional ones) "as soon as possible" and then become users of contraception. Nearly two-fifths of all users are motive planners, while just over one-tenth are action planners. The third category, mixed planners, are usually older women whose marriage duration is above the average.

The hypothetical fertility rates between these three planning groups do not differ significantly. However, mixed planners expect larger families than women in the other two groups. All three groups favour a below average ideal family size. The median desired family size of the mixed planners is above the sample average and significantly higher than that of the motive and action planners. It is, of course, possible that some degree of rationalization is present.

Action planners delay first use of contraception longer (in terms of pregnancies) than women who plan on a mixed basis.

Motive planners record a much longer interval between marriage and the birth of their first child than respondents in the other two planning categories. This difference is maintained when the average interval between the birth of the first child and that of the second child is considered.

Acceptance of family planning acts, to some extent, as a neutralising agent vis-à-vis some of the socio-cultural and socio-economic variables already mentioned. For example, educational standard, annual family income and home language do not alter the general pattern of strict planning status as far as ever-pregnant users are concerned.

Jewish women are overwhelmingly motive planners while ever-pregnant users in the other religious sub-groups reflect the sample distribution in this regard.

In cross-classifying strict planning status simultaneously with home language and standard of education

one finds that Afrikaans respondents on a higher educational level (Matriculation or above) show a much higher degree of motive planning than their English-speaking planning counterparts. In the case of Afrikaans-speaking women, level of education is seemingly much more significant with regard to certain areas of reproductive behaviour than with English-speaking women.

The Afrikaans-speaking user's preference for non-appliance methods of contraception persist even in the motive planning category while English-speaking motive planners employ appliance methods to a far greater extent. As far as the pattern of contraceptive usage is concerned, there is very little difference between Afrikaans-speaking users who plan their pregnancies on a completely motive basis and those who are mixed planners. The English-speaking preference for appliance methods of contraception persists in all the planning categories. It would appear, therefore, that similar planning status does not imply identical methods of contraception.

In examining the main language sub-groups in the sample, it appears that the status of motive planning does not eradicate all differences between English-speaking and Afrikaans-speaking users, e.g., Afrikaans-speaking users have a higher ideal family size as well as a larger expected family size than English-speaking users in the same category. With reference to birth rate and pregnancy rate, the differences between these two groups of motive planners are not great. Similarly, no striking differences are to be found among English-speaking and Afrikaans-speaking action planners and mixed planners in terms of family size.

14.2 Revised Tentative Hypotheses

In the light of the data analysed in the preceding chapters the following revised tentative hypotheses are suggested :-

1. Granting the conditioning nature of differential fecundity status, fertility ideals and values will be closely related to actual reproductive performance.

2. A couple's fecundity status will constitute a strong but partial determinant of their family planning pattern. Those who are highly fecund, and therefore in a sense especially in need of family planning are more likely to use contraception, and use it effectively.

3. Cultural factors will contribute to the shaping of family planning patterns, but can never over-ride differential fecundity status.

4. Commitment to the use of contraception does not, per se, establish proof of successful family planning.

5. The timing of the use of contraception will appear as a function both of socio-economic status and fecundity status, and will be significantly related to successful family planning.

6. Reluctance to employ contraception will be negatively associated with socio-economic and educational status and, to a lesser extent, with fecundity.

7. A woman's pregnancy history - as seen in terms of fecundity impairments - will have an important bearing on the adoption of contraceptive techniques and family planning behaviour.

8. Marriage duration, insofar as it is correlated with differential fecundity status, will form an extremely compelling factor vis-à-vis a couple's acceptance of contraception and family planning behaviour.

9. A strong functional interdependence will exist between religious affiliation and the type of contraception employed in family planning.

10. Standard of education will be found to be a highly significant variable in determining

the use of contraception and family planning behaviour to the extent of being able to neutralise and/or modify religious and language differences.

11. Among the fecund, different types of family planning will be seen as a function of socio-economic and socio-cultural variables.

12. Highly successful family planning will be found to be positively associated with socio-economic status and educational status.

13. The spacing of offspring in marriage will be directly conditional upon family planning techniques, except where fecundity impairments exist.

14. Family size will be largely a function of the use of contraceptives and family planning and, to a lesser degree, of fecundity status.

14.3 Conclusions

It should be stressed in the beginning of this section that different kinds of planners must not be regarded as ideal types (mental constructs) but rather as average categories closely related to the empirical reality from which they are drawn. In addition, it should be stressed that both the methods used in this study as well as the results obtained are inductive and analytical in nature. A discernible family planning complex exists and the present study aims to isolate and analyse the main factors in this complex, and also, insofar as possible, to delineate the inter-relationships between these same factors.

Just over half (53.2%) of the sample have some degree of successful planning to their credit. Nearly 7 out of every 10 users record some degree of successful family planning. Newly-married users are naturally excluded as they have not yet become pregnant and so have

not yet produced proof of planning. Of itself, use of contraception does not constitute proof of planning. As was seen, a significant minority (18.8%) of all ever-pregnant users fail to record any measure of successful planning whatsoever. Use of contraception might be said to constitute evidence of a favourable attitude towards family planning and possibly also indicate a type of attempted planning, but use of contraception does not automatically imply family planning.

Family planning is overshadowed by two fundamental factors, viz., fecundity status and the use of contraception. One is biological and the other is socio-cultural. Not all the women interviewed are fecund; the sample, in fact, covers the whole range from high fecundity to complete sterility. Therefore, for some couples family planning and its vital correlate - contraception - are irrelevant and superfluous. This is not to say that before the onset of some or other form of sub-fecundity, some of these sub-fecund women were both users and planners. However, at the time of the interview a significant minority were passed the planning- and user-stage. While the great majority of the sample falls into the fecund category, we find that among the sub-fecund minority a significant proportion is classed as definitely sterile because of surgical operations (usually hysterectomy); nearly three-quarters of the definitely sterile group had undergone an operation rendering conception impossible. It is interesting to note that the surgically definitely sterile women manifest a more rational fertility pattern that the naturally definitely sterile women.

It is obvious that family planning represents an issue far more pertinent in the case of fecund couples than as regards sub-fecund couples, because it is the former who are more regularly and more really exposed to the risk of conception. Similarly, the use of contraception is positively associated with fecundity status whereas an atypically high proportion of non-users and never-users are found among sub-fecund couples. Generally speaking, non-use and never-use of contraception is to a large extent a function of one or other fecundity impairment rather than a question of religious or moral scruples or even aesthetic objections. To a very great extent, couples who for biological reasons do not have to use contraception, are non-users and never-users; while

the fecund who are biologically compelled to use contraception form the overwhelming bulk of users and future users. Put colloquially, in most cases those who have to use contraception, do; those who do not need to use contraception, do not. Therefore, throughout this study fecundity status has been a major control in the analysis of data. Fecundity status, it will be recalled, is predominantly a biological phenomenon and is not correlated with socio-cultural or socio-economic differences. It would appear that nature does not respect class or other cultural differences. Cultural considerations do, of course, enter the picture in that the use of contraception is chiefly a role-response to an environmental imperative.

Fecundity status colours the whole question of family planning with regard to both the respondent's attitude to it and the actual achievement of planned pregnancies. In addition, the whole question of use of contraception can only be assessed in terms of fecundity status. Use/non-use as well as ever-use/never-use is closely associated with a couple's fecundity status, e.g., only a fraction (7.5%) of fecund couples are classed as never-users. Put simply, most couples turn to contraception because they have to and a significant majority of those who never use contraceptives do not have to because they are sub-fecund.

The most successful planners tend to be highly fecund; they not only use contraceptives regularly but they commence use early on in marriage, usually right at the outset or before their first pregnancy.

The presence of fecundity in a marriage also strengthens the couple's tendency to approve of chemical and/or mechanical types of contraception. The sub-fecund tend to disapprove of this type of contraception in higher proportions than do the fecund and this is obviously partly due to the fact that many of the former (especially the semi-fecund group) experience great difficulty in becoming pregnant as well as carrying a pregnancy to a successful termination. As one would expect, the younger couples are more favourably disposed to the use of mechanical and/or chemical contraceptives.

It would be a mistake to regard the spacing of births as solely contingent upon a favourable attitude

towards family planning plus effective use of contraception. With the passage of time fecundity impairments arise, and these force couples to revise their spacing plans. In the case of motive planners this rarely happens, as they tend to reach their desired family size before the onset of fecundity impairments. In order to minimise the time factor as well as the fecundity impairment factor, in this study we usually limited our analysis of birth spacing to the first two children born.

By themselves, socio-cultural and socio-economic differences cannot completely explain differential use of contraception, because of the inexorable role played by differential fecundity status.

As regards expected family size, when fecundity status and use of contraception are held constant, then the role of the socio-economic and socio-cultural factors emerges but, in the light of the studies already alluded to and the data gathered in this survey, the role of these factors is no longer as predominant as was the case formerly. Fecundity, use of contraception and commitment to family planning do act as levellers vis-à-vis social differentials - not completely, of course, but nevertheless fairly significantly.

The evidence gathered in this study indicates that, holding marriage duration constant, planning (whether completely successful or only partly successful and whether conducted on a purely motive basis or a completely action basis or merely a mixed basis) does influence the number of children a couple actually has. Planning influences the number of children respondents expect to have in their families at the end of their reproductive careers. If we hold fecundity constant, then clearly planners have, and expect, and want, smaller families than non-planners.

In another way we see how attitudes are related to behaviour: those fecund couples (a very small minority) unfavourably disposed to the use of chemical and/or mechanical contraceptives have more children - in the least time - and expect on the average more children in their completed family, than those fecund couples (the vast majority) who approve of the use of chemical and/or mechanical contraceptives.

A favourable attitude to mechanical and/or chemical contraception is positively associated with family planning, especially with a high measure of success and completely motive planning.

Those respondents who prefer a large family to a small one evidence a higher hypothetical fertility rate than women favouring a small-sized family. This difference is carried over to desired as well as expected family size.

Users of contraception have quite a different idea of what constitutes a large family than do non-users. In this matter the fecund users fall below the sample norm vis-à-vis the number of children required in a family before it is considered large.

It will be recalled that the majority of users (89.0%) approve of family planning. One might legitimately wonder about the residual 11.0%. Sometimes it transpired that in the case of a couple using contraceptives the wife did not approve of family planning but was obliged to accommodate her husband; again, we encountered cases where the wife's attitude was ambivalent as her reproductive behaviour demonstrated. There were also a number of cases where the wife genuinely approved of family planning while her husband was indifferent or even hostile. This is particularly so in the case of those non-users (53.5%) who approve of family planning. It will be recalled that we put these attitudinal questions to the wives only. Again, one must remember that a high proportion of non-users are sub-fecund and consequently their approval of family planning is more academic, less personal, than in respect of fecund women the majority of whom approve of family planning and are users.

The more successful and refined the planning the lengthier the spacing between births. Furthermore, the shorter the marriage duration, the more likely the couple is to plan pregnancies. Indeed, all the indications are that in the future populations comparable to the sample population will evidence more and more family planning and, possibly, higher proportions of successful planning.

The use of contraception is so widespread in the sample as to constitute a norm. Not all couples

manifest the same technique pattern, but the majority of the sample are users and the vast majority of the women interviewed are likely to become users before the end of their reproductive career. Use of contraception is at a peak during the first 10-14 years of marriage, and then it declines quite sharply, primarily because of the development of various types of sub-fecundity which render use of contraception unnecessary.

When women are of the same fecundity status, then family planning has a decided effect on family size, actual and expected. The more successful the planning, the smaller both the actual and expected family size of the respondents in question, and the less successful the planning the larger both the actual and expected family size of these less successful planners. Among the fecund, the average actual and expected family sizes of the planning group is much smaller than in the non-planning group. Family planning in this context does imply family limitation. The highest fertility rates are found among fecund women who do not use any form of contraception and are therefore non-planners. The next highest rates occur among those fecund women who use contraception but use it ineffectively in that they have no degree of planning success to their credit. Then follow those who only partly plan their pregnancies, while the lowest rates are to be found among the most rational group, viz., the completely motive planners. Not only do we find family size differences among all these groups but the spacing patterns also tend to vary considerably. Generally, the same phenomenon is found among the various sub-groups of the sample population when planning status is held constant. However, the greatest amount of homogeneity and levelling appears to flourish among the most rational planners (the completely motive and the completely successful planners) while greater sub-group differences reveal themselves when the different kinds of partial planning and less successful planning are investigated.

As regards number of children considered ideal and desired, there appears to be some evidence for suggesting that a shift in outlook has occurred over the last two decades. On the whole, newly- and recently-married respondents in this study desire and regard as ideal smaller families than their counterparts married twenty years or more. Users want less children than

non-users in the same socio-economic and socio-cultural sub-groups. Use would seem to be, up to a point, a quasi-leveller. However, the difference in the number of children desired by the various socio-economic and socio-cultural sub-groups remains.

We found no evidence which would indicate that the type of contraceptive technique patterns favoured by different groups is in any way associated with differential actual family size. Actual family size is inversely associated with income and the wife's work status; women born in the urban areas tend to have smaller families than those born on farms or in rural areas, and Jewish women have smaller families than Afrikaans Protestant women. Women who use contraception regularly have smaller families than those who use contraception occasionally, and those who use contraception before their first pregnancy have smaller families than those who delay first use of contraception until after their first, second, third or even later pregnancy.

The sooner couples begin using contraceptives, the smaller their actual and expected family sizes; the sooner couples commence using contraceptives, the more successful their family planning. Immediate use of contraception in marriage is positively associated with wife's standard of education and to a lesser extent with income and occupation. Afrikaans-speaking users show a greater proportion of later users than do the English-speaking users. Among the religious sub-groups, Jewish women are immediate users of contraception to a far greater extent than women in the other religious sub-groups.

It might be said that one of the pointers to increasing social change which Weber noted was the intensifying bureaucratisation of life; so, too, in the urban world family planning has emerged because it, as a form of social change, was demanded by other concomitant forms of social change. In both bureaucracy and family planning patterns the rational element predominates.

Technological change is the over-riding influence in what demographers term the vital revolution because it sets in motion forces which, inter alia, elicit the family planning response from countless urban

couples. This fact implies that, for large sections of the population, the pull, let us say, of language and religious groups has weakened. In fact, among the standard sociological variables long associated with fertility differentials one notices, as far as the present study is concerned, a declining influence.

As far as the present sample study is concerned there is convincing evidence of the widespread diffusion of contraceptive techniques as well as favourable family planning attitudes consonant with the purposive-rational type of life-orientation described by Max Weber. Certainly, the completely motive planners in this study fit Weber's categorisation and, possibly, so do some of the mixed planners.

It has already been observed that some couples operate on a purposive-rational basis from the outset of marriage as far as family planning is concerned; other couples become so later on in their marriage - usually after a number of pregnancies. But these are two distinct groups and, strictly speaking, the late starters cannot be said to "practise" family planning entirely on a purposive-rational basis. The late starters are not precise calculators in the sense that the former group are; the late starters are couples who make a type of stop-gap adjustment towards a pregnancy situation which is becoming over-taxing in their particular marriage. It might be argued, of course, that strictly personality factors are involved in these two distinct typologies; this may or may not be the case but, most certainly, personality differentials cannot explain everything adequately. We are not dealing with single individuals so much as with couples involved in a structured role-complex. In addition, what is more significant is that this study shows that differential modes of orientation are associated with socio-economic and socio-cultural differences. Given fecundity at par, it has been seen that family planning is only partly a question of personal motivation; it is overwhelmingly conditional upon social parameters. The institution of marriage is one which is peculiarly sensitive to the pressures, demands and example of the generalized other.

A significant minority of the 900 couples in this study manifest a pattern of fertility behaviour that can be termed purposive-rational. An even greater

proportion give evidence of a sort of well-intentioned but often poorly-executed purposive-rational fertility behaviour, while the fertility pattern exhibited by a further minority is obviously non-rational and traditional. The great difference between the two extreme groups, i.e., those rational in intention and execution on the one hand, and the non-rational on the other, is to be found in their differing time perspectives. The purposive-rational group plan their fertility behaviour right to the end of their reproductive careers, while the non-rational traditional group is largely oriented to past and present, not to the future. The well-intentioned but not so effectively rational group have a poorer time perspective than the truly purposive-rational group, and they fall behind this latter group as regards efficiency and planning techniques. All three groups are conceptually distinct and also demarcated, with occasional blurring and over-lapping, socio-economically and socio-culturally. Some sociologists might term them sub-cultures, but this designation does not seem warranted by the data gathered in this study.

Even among non-users and never-users, a very small proportion of the women interviewed could be described as traditional in the sense that they simply intend seeking precisely the same alternative vis-à-vis family size and general fertility behaviour that their parents had selected before them. Nevertheless, some non-users will become future-users; even among the never-users the possibility of a change of mind cannot be ruled out.

From the data gathered, it is evident that most respondents have a specific number of children in mind which they consider ideal for the contemporary average South African white family. This number varies according to the respondent's general socio-economic status. Less clarity surrounds the number of children wanted (i.e., desired family size) because this is subject to revision as family building and married life progresses through time, and also because sub-fecundity and marriage duration are directly proportional. Many respondents reluctantly or gladly, as the case may be, settle for less children than they originally desired. While there are, indeed, cases where couples have more children than they want, the reverse is more common. This in itself is a major social change resulting from the vital revolution.

On the whole, except in the lower socio-economic sub-groups, the more recently married women in this sample are overwhelmingly in favour of family planning and the use of appliance methods of contraception, and were already using them or intended to do so shortly. There is no evidence that this trend will decrease; rather, it is most likely that it will increase. Use of contraception and commitment to family planning tends to increase with marriage duration up to the point where - as sub-fecundity begins to manifest itself - neither use of contraception nor family planning are relevant to a particular couple's situation.

To a great extent the sample population holds a set of values broadly favourable to family planning and family limitation. Those respondents in the higher socio-economic classes appear able to realise these values in their own fertility behaviour more effectively than respondents in the lower socio-economic classes. Furthermore, there exists a notable degree of unanimity about the feasibility of mechanical and/or chemical means of contraception. A significant minority are opposed to these techniques, mainly on "health" grounds or for aesthetic reasons, though a few do have religious and moral objections. As one would expect, couples who rely entirely on "natural" methods of contraception, such as rhythm or coitus interruptus are less successful planners than those who depend exclusively on chemical and/or mechanical means of contraception.

It is obvious that in South African urban society a high degree of contraceptive availability exists. However, as far as the sample population is concerned, completely successful planners are in a minority. Why?

(i) Not only must a set of values and attitudes favourable to family planning and, a fortiori, use of contraceptives be present, but

(ii) their actual employment in a given marriage must be seen as imperative, and

(iii) a high degree of competence in use must be achieved.

Not only do personal factors operate here but the pressure of reference groups in this regard has already been made clear. The social and psychological gap or distance

between these steps or requirements partly explains the shrinkage from the vast majority who approve of family planning to the - statistically speaking - more modest group who plan their families successfully.

There are numerous ways of classifying couples who plan their families. We might distinguish between those who plan to have small families (such as the completely motive planners) and those who will have larger families but who will space their pregnancies in a manner which they consider rational. These latter would be the mixed planners and the completely action planners mentioned in this study. Per se, family planning does not mean a small family; size depends on the type of planning executed by the couple. If, in the future, a population comparable to our sample population becomes increasingly a motive planning one, then smaller families would result. This study, one trusts, proves that as far as the sample population is concerned, there are many types of family planning, not just one kind. But in general, family planners - of whatever type - still, on the average, have smaller families than the non-planners provided the fecundity proportions remain constant.

For many reasons family planning can never be adequately investigated in a single, on-the-spot study chiefly because of the lack of the time perspective. For instance, we do not know what further advances in contraceptive techniques lie ahead in the future; we can surmise there will be such advances and that these will have a bearing on family planning. It is also possible that some of the non-users in this study, who , at the time of the interview were absolutely sure that they would never use any form of contraception in the future, will eventually be compelled to use some form of contraception in the future and might even qualify as mixed planners. Moreover, the factor of sub-fecundity is omnipresent and operates among all classes of a population and, as yet, we have no accurate means of making predictions in this regard. The present study, therefore, would be more significant if it were allied to a follow-up study. We can, in some case, infer the pattern of change, generally from indifference to family planning to acceptance thereof but our data are not absolutely precise in this regard. In fact, many interviewees told our interviewers that over the course of time their ideas about family size had undergone considerable change; time and its concomitant, experience, had made them more realistic and rational as

regards their own fertility expectations. Then, again, women in the lower socio-economic classes are often ignorant of appliance contraceptive techniques, or they are prejudiced against them (as are many of their husbands). Later on some of these women consult a doctor about a health problem and this is frequently their first introduction to chemical and/or mechanical means of contraception. In short, the phenomenon this dissertation examines is an ongoing, fluid one and an exhaustive study is only possible if one has a detailed account of the woman's entire reproductive career. This would require a longitudinal rather than a cross-sectional study.

Some scholars hold the view that psychological processes alone can satisfactorily explain differential fertility behaviour and family planning. Strictly interpreted, this explanation ignores or certainly minimises the socio-cultural conditioning that takes place in any society, but more especially in contemporary industrialised society. The differences between the various sub-groups of the sample population vis-à-vis family planning cannot be exclusively ascribed to psychological factors. The present-day family is subject to considerable socio-economic and communications-media type of pressure. Husband and wife are part of the society that is putting pressure on them to adjust to a way of life vastly different from that of their immediate ancestors. However, husbands and wives are not automata but are, in varying degrees, participants in decision-making which, in turn, affects family planning, family size and allied matters. Their decisions are not purely private in that normal or average people do not live in a purely private world; their decisions are a partial function of their various roles, domestic and extra-domestic. We might refer to the changed professional structure of today's world and the way in which this impinges on the professional man and his family. By definition, the professional man, on the average, manifests a far greater occupational role-involvement than the artisan or labourer. This is not entirely a question of individual temperament or personal choice but it is very largely structurally induced. In like manner, the compulsion towards family planning, while it may manifest itself at the level of personal decision-making, most certainly contains structural and institutional elements. Human beings are not pure personalities existing <u>in vacuo</u>. The human being internalises the values of his group or

sub-culture; he makes them his own. However, these norms and values are retained, kept vital, in the group's or sub-cultural structure and institutional or semi-institutional framework. Society forces its members to adjust, but not all members make a satisfactory adjustment; many are poor adjustment technicians and this is not solely because of psychological reasons but it is in no small measure due to a given cultural or sub-cultural (or sometimes contra-cultural) conditioning.

Family planning cannot be viewed purely and simply as an inner subjective matter. It represents a situational response to the stimulus of a particular kind of socio-cultural environment. Family planning belongs far more to the order of social facts than to that of inner psychological facts. The phenomenon of family planning possesses Durkheim's two major requirements for a social fact, viz., externality and constraint. The externality element is there for all to see but the constraint element is more subtle and less tangible but nevertheless real. No one is born with a commitment to family planning; this commitment is acquired through socio-cultural experience. A married couple in one sub-cultural group will feel far greater attraction towards family planning than will another couple in a different sub-cultural group. From one point of view, family planning represents a personal decision but it is one that is initially imposed on a couple from without by an objective order of facts to which they feel they must respond. One is not arguing any deterministic position here; one concedes that the element of choice is present - within narrow limits - but it always operates in terms of a socio-cultural framework.

Like the sociologist, the demographer tends to view individuals in terms of group membership, role-set and institutionalisation. Individual motivation is not ignored but it is interpreted in terms of a socio-cultural network. What is socio-cultural is sui generis and irreducible and any explanation thereof must be sought on a social, not an individual, level. The use of contraceptives and family planning appear prima facie to belong to the realm of the purely personal and domestic. However, deeper analysis shows that the pressure of economic institutions and society's clear-cut as well as unspoken, but implicit, expectations reach right down to the level of the individual couple. Marriage partners

and parents are enmeshed in role-expectation and role-fulfilment. Of its very nature, this can only be partly individual - it is largely social in that it is predominantly socially conditioned. Institutional norms and values are independent of the individual. Human personality and the social system interpenetrate. Family planning values and norms may be part of the consciousness of this or that individual, but these values and norms remain analytically independent of their individual manifestations.

Couples may seem to be controlling their own biological system in purely individual terms, but in fact they are reacting to differing goals and sets of alternatives which society makes available to individual marriage partners. Obviously, not all respondents in the present study have internalised norms and values favourable to the use of contraception and family planning. There have been others who have effectively internalised these norms and values but have been more or less ineffective in translating these into actual fertility behaviour. And it is precisely here that we see the pull of the group on the individual couple (e.g., the different patterns of use of contraception and family planning manifested by the higher socio-economic groups as compared to those evident in the case of the lower socio-economic groups). Furthermore, the ideology of a group influences couples as has been seen in the case of religious differentials vis-à-vis use of contraception (especially different techniques) and family planning patterns.

Beshers (1967) has very ably argued the case of the moulding power of social factors in matters of fertility behaviour, and this has been revealed by the present study. Beshers (p.74) contends that: "... the psychological experience of a person is constrained by social processes. The inputs of experience to an individual are mediated by psychological processes but the content of the experience varies according to social situations." In short, even our subjective biases result in part from the social world in which we live, and especially from the way in which our major reference group defines the situation. Variables subsumed under the term "social situations" are of paramount importance to the sociologist.

Society places constraints on all its members. Not all members react in the same way. Many react in terms of their group membership; they are conditioned

that way. Clearly, life in a technological and industrial society constrains many married people to plan their pregnancies and limit family size. The majority react favourably, but very often not at all efficiently; only a minority completely resist this rather iron-clad constraint. The difference between those who adjust to this constraint and those who ignore it is significant in terms of all the sociological variables employed in analysis. In addition, socio-cultural differences between different classes of planners is not without significance.

No individual, whatever his psychological make-up can ignore the generalised other. Without the other, there is no ego. Ego is never simply a self-defining actor but rather a group-defined being oriented toward a behavioural framework external to him and independent of him. It is particularly the reference groups which mediate the overall framework to the actor. The average actor to a very great extent interprets society and his roles within that society along the broad lines indicated by reference groups or classes he considers meaningful to himself. These groups or classes may be regarded in this context as pace-setters and goal-definers. Consequently, although it may be said that certain couples choose to plan their families, in a strict sociological sense, it would perhaps be more accurate to argue that they are structurally induced to do so but, of course, not all are equally successful.

It is possible to equate different types of planning with different sets of alternatives. The latter differ according to differential social situations; in addition, the constraint to choose - this differs socially, as well as structurally. It is only half the truth to allege that the subjectively more rational person chooses one set of alternatives while the subjectively less rational or more erratic person chooses another set. To deny this is to imply that individuals exist and operate within a socio-cultural vacuum.

The evidence gathered in the course of this study indicates that the vast majority of planning respondents manifest a type of sequential decision-making. This means that initial ideas and plans can be modified by experience or changing socio-economic circumstances.

The type of data gathered in this study and the level of analysis adopted does not permit any consideration of, or speculation about, the presence of those compulsive personality traits which Max Weber regarded as indices of complete commitment to rationality and efficiency.

The vast majority of the women who approve of family planning, and the vast majority of those who plan their families with some success, emphasised the importance of adequate care of children and the high financial demands of their children's future educational requirements. This is not to say that there is any evidence of a filio-centric sub-culture, but the future status of children in an increasingly competitive world was certainly in the forefront of the minds of a great number of the women interviewed. Hence, it is not surprising that income and family planning matters sometimes show an irregular relationship. In many pertinent fertility issues a marked difference was revealed between the top income sub-group (R5000 or more per annum) and the next income sub-group (R4000 - R4999 per annum) which contains a large proportion of salaried professionals. It is this class which has to curtail its fertility to a greater extent than the highest income class precisely in order to ensure the future status of its children. In the case of the second income class the balance between commitment to given status goals and available financial means remains a delicate and tricky one.

Particularly on attitudinal questions, our data confirms the findings of Banks (1954) that among middle-class persons it is the future status of their children (in the present study, education-wise) that impels them towards a favourable view of family planning because of considerations of a budgetary nature. It is clear that Banks' position has much in common with Weber's (1947) purposive-rational mode of orientation.

The lower income sub-groups supply the greatest proportion of fecund never-users. Here economic insecurity is negatively correlated with use of contraception and family planning. Research literature in the past few decades underlines the fact that this class plans very little on any level of life, and people in this class do not tend to organise their life experience rationally. In our sample, they constitute a distinct minority and

their attitude is the exception, not the rule. Among these couples one notes a hand-to-mouth existence and a stop-gap approach to life scarcely consistent with the demands of fertility control and family planning. In no life-sphere of lower-class persons does planning play a predominant role; planning and its twin, rationality, are usually not part of the life-experience and role-expectations of this group; planning, as such, is not sub-culturally valued, and with unpredictable economic fortunes would not be easy or particularly appropriate.

The haphazard fertility behaviour of this small group underlines the absence of planning motivation in the life of the average member of this group. Much of the seemingly non-rational, happy-go-lucky fertility outlook and the behaviour patterns so characteristic of this group is simply, on their part, a normal response learned in a poor physical and social environment. This social environment and the typical group life-experience is hardly calculated to impel persons in this class towards the use of contraceptives and family planning. In its essentials, the response-pattern of these persons to fertility pressures is similar to their response-patterns to pressures from other spheres of social living - the present counts most and long-term goals are notoriously absent from their thinking. Long-term goals, concepts of personal responsibility, ambitions for one's children - all these are largely culturally induced; such values are foreign to the women in the lower class who were interviewed in this study.

Of all variables, the respondent's standard of education appears to be most closely and decidedly related to the impact of a technology-dominated culture on fertility attitudes and fertility behaviour. In the present study, the more highly-educated respondents are obviously the most responsive towards technological change as related to the question of fertility. It is interesting to note that in many ways when one or other aspect of fertility was held constant and the respondent's standard of education and home language (or religious affiliation) varied, standard of education appeared to be the more powerful and decisive variable. Afrikaans respondents, traditionally more familial and conservative and less individualistic, tended to match their English counterparts vis-à-vis fertility attitude and planning patterns when both had the same standard of education.

The degree of Catholic non-conformity as regards use of "forbidden" methods of contraception underlines the fact that variables once considered vital in shaping fertility attitudes and behaviour have lost much of their force because of the interaction of other variables such as educational level, technological development and economic pressure.

The higher a respondent's standard of education, the less the impact made by fecundity in increasing the proportion of favourably disposed women vis-à-vis mechanical and/or chemical contraceptives. In this regard, all Catholic respondents and fecund Catholic women only, differ strikingly from all other religious sub-groups in that only a minority approve of mechanical and/or chemical contraceptives. However, the presence of fecundity in Catholic women more than doubles the proportion favourably disposed to the use of mechanical and/or chemical contraception.

The majority of the women interviewed attempt to plan their pregnancies, and the vast majority of the fecund women are in this intentional planning category. The degree of success achieved is highly variable. It is here that socio-cultural and socio-economic differences manifest themselves. For instance, planning success is clearly associated with religious affiliation - the Jewish users are overwhelmingly successful in their planning attempts, while the Catholic and Afrikaans Protestant users are conspicuously less successful, with the English Protestant users occupying an average and middle position. Planning success is partly a function of the type of contraceptive used which, in turn, especially in the case of Catholic users, is influenced by religious norms. It would be a great mistake to regard religious affiliation in this instance as the sole determiner. Religious affiliation is frequently a masking variable whereas religious identification or commitment is not, but, very unfortunately, we have no data on religious commitment for the present sample. The Jewish respondents in our study are characterised by a higher socio-economic status and a higher level of education, and these factors do contribute to differential fertility outlook and behaviour. Relative to other religious sub-groups, it is only in the case of some of the Catholic respondents where the religious variable, so to speak, offers resistance to the family planning and

contraceptive environmental pressures. However, as the Catholics are a small group in the sample detailed analysis and cross-tabulation was not statistically feasible.

It should be remembered that our data are presented in mid-stream as it were, before a couple's reproductive career is completed. We know from this study that as far as Catholic users are concerned, the more that planning success eludes them, the more rapidly they turn to the exclusive use of appliance methods of contraception which they had hitherto avoided. No other religious sub-group in the study manifests this tendency to the same extent. The Catholic users, too, report the highest proportion of accidental pregnancies. As accidental pregnancies mount, and as the rhythm method fails as an efficient planning technique, more and more Catholic users choose contraceptive techniques which violate their religious norms.

It is well-known that the Catholic Church has taken an official stand on the question of family limitation, and has recently re-affirmed its traditional position with regard to the methods permitted to its followers. Has this definite teaching of the Catholic Church in the past had any noticeable effect on the fertility behaviour of those Catholic women interviewed in the present survey? In general, an affirmative answer, albeit a qualified one, must be given. Catholic teaching has unmistakably influenced the type of contraceptive techniques used by the Catholic respondents, but it has not eradicated a definite amount of actual ambivalence in behaviour. The differences in usage patterns and family size are not nearly as great or significant as might have been expected. Furthermore, on many separate indices of fertility outlook and behaviour, Catholic respondents manifest a more "rational" outlook than Afrikaans Protestant respondents. The latter group is less conditioned by any official Church position than by socio-economic factors.

The Catholics in this study and those studied by Hill, Stycos and Back (1959) in Puerto Rico differ considerably in terms of socio-economic status, rural-urban background and standard of education. Catholics interviewed in the present study used contraceptives to a greater extent than do their Puerto Rican co-religionists

and have a lower fertility rate. However, Puerto Rican respondents favour sterilization as the most effective means of fertility control, whereas this is not the case with the Port Elizabeth Catholics interviewed. It is clear that religious factors alone are insufficient to explain these fertility differences. Port Elizabeth Catholics live in a far more industrialised and urbanised world than Puerto Rican Catholics and this difference is reflected in a different fertility outlook and different fertility behaviour patterns. In fact, the Catholic user pattern as revealed in this study is much closer to the Catholic pattern discovered by Freedman, Whelpton and Campbell (1959) in their GAF study.

In the present study the Catholic respondents scarcely differed from the rest of the sample in their use of contraception; where they differed was in the type of contraception employed.

As regards use of contraception, there were far greater differences between income, occupational and educational sub-groups than between the religious sub-groups. It appears that the religious pull is weaker than that exerted by variables such as standard of education and income.

The passage of time has the effect of turning reluctant Catholic and Afrikaans Protestant respondents into later planners. Frequent pregnancies compel use of contraception and family planning.

It is obvious from the present study that the religious factor does not have as great an influence on fertility behaviour - except in the case of Catholics with respect to differential methods - as one might have expected. Undoubtedly, especially in the case of Catholic interviewees, the hold of religious sanctions has weakened. In some cases religious affiliation and, more so, religious identification, possibly slows down the rational family planning diffusion process, but it certainly does not stop it.

Relatively few couples in the sample view fertility behaviour in terms of a religious perspective; most of them manifest purely secular perspectives in their approach to fertility behaviour. Of course, human beings are not always consistent in their behaviour and

fertility behaviour is no exception. Some respondents will invoke a supernatural referent for a particular fertility activity but for another, but related, fertility activity, a completely secular criterion is applied.

It is undeniable that, as far as the present sample is concerned, the proportion of couples committed to family planning, and particularly the proportion of couples enjoying varying degrees of success in their family planning attempts varies with socio-cultural and socio-economic factors. We find that a greater proportion of the higher educated women are among the planners than women in the lower educational categories; we also find that a much higher proportion of Jewish women are classed as planners than Afrikaans Protestant women.

Once committed to family planning, however, the influence of socio-economic and socio-cultural factors appears to decline, but not disappear entirely. However, in spite of the quasi-levelling tendency of planning status, these above-mentioned differences do emerge when we consider the question of the commencement (timing) of use of contraception. This timing difference among different categories of planners does affect the spacing of births, actual family size and also expected family size. As has been seen, there are various types of family planning ranging from the strictly rational to the belated quasi-rational type.

Similar planning status does not automatically imply a similarity of contraceptive technique. This is evident particularly in the case of the language and religious sub-groups of the sample population. The goal remains the same but the route traversed differs. This can be slightly differently expressed: Afrikaans planners and Catholic planners tend to be late starters in the sense that they accept the goal of family planning after a longer marriage duration than would be the case with the English and Jewish planners. However, the contraceptive patterns manifested by Afrikaans and Catholic women do not resemble those revealed by other planners.

The stricter the planning status, the closer the family-size patterns manifested by the various sub-groups of the sample population. For example, English and Afrikaans ever-pregnant users who are completely

motive planners evince a more similar general reproductive pattern than those English and Afrikaans ever-pregnant users classed as mixed planners. In the former case, socio-cultural differences already established are weakened, while in the case of the mixed planners they tend to persist.

It has already been noted that religious and socio-economic differences are clearly and closely associated with the type of contraceptives couples use. Actually, it is in this sphere where the religious factor appears - certainly as far as Catholic users are concerned - to exert more influence than any other factor.

In many respects higher education and higher income status exert a greater pull on Afrikaans Protestant users vis-à-vis their fertility behaviour than either variable does in the case of English Protestant, Jewish and Catholic users. In the case of Afrikaans Protestant users, the incidence of use of contraception is increased and a change in the type of contraceptives used is also noticed - a swing away from "natural" or mixed methods to the fuller use of exclusively appliance methods of contraception.

This study shows that fertility attitudes are related to actual fertility behaviour. For instance, a favourable attitude towards family planning is correlated with a below-average desired family size, actual family size, expected family size and number of times pregnant. In the various social categories used to analyse our data, e.g., education, income, occupation, rural-urban origin, etc., we find that fecundity always increases the proportion of women approving of family planning in almost all sub-groups. With regard to respondent's standard of education, the reported effect of fecundity increasing the proportion of women favourable to family planning does not seem as strong as in the case of other categories. The higher the respondent's standard of education, the stronger her support for family planning; hence fecundity makes very little difference to women in the higher educational categories because these women already have extremely favourable attitudes towards family planning.

In the case of the religious sub-groups in the

sample, fecundity status does appear to change the attitudes of Afrikaans Protestants and Catholics to a much greater extent than amongst English Protestants. On Jewish women fecundity makes no impression vis-à-vis their approval of family planning, because all Jewish women and all fecund Jewish women approve of family planning. In all religious sub-groups, both as regards all respondents and exclusively those who are fecund, the vast majority of women approve of family planning.

The number of children deemed necessary before a family is considered large, and the respondent's standard of education, are inversely related. Afrikaans Protestant women, the lower income sub-groups, the blue-collar respondents, and respondents born in rural areas and on farms, all subscribe to an above-average norm in this connection.

Respondents in the higher socio-economic classes show a greater degree of tolerance for those married couples who deliberately avoid having any children at all.

It is not unusual for a piece of empirical research to raise more questions than it answers. Therefore, it is hardly surprising that this study leaves certain questions unanswered. For instance, what about those users who report no successful planning at all? We gathered no data which would throw any light on this anomaly. The reason for this is that at the outset of this study it was hypothesised that use of contraception implied not only a commitment to planning but planning itself. This has been proved to be patently false. A favourable attitude is one thing while its translation into action is quite another. We made the mistake of equating users with planners. It is a pity that we have no direct information on the reasons why nearly one-fifth of the users fail to record any effective planning at all.

Inferentially, we can say that some of this failure is due to faulty inter-spousal communication. During the course of interviewing 900 women, the interviewers frequently encountered women, particularly in the lower socio-economic classes, who had little or no meaningful communication or contact with their husbands on this issue of family planning. Such matters were

never discussed and the wife could not give the interviewer any indication of the husband's attitude on, say, the question of the use of chemical and/or mechanical contraceptives. In many cases, contraception in the form of coitus interruptus was used, but of verbal or ideational communication there was no evidence. In other words, while in the majority of cases the respondent was able to supply us with the information pertaining to her husband which we required, in a minority of cases this was impossible. It might have been wiser to have interviewed both spouses rather than rely on the information supplied by the wife. Interviewing both spouses would also have acted, in some cases as a check on the rationalisation that so easily could have taken place when only one spouse was being interviewed. In addition, we discovered during the course of the survey that in many large families where the couple was fecund and no contraceptives were ever used, husband-wife communication, on all levels, was extremely limited. Among the poorer and less well-educated women interviewed, we found a sort of resignation, a type of submission to male dominance, in that fecund women were prepared to accept the husband's indifference to the use of contraceptives and family planning as part of life. They would never become users of contraception, no matter how many pregnancies they had. Admittedly, these women were in the minority. There were other women who shared their husband's hostility to contraception and family planning and regarded it as a religious duty to bear whatever children came their way.

Family planning affects and involves both spouses. However, in the present study we only interviewed wives as we felt they could supply all the information we required - even about their husbands. In this we erred. Inter-spousal communication has a bearing on the whole question of family planning and we have no definite data on this important area. In the course of data-analysis, an attempt was made to ferret out data which might serve as indices for various degrees of husband-wife communication but without any success; it was then too late.

In terms of any hypothetical family planning model, joint decision-making is a top priority, but we can only infer this in respect of our data. It was quite obvious during the course of the interviewing that upper-class

women enjoyed a far better communication with their husbands vis-à-vis reproductive goals and measures to achieve these than did women in the lower classes. Motive planners were able to give us unhesitatingly the attitude of their husbands towards mechanical and/or chemical contraceptives, whereas non-planners and non-users frequently simply did not know the attitude of their husbands.

A general impression gathered in this study is that among the most successful planners the inter-spousal communications system as well as the decision-making pattern is more highly developed, and more rational than among partly successful planners, and far more so than among most non-users. In order to predict, a study would have to be made of this rather intricate system; how does it flow and how does it differ from class to class? It is the latter question which would be sociologically important in a study of this nature.

This question of inter-spousal communication is important in any consideration of family planning particularly since it has a bearing on the marriage partners' respective definitions of their own role and that of their spouse. In fact, in retrospect it appears likely that the whole question of family planning could be conceptualised in terms of role theory. This suggests an important area for future research.

To a large extent the sample was drawn from a pluralistic universe. In any pluralistic society we encounter the phenomena of plurality of roles as well as contending reference groups. An investigation in terms of role-perception, role-performance and role-conflict - as seen against the background of the actor's dominant reference group - would seem to constitute the most strategic focus for any future family planning studies.

A further gap in the present study is the lack of information on such variables as marital adjustment and husband-wife dominance. Both these factors have an obvious bearing on family planning. In fact, without specifically seeking this type of information, during the course of quite a number of interviews information about these variables in one or other shape was proffered by respondents. In the more egalitarian marriages, the chances of successful family planning are much higher

than in the husband-dominated partnership. The influence of marital adjustment and husband-wife dominance on fertility patterns has been portrayed in a masterly manner in the well-known Puerto Rican study, The Family and Population Control by Hill et al (1959).

It sometimes happens that when fertility data or planning data are cross-classified with two or three sociological variables simultaneously - apart from some cells being statistically thin and the confidence level being thereby lowered - we find that the measurement techniques employed cannot isolate and satisfactorily assess the influence of the several variables being used. It is a mistake to blame the measuring technique for being crude and clumsy when, in fact, the crudeness and clumsiness stem mostly from the form in which the data is presented for measurement. A single measure of socio-economic class or status would obviate much of the above-mentioned crudeness and clumsiness. A reliable measure of socio-economic status would possibly contribute towards a more meaningful and sensitive analysis of data.

Differential fertility studies conducted in many parts of the world have demonstrated that differential fertility goals and behaviour patterns are related to class position. Demographic variables are always correlated with standard variables such as educational level, annual income and husband's occupation. Repetition of such comparisons can be both tedious and cumbersome. A more efficient manner of comparison would be some type of socio-economic index which combines the important variables of education, occupation, income and possibly rental or home ownership in much the same way as Redlich and Hollingshead achieved in their excellent study entitled Social Class and Mental Illness. A recent attempt has been made by Close (1968) to do this - to divide a population into classes depending on the combination of certain basic variables - in a South African study. The presence of an empirically-established and determined class grouping of the sample population would have given many of the cross-tabulations employed in this study greater rigour and refinement.

If we took use of contraception (past, present and future) as the criterion of family planning, then the majority of the 900 couples in this study would be classed

(many in an inchoate manner) as planners. However, in terms of more rigorous definitions, only a substantial proportion are planners and there are different degrees of planning. Those who plan strictly and with complete success are in a minority but they are a significant minority. Family planning, therefore, is best represented by the continuum concept.

The very fact of family planning, whatever its degree of success, implies a profound social change on the part of the society in which it is occurring. The social world of the couples investigated in the present study is urban South Africa, which is Western and industrialised. Consequently, a measure of family planning would be expected. The change in fertility patterns and the ever-increasing use of contraception and acceptance of family planning have to be seen as part of the great sweep of social change characteristic of a society more and more influenced by technology and the mass media of communication.

This study has only examined family planning in an urban White population. In addition, when the field-work was being conducted the latest contraceptive technique, the anti-ovulatory tablets, were not as widely available as they are now. In the present study we found that it was newly-married women and former non-users of contraception who favoured these anti-ovulatory tablets, either on their own initiative or on medical advice. We might hypothesise that these tablets will make a greater difference to family planning patterns in similar populations in the immediate future.

The South African population consists of four ethnic groups:-

- the Whites (the lowest birth rate);
- the Coloureds (the highest birth rate, nearly double that of the Whites);
- the Africans (a higher birth rate than the Whites but lower than that of the Coloureds); and
- the Asiatics (a somewhat higher birth rate than that of the Whites but lower than that of the other non-White groups).

Very little is known scientifically of the attitudes of these non-White groups to questions of fertility control; less is known of actual family planning patterns.* The mortality rates of the non-White peoples in South Africa have fallen steadily in the last two decades and these population groups are all increasing at a faster rate than the White population.

Some authorities have suggested family planning programmes for non-Whites, but one cannot even think of such programmes without empirically-obtained data on the attitudes and fertility patterns of these ethnic groups. The non-Whites of South Africa are being more and more drawn into the industrialised and urbanised order. Industrialisation and urbanisation are known to be highly correlated with fertility control and more rational fertility attitudes. Each of the three non-White groups is culturally distinct, and an investigation of the fertility pattern reaction to social change on the part of the non-White groups could, indeed, be a most rewarding study. It is precisely here in the sphere of non-White fertility behaviour that family planning studies would be of great significance from a medical, demographic and administrative point of view.

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* Since writing this, the position has begun to change. The South African Human Sciences Research Council has launched a series of studies amongst various non-White groups, and some results have already appeared.

BIBLIOGRAPHY

ABRAMS, Mark, (1945): The Population of Great Britain. George Allen and Unwin, London.

AGARWALA, S.N., (1961): "A Family Planning Survey in Four Villages": Population Studies, Vol.15, No.2, Nov.1961.

AGARWALA, S.N., (1963): Attitude Towards Family Planning in India. Asia Publishing House, Delhi.

AGINSKY, B.W., (1939): "Population Control in the Shanel (Pomo Tribe)": American Sociological Review, Vol.4

ARENSBURG, Conrad M., and KIMBALL, Solon T., (1940): Family and Community in Ireland. Harvard University Press.

BADENHORST, L.T., (1950): "The Future Growth of the Population of South Africa and Its Probable Age Distribution": Population Studies, Vol.4, No.1, June 1950.

BADENHORST, L.T., (1952): "Territorial Differentials in Fertility in the Union of South Africa, 1911-1936": Population Studies, Vol.4, No.2.

BADENHORST, L.T., (1963): "Family Limitation and Methods of Contraception in an Urban Population": Population Studies, Vol.16, No.3, March 1963.

BADENHORST, L.T., and HIGGINS, Edward, (1962): "Fecundity of White Women in Johannesburg": Population Studies, Vol.15, No.3, March 1962.

BALFOUR, M.C., (1961): "Family Planning in Asia": Population Studies, Vol.15, No.2, November 1961.

BANKS, J.A., (1954): Prosperity and Parenthood - A Study of Family Planning Among Victorian Middle Classes. Routledge and Kegan Paul, London.

BANKS, J.A., and BANKS, O., (1964): Feminism and Family Planning in Victorian England. Liverpool University Press.

BARBER, R.E., and ROSS, E.A., (1924): "Changes in Size of American Families in One Generation". University of Wisconsin Studies in the Social Sciences and History, No.10, Madison.

BARCLAY, G.W., (1958): Techniques of Population Analysis. Wiley, New York.

BARNES, Harry Elmer, (1942): Society in Transition. Prentice-Hall Inc., New York.

BARNES, Harry Elmer, (1947): Social Institutions. Prentice-Hall Inc., New York (Sixth Printing).

BARRETT, D.M., (Ed.), (1964): The Problem of Population, Moral and Theological Considerations. University of Notre Dame Press.

BEEBE, G.W., (1942): Contraception and Fertility in the Southern Appalachians. The Williams and Wilkins Co., Baltimore.

BENEDICT, Ruth, (1949): Patterns of Culture. Routledge and Kegan Paul, London, 4th impression.

BERENT, Jerzy, (1952): "Fertility and Social Mobility": Population Studies, Vol.5, Part 3, March.

BESHERS, J.M., (1967): Population Processes in Social Systems, Free Press.

BEVERIDGE, Sir William, et al., (1932): Changes in Family Life. George Allen and Unwin, London.

BOWEN, Ian, (1954): Population. Cambridge University Press.

BOWMAN, Claude G., (1946): "Hidden Valuations in the Interpretations of Sexual and Family Relationships": American Sociological Review, Vol.11, No.5, October.

BROWN, Harrison, (1954): The Challenge of Man's Future. Secker and Warburg, London.

CADBURY, L.J., (1945): "This Question of Population - Europe in 1970", News Chronicle, Publications Department, London.

CAMPBELL, E., (1960): "Birth Control and the Christian Churches": Population Studies, Vol.14, Part 2, November.

CARR-SAUNDERS, A.M., (1922): The Population Problem: A Study in Human Evolution. Oxford University Press.

CARR-SAUNDERS, A.M., (1925): Population. Oxford University Press, London.

CHAND, Gyan, (1939): India's Teeming Millions. George Allen and Unwin, London.

CHAPMAN, Guy, (1940): Culture and Survival. Jonathan Cope, London.

CHARLES, Enid, (1934): Twilight of Parenthood. Watts and Co., London.

CHARLES, Enid, (1936): The Menace of Under-Population. Watts and Co., London.

CHARLES, Enid, (1937): "Differential Fertility": The Sociological Review (U.K.), Vol.29, No.3, July.

CLOSE, M.E., (1968): „Die Meting van Maatskaplike Status en Status-kongruensie: 'n Skaal Gebaseer op Sensusgegewens": Unpublished M.A. Thesis, University of Stellenbosch.

COLE, G.H.D., et al.. (1947): What is Ahead of Us? George Allen and Unwin, London.

COMBS, Jerry W., and DAVIS, Kingsley, (1951): "Differential Fertility in Puerto Rico": Population Studies, Vol.5, Part 2, Nov.

COOK, Robert C., (1951): Human Fertility: The Modern Dilemma. Victor Gollancz, London.

COTTRELL, Leonard S. Jnr., (1947): "Research in Causes of Variations in Fertility: Social Psychological Aspects": American Sociological Review, Vol,12, No.5, October.

COTTRELL, Leonard S. Jnr., (1948): "The Present Status and Future Orientation of Research on the Family": American Sociological Review, Vol.13, No.2, April 1948.

COX, P.R., (1950): Demography. Cambridge University Press.

DARWIN, Leonard, (1928): What is Eugenics? Watts and Co., London.

DAVIS, Jerome and BARNES, Harry Elmer, (Eds.) (1931): An Introduction to Sociology. D.C. Heath and Co., New York, Boston, Chicago, Revised 1931.

DAVIS, Kingsley, (1937): "Reproductive Institutions and the Pressure of Population": The Sociological Review (U.K.), Vol.19, No.3, July 1937.

DAVIS, Kingsley, (1946): "Human Fertility in India": American Journal of Sociology. Vol.52, No.3, Nov.1946.

DAVIS, Kingsley, (1950): Human Society. The MacMillan Co., New York.

DAVIS, Kingsley, (1951): The Population of India and Pakistan. Princeton University Press, N.J.

DE BEAUVOIR, Simone, (1953): The Second Sex. Alfred A. Knopf, New York. (Edited and translated by H.M. Parshley).

DE LESTAPIS, S., (1961): Family Planning and Modern Problems, Burns and Oates, London.

DINGWALL, E.J., (1956): The American Woman. Gerald Duckworth and Co. Ltd., London.

DORN, Harold F., (1947): "Genetic and Social Significance of Differential Fertility": The Milbank Memorial Fund Quarterly, Vol.25, No.4, Oct. 1947.

DOVE, R.P., (1953): "Japanese Rural Fertility: Some Social and Economic Factors": Population Studies, Vol.7, No.1, July 1953.

DRAPER, Elizabeth, (1965): Birth Control in the Modern World. George Allen and Unwin, Ltd., London.

EAST, Edward M., (1924): Mankind at the Crossroads. Charles Scribner and Sons, New York.

ECONOMIST, (1936): Economist, Vol.112, No.4825, Feb. 15th, 1936. (Editorial).

EDIN, Karl Arvid and HUTCHINSON, Edward P., (1935): Studies of Differential Fertility in Sweden. P.S. King and Sons Ltd., London.

ELLIS, Havelock, (1912): The Task of Social Hygiene. Constable and Co., London.

FABRE-LUCE, Alfred, (1964): Men or Insects? A Study of Population Problems. Hutchinson and Co. Ltd., London.

FAGLEY, Richard M., (1960): The Population Explosion and Christian Responsibility. Oxford University Press, New York.

FIELD, James A., (1931): Essays on Population. Chicago University Press.

FINCH, B.E., and GREEN, Hugh, (1964): Contraception Through The Ages. Peter Owen Ltd., London.

FISHBEIN, Morris and BURGESS, Ernest W., (Eds.), (1948): Successful Marriage. Doubleday and Co. Inc., New York.

FISHER, R.A., (1932): The Social Selection of Human Fertility. Oxford at the Clarendon Press.

FLUGEL, J.C., (1947): Population, Psychology and Peace. Watts and Co., London.

FOLSOM, J.K., (1942): The Family and Democratic Society. John Wiley and Sons, New York.

FOLSOM, Joseph K., (1937): "Changing Values in Sex and Family Relations": American Sociological Review, Vol.2, October.

FOOTE, Nelson N., (1954): "Changes in American Marriage Patterns": Eugenics Quarterly, Vol.1, No.4, December.

FRANZSEN, D.G., and SADIE, J.L., (1950): Inleiding tot die Bevolkingsvraagstuk. Die Universiteits-Uitgewers en -Boekhandelaars (Edms.) Bpk., Stellenbosch.

FREEDMAN, Ronald and WHELPTON, P.K., (1950): "Fertility Planning and Fertility Rates by Religious Interest and Denomination": The Milbank Memorial Fund Quarterly, Vol.28, No.3, July.

FREEDMAN, Ronald and WHELPTON, P.K., (1952): "Fertility Planning and Fertility Rates by Adherence to Traditions": The Milbank Memorial Fund Quarterly Vol.30, No.1, January.

FREEDMAN, R., and SHARP, A., (1954): "Correlates of Values about Ideal Family Size in Detroit Metropolitan Area": Population Studies, Vol.8, No.1, July.

FREEDMAN, Ronald, et al., (1959): Family Planning, Sterility and Population Growth. McGraw-Hill Book Co., New York.

FREEDMAN, Ronald, et al., (1959a): "Expected Family Size and Family Size Values in West Germany": Population Studies, Vol.13, No.2.

FREEDMAN, Ronald, et al., (1963): "Fertility Trends in Taiwan: Tradition and Change": Population Studies, Vol.16, No.3, March.

FREYMANN, Moye, W., (1963a): "Population Control in India": Marriage and Family Living, Vol.25, No.1, February.

GAVRON, Hannah, (1966): The Captive Wife. Routledge and Kegan Paul, London.

GIBBONS, William J., (1956): "Fertility Control in the light of Some Recent Catholic Statements": Eugenics Quarterly, Vol.3, No.1, March.

GILLIN, John Lewis and GILLIN, John Philip, (1954): Cultural Sociology. The MacMillan Co., New York, 3rd Printing.

GLASS, D.V., (Editor), (1954): Social Mobility in Britain. Routledge and Kegan Paul Ltd., London.

GLASS, D.V., (1936): The Struggle for Population. Oxford University Press.

GOODSELL, Willystine, (1928): Problems of the Family. The Century Co., New York.

GROENMAN, S., (1955): "Women's Opinions about Size of Family in the Netherlands: Attempts to Measure Desired Family Size": Eugenics Quarterly, Vol.2, No.4, December.

GUTMAN, R., (1960): "In Defence of Population Theory": American Sociological Review, Vol.25, June.

GUTTMACHER, A.F., (1952): "Fertility of Man": Fertility and Sterility, Vol.3, No.4, July-August.

HAGOOD, Margaret Jarman, (1939): Mothers of the South. University of North Carolina Press, Chapel Hill.

HALDANE, J.B.S., (1938): Heredity and Politics. George Allen and Unwin, London.

HAJNAL, J., (1947): "The Analysis of Birth Statistics in the Light of the Recent International Recovery of the Birth Rate": Population Studies, Vol.1, No.2, September.

HAJNAL, J., (1954): "Differential Changes in Marriage Patterns": American Sociological Review, Vol.19, No.2, April.

HANKINS, Frank N., (1933): "Is the Differential Fertility of the Social Classes Selective?": Social Forces, Vol.12, No.1, October.

HATT, Paul K., (1952): Backgrounds of Human Fertility in Puerto Rico. Princeton University Press, N.J.

HAUSER, Philip M., (1942): "Population and Vital Phenomena": American Journal of Sociology, Vol.48, No.3, November.

HAUSER, Philip M., (1963): The Population Dilemma. Prentice-Hall Inc., New York.

HERBERLE, Rudolf, (1941): "Social Factors in Birth Control": American Sociological Review, Vol.6, No.6, December.

HENRY, F.J., (1958): "An Empirical Study of the Relationships of Catholic Practice and Occupational Mobility to Fertility": The Milbank Memorial Fund Quarterly, Vol.36, No.3, July.

HERTZLER, J.O., (1956): The Crisis in World Population. Lincoln University of Nebraska Press.

HIGGINS, E., (1960): "A Study of Some Norms and Values Pertaining to Fertility in an Urban White Population": Unpublished M.A. thesis, University of the Witwatersrand, Johannesburg.

HIGGINS, E., (1962): "Some Fertility Attitudes among White Women in Johannesburg": Population Studies, Vol.16, No.1, July.

HIGGINS, E., (1964): "Differential Fertility Outlook and Patterns among Major Religious Groups in Johannesburg": Social Compass, Vol.11, No.1.

HILL, Reuben, (1954): "Marriage and Family Research": Eugenics Quarterly, Vol.1, No.1, March.

HILL, Reuben, STYCOS, J. Mayone and BACK, Kurt W., (1959): The Family and Population Control: A Puerto Rican Experiment in Social Change. University of North Carolina Press.

HOLLINGWORTH, Leta S., (1916): "Social Devices for Impelling Women to Rear and Bear Children": American Journal of Sociology, Vol.22, No.1, July.

HUBBACK, Eva M., (1937): "Family Allowances in Relation to Population Problems": The Sociological Review (U.K.), Vol.29, No.3, July.

HUBBACK, Eva M., (1945): Population Facts and Policies. George Allen and Unwin, London.

HUBBACK, Eva M., (1947): The Population of Britain. Penguin Books, London.

HYRENIUS, H., (1958): "Fertility and Reproduction in a Swedish Population Group Without Family Limitation": Population Studies, Vol.12, Part 2, November.

INNES, John W., (1938): Class Fertility Trends in England and Wales (1876-1934). Princeton University Press.

JANSEN VAN RYSSEN, J.W., et al., (1944): Die Selfmoord van 'n Nasie. J.H. de Bussy, Pretoria.

JONE, Rev. Heribert, (translated by Urban Adelman) (1948): Moral Theology. The Newman Bookshop, Westminster, Maryland.

KINSEY, Alfred C., et al., (1949): Sexual Behaviour in the Human Male. W.B. Saunders Co., Philadelphia and London.

KINSEY, Alfred C., et al., (1953): Sexual Behaviour in the Human Female. W.B. Saunders Co., Philadelphia and London

KISER, Clyde V., (1942): Group Differences in Urban Fertility. The Williams and Wilkins Co., Baltimore.

KISER, Clyde V., and WHELPTON, P.K., (1947): "Progress Report on the Study of Social and Psychological Factors Affecting Fertility": American Sociological Review, Vol.12, No.2, April.

KISER, Clyde V., and WHELPTON, P.K., (1949): "Fertility Planning and Fertility Rates by Socio-economic Status": The Milbank Memorial Fund Quarterly, Vol.27, No.2, April.

KISER, Clyde V., and WHELPTON, P.K., (1953): "Resumé of the Indianapolis Study of Social and Psychological Factors Affecting Fertility": Population Studies, Vol.7, No.2, November.

KLEIN, Viola, (1946): The Feminine Character. Routledge and Kegan Paul, London.

KLUCKHOHN, Clyde, (1949): Mirror for Man. McGraw-Hill, Inc., New York.

KNIBBS, Sir George Handley, (1928): The Shadow of the World's Future. Ernest Benn Ltd., London.

KÖHLER, Wolfgang, (1938): The Place of Value in a World of Fact. Liveright Publishing Corporation, U.S.A.

KOLB, William L., (1948): "Sociologically Established Family Norms and Democratic Values": Social Forces, Vol.26, No.4, May.

KOYA, Yoshio, (1962): "Lessons from Contraceptive Failure": Population Studies, Vol.16, No.1, July.

KUCZYNSKI, Robert R., (1935): The Measurement of Population Growth. Sidgwick and Jackson Ltd., London.

LAFITTE, F., (date not known] Family Planning in the Sixties. The Family Planning Association, London.

LANDIS, Judson T., and LANDIS, Mary G., (Editors), (1953): Readings in Marriage and the Family. Prentice-Hall, New York, 2nd Printing.

LANDIS, Paul H., (1943): Population Problems: A Cultural Interpretation. American Book Co., New York.

LaPIERE, Richard T., (1954): A Theory of Social Control. McGraw-Hill, London, New York, Toronto.

LAZARSFELD, Paul, (Ed.) (1954): Mathematical Thinking in the Social Sciences. The Free Press, Glencoe, Illinois.

LENICA, Jan and SAUVY, Alfred, (1962): Population Explosion. Dell Publishing Company, New York.

LEWIS, Gordon F., (1950): "Attitudes Towards Contraceptives Among Residents of a University Housing Project": American Sociological Review, Vol.15, No.5.

LEWIS-FANING, E., (Ed.) (1949): Papers of the Royal Commission on Population. Vol.1, H.M.S.O., London.

LINDQUIST, Ruth, (1931): The Family in the Present Social Order. University of North Carolina Press, Chapel Hill.

LINTON, Ralph, (1936): The Study of Man. D. Appleton-Century Co., New York.

LORIMER, Frank, et al., (1933): "Discussion of the Differential Fertility of Social Classes": Social Forces, Vol.12, No.1, Oct.

LORIMER, Frank, et al., (1954): Culture and Human Fertility. UNESCO, Paris.

LORIMER, Frank, et al., (1958): "An Inquiry Concerning Some Ethical Principles Relating to Human Reproduction": Cross Currents, Vol.8, No.1, Winter.

LORIMER, Frank and OSBORN, Frederick, (1954): Dynamics of Population. The MacMillan Co., New York.

MAIR, George F., (Ed.) (1949): Studies in Population. Princeton University Press.

MALTHUS, R.T., (1926): An Essay on the Principle of Population. MacMillan and Co. Ltd., London.

MARCHANT, Sir James, (Ed.), (1923): The Control of Parenthood. G.P. Putman, London and New York, March.

MARSHALL, T.H., et al., (1938): The Population Problem. George Allen and Unwin, London.

MASS OBSERVATION: Britain and Her Birthrate. John Murray, London.

MAUDLIN, W. Parker, (1963): "Population and Population Policy in Pakistan": Marriage and Family Living, Vol. 25, No. 1, Feb.

McCLEARY, G.F., (1938): Population: Today's Question. George Allen and Unwin, London.

McCLEARY, G.F., (1945): Race Suicide? George Allen and Unwin, London.

MEIER, R.L., (1959): Modern Science and the Human Fertility Problem. John Wiley and Sons, New York.

MERTENS, Clement, (1960): "Population and Ethics: Pinpointing the Problem": Cross Currents, Vol.10, No.3, Summer.

MORRISON, William A., (1956): "Attitudes of Males Towards Family Planning in a Western Indian Village": The Milbank Memorial Fund Quarterly, Vol.34, No.3.

MORRISON, William A., (1957): "Attitude of Females Toward Family Planning in Maharashtrian Village": The Milbank Memorial Fund Quarterly, Vol.35, No.1.

MONAHAN, Thomas P., (1955): "Is Childlessness Related to Family Stability?": American Sociological Review, Vol.20, No.4, August.

MUSHAM, H.V., and KISER, Clyde V., (1956): "The Number of Children Desired at the Time of Marriage": The Milbank Memorial Fund Quarterly, Vol.34, No. 3, July.

NOTESTEIN, F.W., (1933): "The Differential Rate of Increase Among the Social Classes of the American Population": Social Forces, Vol.12, No.1, October.

NOTESTEIN, F.W., (1936): "Class Differences in Fertility": Annual of American Academy of Political and Social Sciences, Vol.188, November.

OGBURN, W.F., and TIBBITTS, Clark, (1929): "Birth Rates and Social Classes": Social Forces, Vol.8, No.1, Sept.

ORGANSKI, Katherine and ORGANSKI, A.F.K., (1961): Population and World Power. Alfred A. Knopf, New York.

OSBORN, Frederick, (1933): "Characteristics and Differential Fertility of American Population Groups": Social Forces, Vol.12, No.1, October.

PARKES, A.S., (1961): "The Menace of Overpopulation": The New Scientist, Vol.10, June 8th.

PEARL, Raymond, (1939): The Natural History of Population. Oxford University Press, London.

PELZEL, John C., (1950): "Some Social Factors Bearing Upon Japanese Population": American Sociological Review, Vol.15, No.1, February.

PENDELL, Elmer, (1951): Population on the Loose. Wilfred Funk Inc., New York.

PENDELL, Elmer and BUNCH, Guy Irving, (1947): Human Breeding and Survival. Penguin Books Inc., New York.

PETERSEN, William, (1961): Population. MacMillan, New York.

PLACE, Francis, (1930): Illustrations and Proofs of the Principle of Population. Critical and Textual Notes by Norman E. Himes. George Allen and Unwin, London.

POTTER, R.G., (Jnr.), et al., (1962): "Improvement of Contraception During the Course of Marriage": Population Studies, Vol.16, No.2, November.

PROTHRO, E.T., (1962): Child-Bearing in the Lebanon. Oxford University Press.

PYKE, Margaret, (1956): "Population Planning in Great Britain": Eugenics Quarterly, Vol.3, No.3, September.

REED, Robert B., (1947): "The Inter-relationship of Marital Adjustment, Fertility Control and Size of Family": The Milbank Memorial Fund Quarterly, Vol.25, No.4, October.

REEDER, Leo G., and KRISHNAMUTRY, Goreti B., (1964): "Family Planning in Rural India": Social Problems, Vol.12, No.2, Fall.

REPUBLIC OF SOUTH AFRICA (1962a): Population Census 6th September 1960: Sample Tabulations No.1 Industry Divisions, Age Groups and Home Languages: Whites, Government Printer, Pretoria.

REPUBLIC OF SOUTH AFRICA (1962b): Population Census 6th September 1960: Sample Tabulation No.3 Major Occupational Groups, Whites Coloureds and Asiatics, Government Printer, Pretoria.

REPUBLIC OF SOUTH AFRICA (1963): Population Census 6th September 1960: Vol.I. Geographical Distribution of the Population, Government Printer, Pretoria, RP.62/1963.

REPUBLIC OF SOUTH AFRICA (1963a): Population Census 6th September 1960: Sample Tabulation No.6, Religion - All Races, Government Printer, Pretoria.

REPUBLIC OF SOUTH AFRICA (1966): Population Census 6th September 1960: Vol.2, No.4, The Metropolitan Area of Port Elizabeth, Government Printer, Pretoria.

REUTER, Edward B., (1937): Population Problems. J.B. Lippincott Co., Chicago, Philadelphia, New York, 2nd edition revised.

RICH, Margaret E., (Ed.), (1928): Family Life Today. Houghton Mifflin Co., Boston and New York.

RILEY, J.W., and WHITE, M., (1940): "The Use of Various Methods of Contraception": American Sociological Review, Vol.5.

ROBERTS, Archbishop Thomas, et al., (1965): Contraception and Holiness: The Catholic Predicament. Collins, London.

ROYAL COMMISSION ON POPULATION (1949): Report of the Royal Commission, H.M.S.O., London.

ROWNTREE, G., and PIERCE, R.M., (1961): "Birth Control in Great Britain. Part I": Population Studies, Vol.15, No.1, July.

RUMNEY, J., (1935): "The Problem of Differential Fertility": Population, Vol.2, (3-2) November.

RUSSELL, Bertrand, (1938): Marriage and Morals. George Allen and Unwin, London, 6th impression.

RYAN, Bryce, (1952): "Institutional Factors in Sinhalese Fertility": The Milbank Memorial Fund Quarterly, Vol.30.

SADIE, J.L., (1949): Westerse Bevolkingsneiginge. Die Universiteits en -Boekhandelaars (Edms.) Bpk., Stellenbosch.

SAGI, Phillip C., et al., (1962): "Contraceptive Effectiveness as a Function of Desired Family Size": Population Studies. Vol. 15, No.3, March.

ST. JOHN-STEVAS, N., (1960): Birth Control and Public Policy. Centre for the Study of Democratic Institutions, Santa Barbara, California.

SANDERS, J., (1931): The Declining Birth Rate in Rotterdam. Martinus Nijhoff, The Hague.

SANGER, Margaret, (1920): Woman and the New Race. Blue Ribbon Books, New York.

SANGER, Margaret, (1932): My Fight for Birth Control. Faber and Faber, London.

SARKAR, Benoy Kumar, (1936): The Sociology of Population. N.M. Ray-Chowdhury and Co., Calcutta.

SAUVY, Alfred, (1961): Fertility and Survival: Population Problems from Maltus to Mao-Tse-Tung. Chatto and Windus, London.

SCHMITT, Robert C., (1952): "Demography and City Planning": Social Forces, Vol.30, No.3, March.

SCHOLTEN, W.H.J., (1948): „Die Faktore Wat die Grootte van Stedelike Gesinne Bepaal, Met Besondere Verwysing na Pretoria": Unpublished doctoral dissertation, University of Pretoria.

SCHUTZ, A., (1943): "The Problem of Rationality in the Social World", Economica, Vol. X, May.

SEERS, Dudley, (1957): "A Fertility Survey in the Maltese Islands": Population Studies, Vol.10, No.3, March.

SINHA, J.N., (1957): "Differential Fertility and Family Limitation in an Urban Community of Uttar Pradesh": Population Studies, Vol.11, No.2, November.

SOROKIN, P.A., (1944): The Crisis of Our Age. E.P. Dutton and Co. Inc., New York.

SHERIF, Muzafer, (1936): The Psychology of Social Norms. Harper Bros., New York.

SMITH, T. Lynn, (1948): Population Analysis. McGraw-Hill Inc., New York.

SPENGLER, Joseph J., (1938): France Faces Depopulation. Duke University Press, Durham, North Carolina.

SPENGLER, Joseph J., and DUNCAN, Otis Dudley, (Eds.) (1956a): Demographic Analysis: Selected Readings. The Free Press, Glencoe, Illinois.

SPENGLER, Joseph J., and DUNCAN, Otis Dudley, (Eds.) (1956b): Population Theory and Policy. The Free Press, Glencoe, Illinois.

SPRING-RICE, Margery, (1939): Working-Class Wives. Penguin Books Ltd., London.

STEVENSON, A., (1942): "Some Aspects of Fertility and Population Growth in Vienna": American Sociological Review, Vol.7, No.4, August.

STIX, Regine K., and NOTESTEIN, Frank W., (1940): Controlled Fertility. The Williams and Wilkins Co., Baltimore.

STOUFFER, S.A., (1935): "Trends in the Fertility of Catholics and Non-Catholics": American Journal of Sociology, Vol.41, No.2, September.

STYCOS, J. Mayone (1952): "Family and Fertility in Puerto Rico": American Sociological Review, Vol.17, No.5, October.

STYCOS, J. Mayone and BACK, Kurt W., (1964): The Control of Human Fertility in Jamaica. Cornell University Press, New York.

SULLOWAY, A.W., (1959): Birth Control and Catholic Doctrine. Beacon, Boston.

SUMNER, W.G., (1906): Folkways. Ginnaand Co., Boston.

SUTHERLAND, Halliday, (1944): Control of Life. Burns, Oates and Washborne, London.

TABAH, Leon, (1963): "A Study of Fertility in Santiago, Chile": Marriage and Family Living, Vol.25, No.1, February.

TAEUBER, Irene B., and ELDRIDGE, Hope T., (1947): "Some Demographic Aspects of the Changing Role of Women": The Annals of the American Academy of Political and Social Sciences, Vol.251, May.

TAEUBER, Irene B. and NOTESTEIN, Frank W., (1947): "The Changing Fertility of the Japanese": Population Studies, Vol.1, Part 1, June.

TAKESHITA, John Y., (1963): "Population Control in Japan: Miracle or Secular Trend?": Marriage and Family Living, Vol. 25, No.1, February.

THAPAR, Savitri, (1963) "Family Planning in India": Population Studies, Vol.17, No.1, July.

THOMLINSON, Ralph, (1965): Population Dynamics: Causes and Consequences of World Demographic Change. Random House, New York.

THOMPSON, Warren S., (1947): "The Impact of Science on Population Growth": The Annals of the American Academy of Political and Social Sciences, Vol.247, January.

THOMPSON, Warren S., (1948): Plenty of People. The Ronald Press Co., New York, revised edition.

THOMPSON, Warren S., and WHELPTON, P.K., (1933): Population Trends in the United States. McGraw-Hill Book Co., Inc., New York.

TIETZE, Christopher, (1947): "Human Fertility in Puerto Rico": American Journal of Sociology. Vol.53, No.1, July.

TIETZE, Christopher, and LEWIT, S., (1953): "Patterns of Family Limitation in a Rural Negro Community": American Sociological Review, Vol.18, No.5, October.

TITMUSS, Richard and Kathleen, (1942): Parents Revolt. Secker and Warburg, London.

TRUXAL, Andrew G., and MERRILL, Frances E., (1953): Marriage and the Family in American Culture. Prentice-Hall Inc., New York.

TYLOR, E.B., (1929): Primitive Culture. Vol.1, John Murray, London, reprinted June.

UNITED NATIONS: Handbook of Vital Statistics Methods. Statistical Office of the United Nations, Studies in Methods Series F.No.7, Department of Economic and Social Affairs.

UNITED NATIONS (1949): Fertility Data in Population Censuses. Population Studies, No.6, November.

UNITED NATIONS (1953a): The Determinants and Consequences of Population Trends.

UNITED NATIONS (1953b): Training in Techniques of Demographic Analysis. ST/SOA/Series A, Population Studies No.18.

UNITED NATIONS (1954a): Population Bulletin of the United Nations. No.4, December.

UNITED NATIONS (1954b): Proceedings of the World Population Conference. Vol.1, (Meetings 2, 4, 6 and 8).

UNITED NATIONS (1966): World Population Conference, 1965. Vol.I: Summary Report. E. Conf. 41/2, 1966.

VAN DER BRINK, T., (1950): "Birth Rate Trends and Changes in Marital Fertility in the Netherlands after 1937": Population Studies., Vol.4, Part 3, December.

VAN HEEK, F., (1956): "Roman Catholicism and Fertility in the Netherlands": Population Studies, Vol.10, No.2, November.

VOGT, William, (1949): Road to Survival. Victor Gollancz, London.

VON UNGERN-STERNBERG, Roderich, (translated by WULLEN, Hilda H.,) (1931): The Causes of the Decline in Birthrate within the European Sphere of Civilization. Eugenic Research Association, Monograph Series No.4, Cold Spring Harbor, Long Island, New York, August.

WACH, Joachim, (1947): Sociology of Religion. Routledge and Kegan Paul, Trench, Trubner and Co. Ltd., London.

WALLER, Willard, (1951): The Family - A Dynamic Interpretation. The Dryden Press, New York. Revised by Reuben Hill.

WEBER, Max, (1947): The Theory of Social and Economic Organisation. The Free Press, New York.

WEILER, H., (1959): "Sex Ratio and Birth Control": American Journal of Sociology, Vol.65, No.3, November.

WESTOFF, C.F., et al., (1961): Family Growth in Metropolitan America. Princeton.

WHELPTON, P.K., (1950): "The Outlook for the Control of Fertility in Japan": American Sociological Review, Vol.15, No.1, February.

WHELPTON, P.K., (1954): "Future Fertility of American Women": Eugenics Quarterly, Vol.1, No.1, March.

WHELPTON, P.K., and FREEDMAN, Ronald, (1956): "A Study of the Growth of American Families": American Journal of Sociology, Vol.61, No.6,

WHELPTON, P.K., and KISER, Clyde V., (1945): "The Sampling Plan, Selection and Representativeness of Couples in the Inflated Sample": The Milbank Memorial Fund Quarterly, Vol.24, No.1.

WHELPTON, P.K., and KISER, Clyde V., (1945): "Trends, Determinants and Control in Human Fertility": Annals of the American Academy of Political and Social Sciences, Vol.237.

WHELPTON, P.K., and KISER, Clyde V., (1945): "Developing the Schedules and Choosing the Type of Couples and the Area to be Studied": The Milbank Memorial Fund Quarterly, Vol.33, No.4.

WHELPTON, P.K., and KISER, Clyde V., (1946): "Social and Psychological Factors Affecting Fertility": The Milbank Memorial Fund Quarterly, Vol.1.

WHELPTON, P.K., and KISER, Clyde V., (1948): "The Comparative Influence on Fertility of Contraception and Impairments to Fecundity": The Milbank Memorial Fund Quarterly, Vol.26, No.1.

WHELPTON, Pascal K., CAMPBELL, Arthur A., and PATTERSON, John E., (1966): Fertility and Family Planning in the United States. Princeton University Press, Princeton, New Jersey.

WHITE, Grace Leybourne and WHITE, Kenneth, (1945): Children for Britain. Pilot Press, London.

WILSON, E.B., (1940): "Methodology in the Natural and Social Sciences": American Journal of Sociology, Vol.45, No.5.

WINSTON, Sanford R., (1930): "The Relation of Certain Social Factors to Fertility": American Journal of Sociology, Vol.35, No.5.

WINSTON, Sanford R., (1932): "Birth Control and Sex Ratio at Birth": American Journal of Sociology, Vol.38, No.2.

WOOFTER, J.J., (1949): "Factors Sustaining the Birth Rate": American Sociological Review, Vol. 14, No.3.

WRIGHT, Harold, (1925): Population. Nisbet and Co., London.

WRONG, Denis, (1962): Population and Society. Second Revised and Enlarged Edition, Random House, New York, Second Printing.

YANKEY, David, (1961): Fertility Differences in a Modernising Community: A Survey of Lebanese Couples. Princeton University Press.

YANKEY, David, (1965): "Some Immediate Determinants of Fertility Differences in the Lebanon": Marriage and Family Living. Vol.25, No.1.

YOUNG, Kimball, (1949): A Study of Society and Culture. American Book Co., New York, Second Edition.

YOUNG, Pauline V., (1935): Interviewing in Social Work. McGraw-Hill Inc., New York.

YOUNG, Pauline V., (1956) Scientific Social Surveys and Research. Third Edition, Prentice-Hall Inc., New Jersey.

APPENDIX A

PROJECT DESIGN

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PROJECT DESIGN.

1. The Sample.

The study was to be based on an investigation of White married women under 50 years of age living in Metropolitan Port Elizabeth (comprising the Municipalities of Port Elizabeth and Walmer). It was decided to sample addresses and interview all White married women found at the addresses concerned. After considering various sampling frames it was concluded that the best would be the current voters' roll. This contained approximately 50,000 addresses of voters. If duplications (e.g. caused by a husband and wife, or adult children) at the sample address were excluded, a list of addresses in the study could be obtained. This was done, although the process was extremely laborious. From the list of about 20,000 addresses a sample was drawn systematically. As a sample of more or less 1,000 White married women was aimed at, 1,493 addresses were selected. The fraction selected was determined after preliminary investigations. Table A.1. below gives the results obtained from this sample:-

TABLE A.1.

SUMMARY OF SAMPLE SIZE, DEGREE OF ELIGIBILITY, REFUSALS AND COVERAGE

ITEM	NUMBER	PERCENTAGE
Dwelling Units in Sample		
Total	1493	100.0
With Eligible Respondent	920	61.6
No Eligible Respondent	475	31.8
Eligibility Not Ascertained	98	6.6
Dwelling Units With Eligible Respondent		
Total (Eligible Respondents)	920	100.0
Interviewed	900	97.8
Refused Interview	20	2.2
Dwelling Units in Sample		
Total	1493	100.0
Contacted	1395	93.4
Uncontacted for various practical reasons	98	6.6

It will be seen that the refusal rate of 2.2% is exceptional and compares more than favourably with overseas studies of a similar nature. "An 85 per cent response rate is often considered satisfactory, and 87 per cent is typical for such studies," (cf. Freedman, Whelpton and Campbell, (1959, 14)).

A partial possible explanation for this low refusal rate was the presence of dedicated and alert fieldworkers together with the excellent publicity and spontaneous support given to the survey by the local English-speaking press. The proportion of possible respondents uncontacted would have been less had more funds been available.

The white residential areas of Port Elizabeth and Walmer cover approximately 36.68 square miles out of a total of 118.80 square miles for both municipalities. The addresses sampled were well and satisfactorily spread throughout the White areas of the two municipalities; in all, 53 different suburbs or areas were represented in the sample. As will be seen in Chapter II, the sample data compares well with census data, and may be considered to be representative.

2. The Fieldworkers

Because of the intimate nature of the schedule, only mature married women were employed as interviewers. Some were qualified social workers; some were nurses; others were teachers or housewives. All were professional women in one way or another with a university or comparable background.

All fieldworkers were thoroughly instructed in interviewing techniques. In addition, the aims and scope of the study were explained to them in great detail. Furthermore, each item in the schedule was made clear to the interviewers. They were also given a condensed view of the sampling plan so as to be in a position to explain to an informant how her address was chosen and not her neighbour's. After thorough and lengthy briefing, each fieldworker was handed a detailed instruction sheet for further study and reference.

Every interviewer carried an official card identifying her as a bona fide fieldworker in the Department of Sociology. In view of the splendid co-operation and interest of the Port Elizabeth housewives, it never became necessary to produce this card in order to overcome truculence or suspicion.

As an aid to the editing of the schedules, the director of the research project discussed the completed schedules in considerable detail with the fieldworkers. Constant contact was maintained between the interviewers and the research office by means of frequent telephone and personal calls.

3. The Schedule.

A standardised schedule was used throughout this family planning study. Most of the questions were completely structured while some few were open-ended. Each schedule was provided with space for a 'thumb-nail' sketch, exclusively reserved for the interviewer's use after the completion of the interview. Here she recorded her general impressions of the interview and remarked upon the informant's veracity, reliability and intelligence where necessary. She also recorded any information gathered during the course of the interview which might qualify, clarify or enlarge upon the respondent's actual replies to specific questions. The schedule used is over the page:-

RHODES UNIVERSITY : DEPARTMENT OF SOCIOLOGY

FAMILY PLANNING SURVEY

STRICTLY CONFIDENTIAL:

Thumb-nail Sketch:

Date and time of Interview .. Place of Interview .....

....

....

....

Code No. ..... Name of Interviewer: .....

SECTION A : GENERAL SOCIOLOGICAL FACTORS

1. Is this your first marriage? First Marriage .....
Married before? .....

1.a. Could I have the date of: First Marriage?
....
(Day) (Month) (Year)

(If Necessary) When did it end?
....
(Day) (Month) (Year)

2nd Marriage began ....
(Day) (Month) (Year)

Ended ....
(Day) (Month) (Year)

3rd Marriage began ....
(Day) (Month) (Year)

Ended ....
(Day) (Month) (Year)

1.b. Has your Husband been married before? Yes..No...

2. Could you please tell me, did you work for pay before you were (first) married?
YES: NO:

(If YES) 2.a. What was your occupation?.....

3. Do you have a job at present? YES: NO:

(If YES) 3.a. Is it full-time?...or Part-Time?...

4. Have you had a job since you were (first) married?
YES ..... NO .....

(If YES) 4.a. About how many years have you worked altogether since you were (first) married? .....

(If YES to Q.4) 4.b. Women have different reasons for working after marriage. What was your main reason?
.....

5. What is your religion? .....

5.a. What is your husband's religion? .....

5.b. How often do you attend Church/Synagogue?.....

5.c. How often does your husband attend Church/Synagogue?
.....

6. Could you possibly tell me how many times you have moved residence since you first got married?
.....

7. Where and in what country were you born?
.....(farm, village, town, city)
.....(Country).

7.a. Where and in what country was your husband born?
.....(farm, village, town, city)
.....(Country)

7.b. Where and in what country did you live for the longest time before you were married?
.....(farm, village, town, city)
.....(Country)

8. What was the last school attended by you and your husband?
Wife:.....
Husband: .....

8.a. What standards did you and your husband complete?
Wife: .....Husband: .....

8.b. Do either you or your husband possess a University degree or diploma?

	YES:	NO:
(If YES) 8.c. What?	Wife:.....	
	Husband:	

9. Do you own this (house, flat, room) or are you renting it?. OWNS: ..... RENTS: .....

(If rented) 9.a. May I ask about how much you pay per month? .....

(If owns) 9.b. May I ask about how much you think it would rent for unfurnished?
.....

10. What is your home language? (The language spoken predominantly in this home)
.....

11. Could you please tell me the total annual income of all the members of your family? You may indicate on this card between which amounts your income falls. .....

12. What is your husband's occupation? (If retired or unemployed, what did he do when he worked?)
.....

12.a. Does your husband work as:
an employee ...OR an employer....OR entirely on his own account ....

12.b. What was your husband's occupation at marriage?
.....

13. Could you please tell me your date of birth and that of your husband?
Wife: ....
(Day) (Month) (Year)
Husband: ....
(Day) (Month) (Year)

SECTION B : ATTITUDES AND IDEALS

14. As you know, people have many different ideas about children and families; as things are now what do you think is the ideal number of children for the average White family?
.....
How many Boys? ..... How many Girls?.....

15. How many children would there have to be in a family before you would call it large? .....

16. What do you think of married couples who are able to have children but never have any?
.....
.....

17. Which do you think is better: a large family?....
or a small family?....

17.a. Why? .....
.....

18. If you had a daughter and she got married, how many children would you like her to have in her family? .....

19. Some married people do something to limit the size of their families and to control when their children come. How do you feel about that?.
.....

19.a. Why do you feel that way? .....
.....

(ONLY FOR THOSE WHO DISAPPROVE IN Q.19)

19.b. Are there any conditions under which you think it all right for a married couple to limit family size or control when children come?
YES:.....NO:..... .....
.....

20. In their attempts to limit the size of their families and control when children come, some married people use chemical and/or mechanical contraceptives. How do you feel about that?.
.....
.....

20.a. Why do you feel that way? .....
.....

20.b. Could you perhaps tell me how your husband feels about married people using mechanical and/or chemical contraceptives to limit the size of their families and to control when children come?
.....

20.c. Do you know why he feels that way? .....
.....

21. What do you think is the ideal length of time between marriage and the birth of the first child?
.....

21.a. What do you think is the ideal length of time between the birth of the first child and the birth of the second child?
.....

21.b. What do you think is the ideal length of time between the birth of the second child and the birth of the third child?
.....

SECTION C : REPRODUCTIVE PATTERNS

22. Since marriage, have you ever been pregnant? YES: NO:

(IF RESPONDENT HAS NEVER BEEN PREGNANT SKIP TO Q.25)

22.a. How many times have you been pregnant? .....
(ENTER ON BIRTH RECORD FORM)

22.b. Have you ever had a pregnancy which did not result in a live birth? YES: ... NO:...

(IF YES) 22.c. Which one was that? .....(ENTER ON BRF)

22.d. In what month and year did that pregnancy end? ....(ENTER ON BRF)

22.e. How long had you been pregnant then?
.....(ENTER ON BRF)

(REPEAT 22.d. AND 22.e. IF MORE THAN ONE PREGNANCY DID NOT RESULT IN A LIVE BIRTH ENTER ON BIRTH RECORD FORM).

23. How many children have you had born alive (including those from a previous marriage).
.....

23.a. Could I write down the date(s) of birth please? (ON BRF)

23.b. Have you any adopted children? YES:..... NO: ....
(IF YES) Could I write down the particulars please? (ON BRF).

(IF HUSBAND MARRIED BEFORE) 23.c. Are there any of your husband's children from a previous marriage living with you now?
YES:.....NO:.....(IF YES - ENTER ON BRF).

23.d. Have any of your children died after birth? YES..NO..
(IF YES) Which ones? (Write date of death on BRF)

24. How did you feel about it the last time when you discovered you were pregnant?
.....
(If PREGNANCY UNWANTED): 24.a. Have you changed your mind since then? .....

24.b. How did your husband feel about it last time you were pregnant? .....
(If HUSBAND WAS UNFAVOURABLY DISPOSED): 24.c. Has your husband changed his mind since then?.
.....

ALL RESPONDENTS.

25. Do you have any reason to believe that you or your husband couldn't have another (a) child if you wanted to?

NO (SKIP TO Q.27). UNCERTAIN: (SKIP TO Q.26)
YES: (CONTINUE WITH Q.25a.)

25.a. For how long a time have you thought that you and your husband couldn't have another (a) child?
.....
(IF WOMAN HAS REACHED THE MENOPAUSE, SKIP TO Q.27)

25.b. Have you been told by a doctor that you couldn't have another (a) child?
YES:..... NO:.....
(If NO, SKIP TO Q.25.g.)

(If YES:) 25.c. What did he say were the reasons you couldn't have one?
.....

25.d. Have you or your husband had an operation which makes pregnancy impossible?
WIFE: YES..... NO .....
HUSBAND: YES..... NO .....
(If YES, SKIP TO Q.27)

25.e. Did the doctor think you could have another (a) child if you or your husband took treatment or had an operation?
YES.....UNCERTAIN ..... NO .....

(If YES): 25.f. Do you think you will have the treatment (or operation)?
YES: .....UNCERTAIN:..... NO: .....
(SKIP TO Q.27)

(If NO to Q.25.b.): 25.g. What leads you to think you couldn't have one?
.....
(SKIP TO Q.27)
(FOR THOSE REPLYING "UNCERTAIN" TO Q.25)

26. For how long a time have you thought that you might not be able to have another (a) child?
.....

26.a. Have you had a doctor's opinion on whether you and your husband could have another child?
YES..... NO .....
(If NO, SKIP TO Q.26.c.)

(If YES): 26.b. What did he say were the reasons why you may be unable to have another (a) child?
.....

26.c. Did the doctor think you could have another (a) child if you or your husband had an operation or took treatment?

YES..... UNCERTAIN ..... NO. .....

(If YES): 26.d. Do you think you will have the treatment (or operation)?

YES..... UNCERTAIN..... NO.....

(If NO to Q.26.a.) 26.e. What leads you to think you may be unable to have another (a) child?

.....

26.f. Do you think that you and your husband will see a doctor some time to find out whether a child might be possible?

YES ..... UNCERTAIN ..... NO .....

ALL RESPONDENTS

27. Would you say that you now regard your family as complete, that is, you now feel you have the number of children you can have or you want or the number you intend to have?

YES ..... UNCERTAIN ..... NO .....

(NO or UNCERTAIN): 27.a. How many children do you think you will have by the time your family is complete?

.....

28. So, you expect to have ..... children by the time your family is complete; could you tell me is this the number that you really want?

Supposing, for instance, you could begin your married life all over again, how many children would you really want by the time you were 45?

.....

(FOR THOSE INTENDING TO HAVE MORE CHILDREN)

29. How many more children do you expect to have?....

29.b. When would you say you expect to have your next child? .....

(IF INTENDS HAVING MORE THAN ONE):

29.c. About how many years will there be between that child and the next?

.....

(REPEAT THIS QUESTION UNTIL ALL FUTURE INTENDED CHILDREN AS REPORTED IN Q.29 HAVE BEEN ACCOUNTED FOR):

3rd "future child" .....
4th "future child" .....
.....
.....

ALL RESPONDENTS:

30. When you got married did you decide to have children right away?

YES ..... NO.....

31. Have you changed your mind since the beginning of your marriage about the number of children you wanted?

YES ..... NO .....

(If YES): 31.a. Do you now want more or less children than you first wanted?

MORE..... LESS .....

31.b. Could you perhaps tell me what caused you to change your mind?

.....
.....

32. Some things couples do may not be considered birth control. Doctors and public health workers are interested in learning about the methods people use these days. Have you or your husband ever made use of any of the methods on this card? You can tell me by the numbers on the card.

1. Safe period/rhythm (Avoiding those days of the monthly cycle when conceptionis likely to occur).
2. Douche - for cleanliness (soon after intercourse).
3. Douche - (soon after intercourse).
4. Withdrawal (by husband before completion).
5. Abstinence (abstaining for more than a month).
6. Rubber Condom (prophylactic).
7. Diaphragm.
8. Jelly.
9. Vaginal Suppository.
10. Foam Tablet.
11. Tampon, Vaginal Cap or Stem Pessary.
12. Anti-ovulatory tablet.

ALL RESPONDENTS.

33. Do you intend to use some method in the future?
YES ..... NO ..... UNCERTAIN .....
(NEVER USERS SKIP TO Q.38, 38.a.)

FOR ALL EVER-USERS:

34. Have you used some method almost always during your marriage? YES ..... NO .....

34.a. Have you stopped using a method (methods) only when you wanted a child?
IN ORDER TO HAVE A CHILD: .....OTHER REASON: ....

FOR ALL EVER-PREGNANT USERS:

35. Did you use some method before your first pregnancy?
YES ..... NO .....

(If NO): 35.a. After which pregnancy did you begin to use some method?
.....

35.b. Did you want your pregnancies up to that one?
AS SOON AS POSSIBLE: .....
NOT AS SOON AS POSSIBLE .....

36. Did any of your pregnancies begin at a time when you were using some method to prevent pregnancy?
YES ..... NO .....

(If YES): 36.a. Which one(s) was that (were they)?....

37. Did any of your pregnancies begin at a time when you purposely stopped using a method because you wanted a child?
YES ..... NO .....

(If YES): 37.a. Which one(s)? .....
.....

ONLY FOR RESPONDENTS WHO HAVE BEEN MARRIED AT LEAST FOUR YEARS:

(IF NEVER PREGNANT): 38. Has there ever been a period of two or more years when you did not use any method to prevent pregnancy?
YES..... NO .....

(IF EVER PREGNANT): 38.a. Has there ever been a period of three or more years when you weren't pregnant and nothing was done to prevent pregnancy and you did not become pregnant?
YES ..... NO .....

ALL RESPONDENTS.

39. Since you were married, have you and your husband been away from each other for six months or more?
YES ..... NO .....

(If YES): 39.a.

FROM	TO:
.....	.....
.....	.....
.....	.....
.....	.....

40. If adequate family allowances were made available to all White families, how many children would you like to have (to have had) altogether?
.....

4. The Interview Situation.

In most cases the respondent was interviewed at her place of residence. However, in a few instances, circumstances compelled the fieldworker to conduct the interview at the respondent's place of employment during the lunch break. In nearly all cases, the interview was conducted in private though on five occasions the husband insisted on being present.

The vast majority of respondents were reported as being co-operative, some extremely so. Our interviewers experienced very few instances of reluctance, although it is clear that a few interviews were granted with definite reluctance. Each interview averaged about three-quarters of an hour.

After the editing of the schedules, all the raw data were coded and computer tabulations produced.

APPENDIX B

THE REPRESENTATIVENESS OF THE SAMPLE, AND QUESTIONS OF SAMPLING INFERENCE

APPENDIX B.

THE REPRESENTATIVENESS OF THE SAMPLE, AND QUESTIONS OF SAMPLING INFERENCE

The representativeness of the sample drawn in 1964, was guaged by a comparison of the results with figures obtained from the 1960 census of Metropolitan Port Elizabeth. It should be noted that the sample and the census population fail to coincide in three important respects:

i. The sample universe was limited to married females under 50 (i.e. 15 - 49 years) while the census distribution is based on counts of all females 15 - 64 years.

ii. Our geographical universe consisted of the Municipalities of Walmer and Port Elizabeth while the Metropolitan area includes, in addition, the adjacent area of Bethelsdorp. (But this is largely a non-White area with only 61 White persons at the time of the 1960 Census. (1963, 51).

iii. The census represents the population distribution as at 6th September, 1960, whereas the sample was drawn in May 1964.

Table B.1 compares the ages of women in the sample with all White females in Metropolitan Port Elizabeth at the 1960 Census.

TABLE B.1.

PERCENTAGE DISTRIBUTION OF THE SAMPLE POPULATION BY HOME LANGUAGE, COMPARED WITH ALL WHITE FEMALES AGED 15-64 IN PORT ELIZABETH METROPOLITAN AREA ACCORDING TO 1960 CENSUS

HOME LANGUAGE	SAMPLE %	CENSUS %
English	48.3	50.6
Afrikaans	47.3	45.7
English/Afrikaans Equally	3.9	2.6
Other	0.5	1.1
Total.	100.0	100.0

It will be seen the agreement between the two sets of figures is excellent. In the following table a more exact comparison is possible because both the marital status as well as the age are the same in the sample and the census (1966c, 16).

TABLE B.2.

PERCENTAGE AND NUMERICAL DISTRIBUTION OF THE SAMPLE POPULATION, AND OF ALL WHITE MARRIED FEMALES AGED 15-49 YEARS IN THE PORT ELIZABETH METROPOLITAN AREA ACCORDING TO THE 1960 CENSUS

AGE IN YEARS	SAMPLE		CENSUS	
	Number	Percentage	Number	Percentage
15-19	21	2.3	317	1.9
20-24	123	13.7	2,358	14.5
25-29	182	20.2	2,993	18.4
30-34	169	18.8	3,064	18.8
35-39	144	16.0	2,779	17.1
40-44	145	16.1	2,527	15.5
45-49	115	12.8	2,252	13.8
No Information	1	0.1	-	-
Total	900	100.0	16,290	100.0

The above table reflects a close correspondence between the two populations when age and marital status are held constant. With regard to the age groups, the highest difference between the sample distribution and that of the census is 1.7 percentage points; the total mean difference is, in fact, only 0.8 percentage points. Therefore, in terms of age the sample appears representative.

A distribution of the occupation of husbands of the women interviewed is provided below and compared with census figures.

TABLE B.3

PERCENTAGE AND NUMERICAL DISTRIBUTION OF SAMPLE POPULATION ACCORDING TO OCCUPATION OF RESPONDENT'S HUSBAND, AND OCCUPATIONAL DISTRIBUTION OF ALL ECONOMICALLY-ACTIVE WHITE MALES IN METROPOLITAN PORT ELIZABETH ACCORDING TO THE 1960 CENSUS

OCCUPATION	SAMPLE		CENSUS	
	Percentage	Number	Percentage	Number
Professional, technical, related worker	6.7	60	8.8	2,404
Administrative, Executive and Managerial worker	9.8	88	7.9	2,161
Clerical worker	17.9	161	20.9	5,726
Salesworker	7.6	68	8.4	2,304
Farmer, fisherman, lumberman and related worker	0.7	6	0.7	202
Miner, Quarryman and related worker	-	-	0.1	15
Worker in transport and communication	-	-	9.5	2,603
Craftsman, production worker and labourer	51.1	460	35.6	9,822
Service, sports and recreation worker	5.1	46	5.5	1,501
Unemployed and unspecified	1.1	11	2.6	718
TOTAL	100.0	900	100.0	27,456

Note: Census data are from (1966c, 8-9)

Two factors must be borne in mind when studying the above table, viz., (i) the census data lacks the control of marital status and (ii) in one instance[1], two categories are not strictly comparable. Nevertheless, the general correspondence between the census and sample on the occupation variable is satisfactory.

As far as the present study is concerned, it was felt that the detailed specific occupational classification was unsatisfactory in that when cross-classifying the occupation variable with some other variable (e.g. family planning status), many of the cells in the table would be too small to be statistically reliable. Therefore. we adopted the briefer and more general classification used by Freedman and his colleagues in their well-known GAF Study. (Freedman et al. 1959, 132). There are two general categories (i.e. white-collar and blue-collar) which are subdivided into upper and lower. For example, a professional worker would be classed as upper-white-collar, as would a business or government executive; lower-white-collar is composed of clerical and sales workers; a skilled artisan belongs to the upper-blue-collar category while a semi-skilled or service worker would belong to the lower-blue-collar group. Not all of these "collar" groupings are comparable to the census classification because, for example, the census places skilled artisans, semi-skilled workers and labourers in one and the same category. Nevertheless, in the following table some attempt at comparison is made.

---

1. This category was not employed in the sample classification of occupations. These workers were placed in the same category as craftsmen, production workers and labourers.

TABLE B.4

PERCENTAGE DISTRIBUTION OF SAMPLE POPULATION ACCORDING TO OCCUPATION (GENERAL CLASSES) OF RESPONDENT'S HUSBAND AND OCCUPATIONAL DISTRIBUTION OF ALL ECONOMICALLY-ACTIVE MALES IN METROPOLITAN PORT ELIZABETH ACCORDING TO THE 1960 CENSUS CLASSIFIED BY FREEDMAN'S CATEGORIES.

GENERAL OCCUPATIONAL CLASSIFICATION	SAMPLE	CENSUS *
Upper-white-collar	16.7	17.4
Lower-white-collar	25.7	29.3
(Blue-collar)	(56.6)	(50.7)
Upper-blue-collar	30.2	-
Lower-blue-collar	26.4	-
Unemployed and Unspecified	1.0	2.6
TOTAL	100.0	100.0

* Note: These figures are calculated from the Census (1966c, 8-9).

Though, as far as the census is concerned the control of marital status is absent, the correspondence in the above table is fair.

Table B.5 below compares the employment status of the respondent's husband with that revealed by the 1960 Census for all economically active males in metropolitan Port Elizabeth (1966c, 56).

TABLE B.5

NUMERICAL AND PERCENTAGE DISTRIBUTION OF SAMPLE POPULATION ACCORDING TO EMPLOYMENT STATUS OF RESPONDENT'S HUSBAND, AND EMPLOYMENT STATUS OF ALL ECONOMICALLY-ACTIVE WHITE MALES IN METROPOLITAN PORT ELIZABETH ACCORDING TO 1960 CENSUS.

EMPLOYMENT STATUS	SAMPLE		CENSUS	
	Number	Percentage	Number	Percentage
Employer	45	6.0	1,951	7.1
Employee	836	92.9	24,441	89.1
Unemployed and Unidentifiable	10	1.1	1,050	3.8
TOTAL	900	100.0	27,442	100.0

It will be seen that the differences in the above table regarding employment status are extremely minor; the correspondence is much more striking.

A close correspondence between the proportions of married women in the universe and the sample appears in Table B.6 which compares the distribution of the working status of married women.

TABLE B.6.

NUMERICAL AND PERCENTAGE DISTRIBUTION OF SAMPLE POPULATION ACCORDING TO RESPONDENT'S WORK STATUS AND WORK STATUS OF ALL MARRIED FEMALES IN METROPOLITAN PORT ELIZABETH ACCORDING TO 1960 CENSUS.*

EMPLOYMENT STATUS	SAMPLE		CENSUS	
	Number	Percentage	Number	Percentage
Not economically active	642	71.3	15,510	73.3
Economically active	253	28.1	5,657	26.7
No information	5	0.6	-	-
TOTAL	900	100.0	21,167	100.0

* Note: Calculated from the Census (1966c, 39)

Bearing in mind both the time lag (nearly four years) and the absence of age-control from the census data, it must be averred that the correspondence between the two populations as revealed in the above table is extremely close. In passing, it should be noted that the sample working population is predominantly full-time - 85.8% of the economically-active respondents are employed on a full-time basis while the rest are part-time workers.

In this study the educational category of "University or College" includes only persons who have graduated from a university, teachers' training college or similar institution. Technical colleges are not included here. Matriculation means that the person concerned has passed the Matriculation (including school-leaving) Examination. Secondary school refers to all those who have passed any standard from six to nine. Primary school embraces all or any schooling up to and including Standard five.

It has not been possible to compare the distribution according to level of education of the women in the sample with census data because no controls of age or marital status are reflected in the census which, in this instance, only distinguishes between women who are economically-active and those who are not. However, it has been found possible to compare the distribution of the educational levels of the husbands of the women interviewed in this study with that of all economically-active males in metropolitan Port Elizabeth. While this does not represent perfect comparability, it is more accurate than any attempted comparison with the female population of metropolitan Port Elizabeth. These data appear in Table 8.

TABLE B.7.

NUMERICAL AND PERCENTAGE DISTRIBUTION OF SAMPLE POPULATION (RESPONDENTS AND THEIR HUSBANDS) ACCORDING TO LEVEL OF EDUCATION AND LEVEL OF EDUCATION OF ALL ECONOMICALLY-ACTIVE MALES IN METROPOLITAN PORT ELIZABETH ACCORDING TO THE 1960 CENSUS

LEVEL OF EDUCATION	SAMPLE POPULATION				CENSUS (All Economically-Active Males)	
	Females		Males			
	Nos.	Per-cent	Nos.	Per-cent	Nos.	Per-cent
University/ College	38	4.2	69	7.7	2,603	9.6
Matriculation	174	19.4	184	20.4	4,601	17.0
Secondary School	650	72.2	610	67.8	18,056	66.6
Primary School	35	3.9	19	2.1	1,432	5.3
No Schooling	-	-	-	-	85	0.3
No Information	3	0.3	18	2.0	347	1.2
TOTAL	900	100.0	900	100.0	27,124	100.0

Table B.7. shows us that the education level of the husbands of the 900 women interviewed in this study is fairly similar to that of all the economically-active males in the metropolitan area of Port Elizabeth. It will also be observed that the husbands are, on the whole, slightly better educated than their wives, i.e., the respondents in our study.

From the foregoing analysis it will be seen the sample data agree closely with relevant census data for the city in 1960. We conclude the sample is representative.

Strictly speaking, standard measures of standard errors of statistical significance for a simple random sample are not applicable, unaltered, for a systematic sample. However, there was no reason to suspect systematic biases in the sample design, so the results were treated as if they were based on a simple random sample. The main test used was Chi-Square. As fiducial limits were satisfactorily small they were not calculated throughout. The following figures exemplify the size of these limits:

TABLE B.8

DISTRIBUTION OF CALCULATED STANDARD ERRORS OF VARIOUS SAMPLE MEANS AND FIDUCIAL LIMITS OF ESTIMATE OF RELEVANT POPULATION PARAMETER

VARIABLE	SAMPLE MEAN	STANDARD ERROR OF THE MEAN		FIDUCIAL LIMITS OF ESTIMATE OF RELEVANT POPULATION PARAMETER	
		5.0 per cent	1.0 per cent	5.0 per cent	1.0 per cent
Actual Number of Children Born	2.6	0.03	0.04	2.57 - 2.63	2.56 - 2.64
Age of Respondent	34.10 years	0.52	0.69	33.58 -34.62	33.41 -34.79
Annual Family Income	R2,386.11	R79.38	R104.49	R2,306.73 - R2,465.49	R2,281.62 - R2,490.60
Monthly Rental	R29.28	R1.56	R2.05	R27.72-R30.84	R27.23-R31.33

TABLE B.9.

DISTRIBUTION OF CALCULATED STANDARD ERRORS OF PERCENTAGE ENGLISH- AND AFRIKAANS-SPEAKING USERS OF CONTRACEPTION AND FIDUCIAL LIMITS OF RELEVANT ESTIMATES OF POPULATION PERCENTAGES

CHARACTERISTIC	SAMPLE PERCENTAGE	STANDARD ERROR		FIDUCIAL LIMITS	
		5.0 per cent	1.0 per cent	5.0 per cent	1.0 per cent
English-speaking (N= 434)	86.0	3.2	4.2	82.8-89.2	81.8-90.2
Afrikaans-speaking (N=426)	68.1	4.4	5.7	63.7-72.5	62.4-73.8
Contraceptive Users (N= 693)	77.0	2.05	2.69	74.95-79.05	74.31-79.69

Table B.10 gives some fiducial limits read from a nomograph:

TABLE B.10

DISTRIBUTION OF FIDUCIAL LIMITS -AT 5.0 PER CENT LEVEL - OF EXCLUSIVE USE OF APPLIANCE METHODS OF CONTRACEPTION OF FECUND COUPLES, BY RESPONDENT'S RELIGIOUS AFFILIATION

RELIGIOUS AFFILIATION	SAMPLE PERCENTAGE	FIDUCIAL LIMITS
English Protestant (N= 241)	52.3	46.0 - 59.0
Afrikaans Protestant (N= 222)	38.7	32.5 - 45.0
Jewish (N = 17)	70.6	44.0 - 90.0
Catholic (N= 29)	31.0	16.0 - 51.0

As one would expect the smaller the sub-sample the greater the range attached to fiducial limits. However, the above table represents an extreme case in which three controls are operating, viz., fecundity status, use of contraception and religious affiliation. Generally the limits are acceptably small.

APPENDIX C

ADDITIONAL TABLES REFERRED TO IN THE TEXT

APPENDIX C.

ADDITIONAL TABLES REFERRED TO IN THE TEXT

TABLE C-1

DISTRIBUTION OF THE SAMPLE POPULATION ACCORDING TO TIME RESPONDENT HAS WORKED SINCE MARRIAGE

TIME WORKED SINCE MARRIAGE	NUMBER	PERCENTAGE
Always	77	8.6
Almost Always	78	8.7
About Half the Time	92	10.2
Some of the Time	347	38.6
Never	296	32.9
No Information	10	1.0
TOTAL	900	100.0

TABLE C-2

DISTRIBUTION OF THE SAMPLE POPULATION ACCORDING TO THE NUMBER OF YEARS RESPONDENT HAS WORKED SINCE MARRIAGE

YEARS WORKED SINCE MARRIAGE	NUMBER	PERCENTAGE
None	296	32.9
Under 1 Year	112	12.4
1 - 4 Years	252	28.0
5 or More	227	25.2
No Information	13	1.5
TOTAL	900	100.0

TABLE C-3

DISTRIBUTION OF THE SAMPLE POPULATION ACCORDING TO ANNUAL FAMILY INCOME

ANNUAL FAMILY INCOME (Rands)	NUMBER	PERCENTAGE
R5000 or more	43	4.8
R4000 - R4999	59	6.6
R3000 - R3999	131	14.6
R2000 - R2999	269	29.9
R1000 - R1999	329	36.6
Under R1000	42	4.6
No Information	27	2.9
TOTAL	900	100.0

TABLE C-4

DISTRIBUTION OF THE SAMPLE POPULATION ACCORDING TO RESPONDENT'S ACTUAL OR EQUIVALENT MONTHLY RENTAL.

ACTUAL OR EQUIVALENT MONTHLY RENTAL (Rands)	NUMBER	PERCENTAGE
R80 or more	60	6.7
R60 - R79	109	12.1
R40 - R59	229	25.5
R20 - R39	265	29.4
Less than R20	218	24.2
No Information	19	2.1
TOTAL	900	100.0
Mean = R39.08 Median = R36.79 Mode = R30.24		

TABLE C-5

DISTRIBUTION OF THE SAMPLE POPULATION ACCORDING TO DURATION OF RESPONDENT'S MARRIAGE.

DURATION OF MARRIAGE	NUMBER	PERCENTAGE
Under 5 years	182	20.2
5 - 9 years	226	25.1
10 - 14 years	170	18.9
15 - 19 years	139	15.4
20 - 24 years	121	13.4
25 or more years	62	6.9
TOTAL	900	99.9

Mean = 12.4 years
Median = 11.2 years
Mode = 8.4 years

TABLE C-6

DISTRIBUTION OF THE SAMPLE POPULATION ACCORDING TO THE RESPONDENT'S AGE AT MARRIAGE

AGE AT MARRIAGE	NUMBER	PERCENTAGE
Under 20 years	280	31.1
20 years	127	14.1
21 years	128	14.2
22 years	93	10.3
23 years	72	8.0
24 years	57	6.3
25 years	32	3.6
26 years - 29 years	85	9.5
30 or more years	24	2.7
No Information	2	0.2
TOTAL	900	100.0

TABLE C-7

DISTRIBUTION OF ALL RESPONDENTS AND THEIR HUSBANDS ACCORDING TO THEIR RURAL/URBAN ORIGIN (BIRTHPLACE).

RURAL/URBAN ORIGIN (BIRTHPLACE)	RESPONDENTS		HUSBANDS	
	Number	Percentage	Number	Percentage
Farm	66	7.3	47	5.2
Village	93	10.3	83	9.2
Town	322	35.9	353	39.2
City	417	46.3	403	44.8
No Information	2	0.2	14	1.6
TOTAL	900	100.0	900	100.0

TABLE C-8

DISTRIBUTION OF 900 RESPONDENTS ACCORDING TO NUMBER OF RESIDENTIAL MOVES MADE SINCE MARRIAGE

NUMBER OF MOVES SINCE MARRIAGE	NUMBER	PERCENTAGE
None	94	10.4
1 - 4 moves	583	64.8
5 - 9 moves	188	20.9
10 or more moves	34	3.8
No Information	1	0.1
TOTAL	900	100.0
Mean No. of moves for total sample		3.7 moves
Mean No. of moves for movers only		4.1 moves

TABLE C-9

DISTRIBUTION OF THE SAMPLE POPULATION ACCORDING TO TYPE OF PRE-MARRIAGE RESIDENCE OF RESPONDENT

TYPE OF PRE-MARRIAGE RESIDENCE	NUMBER	PERCENTAGE
Farm	38	4.2
Village	49	5.4
Town	230	25.6
City	573	63.7
No Information	10	1.1
TOTAL	900	100.0

TABLE C-10

PERCENTAGE USERS OF CONTRACEPTION, BY HUSBAND'S STANDARD OF EDUCATION

ALL COUPLES	HUSBAND'S STANDARD OF EDUCATION			
	University /College	Matric-ulation	Secondary School	Primary School
N=900	N=69	N=184	N=609	N=19
77.0%	91.3%	91.9%	71.4%	63.2%

$X^2 = 44.84$, d.f., 3, $p < .01$

TABLE C-11

PERCENTAGE USERS OF CONTRACEPTION, BY RESPONDENT'S OCCUPATION BEFORE MARRIAGE

ALL RES-PONDENTS	RESPONDENT'S OCCUPATION BEFORE MARRIAGE					
	Profess-ional Executive	Clerical	Sales	Skilled	Semi-Skill-ed	Service
N=900	N=84	N=363	N=97	N=57	N=151	N=62
77.0%	89.2%	87.1%	72.2%	68.4%	62.3%	80.6%

$X^2 = 51.73$, d.f., 5, $p < .01$

TABLE C-12

PERCENTAGE USERS OF CONTRACEPTION BY RESPONDENT'S PRESENT EMPLOYMENT STATUS

ALL RESPONDENTS N=900	RESPONDENT'S PRESENT EMPLOYMENT STATUS		
	Working Full-time N=217	Working Part-time N=36	Not Working N=642
77.0%	82.9%	83.3%	74.4%

$X^2 = 7.26$, d.f., 2, $p < .05$

TABLE C-13

PERCENTAGE USERS OF CONTRACEPTION, BY BIRTHPLACE OF RESPONDENT'S HUSBAND

ALL RESPONDENTS N=900	HUSBAND'S BIRTHPLACE			
	Farm N=47	Village N=83	Town N=352	City N=403
77.0%	61.7%	57.8%	78.1%	81.6%

$X^2 = 28.56$, d.f., 3, $p < .01$

TABLE C-14

PERCENTAGE USERS OF CONTRACEPTION, BY RESPONDENT'S BIRTHPLACE

ALL RESPONDENTS N=900	RESPONDENT'S BIRTHPLACE			
	Farm N=66	Village N=93	Town N=321	City N=417
77.0%	65.2%	65.6%	78.2%	80.1%

$X^2 = 14.35$, d.f., 3, $p < .01$

TABLE C-15

PERCENTAGE REGULAR USERS OF CONTRACEPTION, BY COUPLE'S MARRIAGE DURATION AND FECUNDITY STATUS

USERS	COUPLE'S MARRIAGE DURATION					
	Under 5 Years	5 - 9 Years	10-14 Years	15-19 Years	20-24 Years	25 Years or More
All Couples	69.8%	80.0%	79.1%	74.3%	74.1%	75.0%
$X^2 = 5.19$, d.f., 5, $p > .05$						
Fecund Couples	69.9%	84.9%	87.5%	82.5%	85.0%	90.0%

$X^2 = 15.74$, d.f., 5, $p < .01$

TABLE C-16

PERCENTAGE REGULAR FECUND USERS, BY RESPONDENT'S RELIGIOUS AFFILIATION

ALL FECUND USERS N=509	RELIGION OF RESPONDENT			
	Afrikaans Protestant N=239	English Protestant N= 221	Jewish N=17	Catholic N=30
81.3%	83.3%	77.4%	94.1%	86.7%

$X^2 = 5.52$, d.f., 3, $p > .05$

TABLE C-17

PERCENTAGE REGULAR SUB-FECUND USERS, BY RESPONDENT'S RELIGIOUS AFFILIATION

ALL SUB-FECUND USERS N=171	RELIGION OF RESPONDENT			
	English Protestant N=75	Afrikaans Protestant N=74	Jewish N=4	Catholic N=16
59.6%	72.0%	51.4%	75.0%	43.8%

$X^2 = 10.61$, d.f., 3, $p < .05$

TABLE C-18

PERCENTAGE FECUND REGULAR USERS OF CONTRACEPTION, BY OCCUPATION OF RESPONDENT'S HUSBAND

ALL FECUND USERS N=509	OCCUPATION OF HUSBAND			
	Upper-White-Collar N=102	Lower-White-Collar N=151	Upper-Blue-Collar N=162	Lower-Blue-Collar N= 89
81.3%	86.3%	88.1%	78.4%	70.8%

TABLE C-19

PERCENTAGE DISTRIBUTION OF FECUND USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED, BY RESPONDENT'S RELIGIOUS AFFILIATION

GENERAL TYPE OF CONTRACEP-TIVES	ALL FECUND USERS N=509	RELIGION OF RESPONDENT			
		English Protest-ant N=241	Afrikaans Protest-ant N=222	Jewish N=17	Catholic N=29
Appliance Methods only	45.8	52.3	38.7	70.6	31.0
Mixed Methods	26.3	32.4	20.7	23.5	20.7
Non-Appliance Methods only	27.9	15.3	40.6	5.9	48.3
TOTAL	100.0	100.0	100.0	100.0	100.0

$X^2 = 48.37$, d.f., 6, $p < .01$

TABLE C-20

PERCENTAGE DISTRIBUTION OF SUB-FECUND USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED, BY RESPONDENT'S RELIGIOUS AFFILIATION *

GENERAL TYPE OF CONTRA-CEPTIVES	ALL SUB-FECUND USERS N=171	RELIGION OF RESPONDENT		
		English Protestant N=77	Afrikaans Protestant N=77	Catholic N= 17
Appliance Methods only	43.8	48.0	28.6	35.3
Mixed Methods	20.5	23.4	13.0	41.2
Non-Appliance Methods Only	35.7	15.6	58.4	23.5
TOTAL	100.0	100.0	100.0	100.0

$X^2 = 60.93$, d.f., 4, $p < .01$

* Note: Jewish sub-fecund users are omitted from this and the following four tables because they form a statistically-insignificant group.

TABLE C-21

PERCENTAGE DISTRIBUTION OF HIGH INCOME USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED, BY RESPONDENT'S RELIGIOUS AFFILIATION

GENERAL TYPE OF CONTRACEP-TIVES.	ALL HIGH INCOME USERS N=94	RESPONDENT'S RELIGION		
		English Protestant N=56	Afrikaans Protestant N=17	Catholic N=7
Appliance Methods only	52.1	58.9	35.3	28.6
Mixed Methods	34.1	32.2	41.2	28.6
Non-Appliance Methods	13.8	8.9	23.5	42.8
TOTAL	100.0	100.0	100.0	100.0

$X^2 = 4.46$, d.f., 4, $p > .05$

TABLE C-22

PERCENTAGE DISTRIBUTION OF MIDDLE INCOME USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED, BY RESPONDENT'S RELIGIOUS AFFILIATION

GENERAL TYPE OF CONTRACEP-TIVES	ALL MIDDLE INCOME USERS N=325	RELIGION OF RESPONDENT		
		English Protestant N=161	Afrikaans Protestant N= 131	Catholic N=26
Appliance Methods only	46.5	51.6	41.2	34.6
Mixed Methods	26.5	34.2	17.6	26.9
Non-Appliance Methods only	27.0	14.2	41.2	38.5
TOTAL	100.0	100.0	100.0	100.0

$X^2 = 30.19$, d.f., 4, $p < .01$

TABLE C-23

PERCENTAGE DISTRIBUTION OF LOW INCOME USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED BY RESPONDENT'S RELIGIOUS AFFILIATION

GENERAL TYPE OF CONTRACEP-TIVES.	ALL LOW INCOME USERS N=248	RELIGION OF RESPONDENT		
		English Protestant N=90	Afrikaans Protestant N=145	Catholic N=13
Appliance Methods only	41.1	57.8	31.7	30.8
Mixed Methods	20.6	23.3	17.9	30.8
Non-Appliance Methods only	38.3	18.9	50.4	38.4
TOTAL	100.0	100.0	100.0	100.0

$X^2 = 24.52$, d.f., 4, $p < .01$

TABLE C-24

PERCENTAGE DISTRIBUTION OF MATRICULATED AND HIGHER-EDUCATED USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED, BY RESPONDENT'S RELIGIOUS AFFILIATION

GENERAL TYPE OF CONTRA-CEPTIVES	ALL MATRIC-ULATED & HIGHER-EDUCATED USERS N=192	RELIGION OF RESPONDENT		
		English Protestant N=107	Afrikaans Protestant N=55	Catholic N=10
Appliance Methods only	53.6	55.1	49.1	30.0
Mixed Methods	31.3	38.3	21.8	20.0
Non-Appliance Methods only	15.1	6.6	29.1	50.0
TOTAL	100.0	100.0	100.0	100.0

$X^2 = 20.71$, d.f., 4, $p < .01$

TABLE C-25

PERCENTAGE DISTRIBUTION OF BELOW MATRICULATION USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED, BY RESPONDENT'S RELIGIOUS AFFILIATION

GENERAL TYPE OF CONTRACEP-TIVES.	ALL BELOW MATRICU-LATION USERS N=494	RELIGION OF RESPONDENT		
		English Protestant N=210	Afrikaans Protestant N=244	Catholic N=36
Appliance Methods only	42.3	54.3	33.2	33.3
Mixed Methods	22.5	26.2	18.0	30.6
Non-Appliance Methods only	35.2	19.5	48.8	36.1
TOTAL	100.0	100.0	100.0	100.0

$X^2 = 44.36$, d.f., 4, $p < .01$

TABLE C-26

PERCENTAGE DISTRIBUTION OF ALL USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED, BY COUPLE'S ANNUAL FAMILY INCOME

GENERAL TYPE OF CONTRACEPTIVES	ALL USERS	ANNUAL FAMILY INCOME					
		R5000 and Over N=41	R4000-4999 N=53	R3000-3999 N=112	R2000-2999 N=213	R1000-1999 N=228	Under R1000 N=20
Appliance Methods only	45.3	53.7	50.9	45.5	47.0	42.5	25.0
Mixed Methods	24.9	36.6	32.1	27.7	25.8	21.5	10.0
Non-Appliance Methods only	29.8	9.7	17.0	26.8	27.2	36.0	65.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

$X^2 = 30.92$, d.f., 10, $p < .01$

TABLE C-27

PERCENTAGE DISTRIBUTION OF ALL USERS ACCORDING TO GENERAL TYPE OF CONTRACEPTIVES USED, BY OCCUPATION OF RESPONDENT'S HUSBAND

GENERAL TYPE OF CONTRACEP-TIVES	ALL USERS N=688	HUSBAND'S OCCUPATION			
		Upper-White-Collar N=136	Lower-White-Collar N=193	Upper-Blue-Collar N=215	Lower-Blue-Collar N=138
Appliance Methods only	45.3	56.6	46.1	42.8	37.7
Mixed Methods	24.9	29.4	28.5	24.2	15.2
Non-Appliance Methods only	29.8	14.0	25.4	33.0	47.1
TOTAL	100.0	100.0	100.0	100.0	100.0

$X^2 = 40.95$, d.f., 6, $p < .01$

TABLE C-28

PERCENTAGE USERS REPORTING ANY USE OF APPLIANCE METHOD(S) OF CONTRACEPTION, BY RESPONDENT'S RELIGION AND FECUNDITY STATUS

USERS	TOTAL	RELIGION OF RESPONDENT			
		English Protest-ant	Afrikaans Protest-ant	Jewish	Cath-olic
Fecund Couples	72.3%	85.1%	59.5%	94.1%	51.7%
	X^2 = 49.60, d.f., 3, $p < .01$				
Sub-Fecund Couples	65.0%	84.4%	41.6%	75.0%	76.5%

X^2 = 32.33, d.f., 3, $p < .01$

TABLE C-29

PERCENTAGE USERS REPORTING ANY USE OF APPLIANCE METHOD(S) OF CONTRACEPTION, BY COUPLE'S ANNUAL FAMILY INCOME

ALL USERS	ANNUAL FAMILY INCOME					
	R5000 or More	R4000-4999	R3000-3999	R2000-2999	R1000-1999	Under R1000
N=688	N=41	N=53	N=112	N=212	N=228	N=20
70.3%	90.2%	83.0%	73.2%	72.6%	64.5%	35.0%

X^2 = 28.43, d.f., 5, $p < .01$

TABLE C-30

PERCENTAGE USERS REPORTING ANY USE OF RHYTHM METHOD OF CONTRACEPTION, BY RESPONDENT'S RELIGIOUS AFFILIATION AND FECUNDITY STATUS

USERS	TOTAL	RELIGION OF RESPONDENT			
		English Protestant	Afrikaans Protestant	Jewish	Catholic
All Couples	21.4%	23.3%	15.7%	19.0%	45.7%
Fecund Couples	22.7%	25.7%	15.8%	17.7%	48.3%
$X^2 = 21.09$, d.f., 3, $p < .01$					
Sub-fecund Couples	18.1%	15.6%	15.6%	25.0%	41.5%

$X^2 = 7.15$, d.f., 3, $p > .05$

TABLE C-31

PERCENTAGE USERS REPORTING ANY USE OF WITHDRAWAL AS A METHOD OF CONTRACEPTION, BY RESPONDENT'S RELIGIOUS AFFILIATION AND FECUNDITY STATUS

USERS	TOTAL	RELIGION OF RESPONDENT		
		English Protestant	Afrikaans Protestant	Catholic
Fecund Couples	38.2%	31.1%	49.1%	31.0%
$X^2 = 20.94$, d.f., 2, $p < .01$				
Sub-fecund Couples	36.7%	23.4%	54.5%	23.5%

$X^2 = 12.54$, d.f., 2, $p < .01$

TABLE C-32

PERCENTAGE USERS REPORTING ANY USE OF WITHDRAWAL AS A METHOD OF CONTRACEPTION, BY RESPONDENT'S RELIGIOUS AFFILIATION AND STANDARD OF EDUCATION

STANDARD OF EDUCATION	TOTAL	RELIGION OF RESPONDENT		
		English Protestant	Afrikaans Protestant	Catholic
Matriculation and Higher	28.0%	25.2%	40.0%	11.1%
$X^2 = 6.07$, d.f., 2, $p < .05$				
Below Matriculation	42.0%	31.0%	52.9%	30.6%

$X^2 = 24.50$, d.f., 2, $p < .01$

TABLE C-33

PERCENTAGE IMMEDIATE EVER-PREGNANT USERS OF CONTRACEPTION, BY OCCUPATION OF RESPONDENT'S HUSBAND.

ALL EVER-PREGNANT USERS N=658	OCCUPATION OF HUSBAND			
	Upper-White-Collar N=131	Lower-White-Collar N=184	Upper-Blue-Collar N=204	Lower-Blue-Collar N=134
45.7%	58.0%	59.8%	35.8%	31.3%

$X^2 = 42.21$, d.f., 3, $p < .01$

TABLE C-34

PERCENTAGE IMMEDIATE EVER-PREGNANT USERS, BY BIRTHPLACE OF RESPONDENT

ALL EVER-PREGNANT USERS N=658	RESPONDENT'S BIRTHPLACE			
	Farm N=41	Village N=58	Town N=242	City N=315
45.7%	34.1%	29.3%	43.8%	51.7%

$X^2 = 14.38$, d.f., 3, $p < .01$

TABLE C-35

PERCENTAGE IMMEDIATE EVER-PREGNANT USERS, BY COUPLE'S ANNUAL FAMILY INCOME

ALL EVER-PREGNANT USERS N=658	ANNUAL FAMILY INCOME					
	R5000 or More N=40	R4000-4999 N=52	R3000-3999 N=102	R2000-2999 N=203	R1000-1999 N=223	Under R1000 N=20
45.7%	47.5%	63.5%	52.9%	48.8%	35.9%	35.0%

$X^2 = 18.52$, d.f., 5, $p < .01$

TABLE C-36

PERCENTAGE DISTRIBUTION OF LATER EVER-PREGNANT USERS OF CONTRACEPTION ACCORDING TO THE NUMBER OF PREGNANCIES OCCURRING BEFORE FIRST USE, BY OCCUPATION OF RESPONDENT'S HUSBAND

AFTER WHICH PREGNANCY FIRST USED METHOD OF CONTRACEPTION	ALL LATER EVER-PREGNANT USERS N=357	HUSBAND'S OCCUPATION			
		Upper-White-Collar N=54	Lower-White-Collar N=70	Upper-Blue-Collar N=126	Lower-Blue-Collar N=90
After First	61.7	61.1	75.7	59.5	54.4
After Second	20.9	27.8	14.3	23.8	17.8
After Third or later Pregnancy	17.4	11.1	10.0	16.7	27.8
TOTAL	100.0	100.0	100.0	100.0	100.0

$X^2 = 16.23$, d.f., 6, $p < .05$

TABLE C-37

PERCENTAGE EVER-USER OF CONTRACEPTION, ALL COUPLES AND FECUND COUPLES BY RESPONDENT'S STANDARD OF EDUCATION

EVER-USERS	RESPONDENT'S STANDARD OF EDUCATION			
	University/ College	Matricu-lation	Secondary School	Primary School
All Couples	91.9	93.0	79.2	54.3
X^2 = 24.63, d.f., 3, $p < .01$				
Fecund Couples	96.8	98.4	91.2	73.3
X^2 = 17.32, d.f., 3, $p < .01$				

TABLE C-38

PERCENTAGE EVER-USER OF CONTRACEPTION, ALL COUPLES AND FECUND COUPLES BY OCCUPATION OF RESPONDENT'S HUSBAND

EVER-USERS	HUSBAND'S OCCUPATION			
	Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar
All Couples	93.2	88.6	83.1	65.7
X^2 = 59.97, d.f., 3, $p < .01$				
Fecund Couples	99.0	97.0	95.0	78.9
X^2 = 48.13, d.f., 3, $p < .01$				

TABLE C-39

PERCENTAGE ALL RESPONDENTS AND FECUND RESPONDENTS APPROVING OF FAMILY PLANNING, BY DURATION OF MARRIAGE

RESPONDENTS	TOTAL	DURATION OF MARRIAGE					
		Under 5 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25 Years or more
All	79.9	83.1	88.0	83.4	76.6	75.0	64.4
Fecund	88.5	84.4	92.9	89.1	85.1	89.1	91.7

All Couples: $X^2 = 23.90$, d.f., 5, $p < .01$
Fecund Couples: $X^2 = 6.97$, d.f., 5, $p > .01$

TABLE C-40

PERCENTAGE ALL RESPONDENTS AND FECUND RESPONDENTS APPROVING OF FAMILY PLANNING, BY HUSBAND'S OCCUPATION

RESPONDENTS	OCCUPATION OF HUSBAND				X^2 READING
	Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar	
All	95.3	86.2	79.5	69.3	$X^2 = 45.94$, d.f., 3, $p < .01$
Fecund	97.2	92.7	88.6	77.1	$X^2 = 27.44$, d.f., 3, $p < .01$

TABLE C-41

PERCENTAGE ALL RESPONDENTS AND FECUND RESPONDENTS APPROVING OF FAMILY PLANNING BY RESPONDENT'S BIRTHPLACE

RESPONDENTS	BIRTHPLACE OF WIFE				X^2 READING
	Farm	Village	Town	City	
All	79.4	63.7	82.4	84.1	$X^2 = 18.06$, d.f., 3, $p < .01$
Fecund	82.2	75.0	92.3	88.9	$X^2 = 13.13$, d.f., 3, $p < .01$

TABLE C-42

PERCENTAGE ALL RESPONDENTS AND FECUND RESPONDENTS APPROVING OF FAMILY PLANNING, BY RESPONDENT'S HOME LANGUAGE

RESPONDENTS	HOME LANGUAGE		X^2 READING
	English	Afrikaans	
All	90.7	71.9	$X^2 = 47.86$, d.f., 1, $p < .01$
Fecund	95.3	81.3	$X^2 = 25.70$, d.f., 1, $p < .01$

TABLE C-43

PERCENTAGE ALL COUPLES AND FECUND COUPLES APPROVING OF CHEMICAL OR MECHANICAL CONTRACEPTIVES, BY HUSBAND'S OCCUPATION, ANNUAL INCOME AND HOME LANGUAGE

TYPE OF COUPLE	OCCUPATION OF HUSBAND			
	Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar
All Couples	71.6	69.0	59.0	46.7
Fecund Couples	75.5	78.5	62.8	54.4

$X^2 = 55.91$, d.f., 6, $p < .01$
$X^2 = 40.46$, d.f., 6, $p < .01$

	ANNUAL INCOME					
	R5000 or more	R4000-R4999	R3000-R3999	R2000-R2999	R1000-R1999	Under R1000
All Couples	60.0	67.9	60.2	62.2	61.4	41.4
Fecund Couples	63.0	78.9	68.8	71.6	65.5	52.6

$X^2 = 28.40$, d.f., 10, $p < .01$
$X^2 = 21.73$, d.f., 10, $p < .05$

	HOME LANGUAGE	
	English	Afrikaans
All Couples	68.2	53.3
Fecund Couples	73.7	61.9

$X^2 = 47.95$, d.f., 2, $p < .01$
$X^2 = 29.49$, d.f., 2, $p < .01$

TABLE C-44

PERCENTAGE REPORTING ANY USE OF APPLIANCE METHODS OF CONTRACEPTION, BY RELIGIOUS AFFILIATION, BY BROAD PLANNING STATUS

BROAD PLANNING STATUS	RELIGION OF RESPONDENT				X^2 READING
	English Protestant	Afrikaans Protestant	Jewish	Catholic	
Completely Planned	90.0	60.2	92.9	50.0	28.88, d.f., 3, $p < .01$
Partially Planned	84.0	52.0	85.7	62.9	48.38, d.f., 3, $p < .01$

TABLE C-45

MEDIAN NUMBER OF CHILDREN WANTED, BY RESPONDENT'S RELIGION, BY BROAD PLANNING STATUS

BROAD PLANNING STATUS	RELIGION OF RESPONDENT				X^2 READING
	English Protestant	Afrikaans Protestant	Jewish	Catholic	
Completely Planned	3.4	3.7	3.1	4.1	9.21, d.f., 3, $p < .05$
Partially Planned	3.9	4.3	3.2	4.4	12.03, d.f., 3, $p < .01$

TABLE C-46

PERCENTAGE COMPLETE PLANNERS, BY RESPONDENT'S ANNUAL FAMILY INCOME

ALL RESPONDENTS	ANNUAL FAMILY INCOME					
	R5000 or more	R4000-R4999	R3000-R3999	R2000-R2999	R1000-R1999	Under R1000
23.5	28.6	33.3	30.6	29.6	16.9	7.3

$X^2 = 25.46$, d.f., 5, $p < .01$

TABLE C-47

PERCENTAGE DISTRIBUTION OF ALL USERS BY DEGREE OF PLANNING SUCCESS, BY HUSBAND'S OCCUPATION

DEGREE OF PLANNING SUCCESS	ALL USERS	HUSBAND'S OCCUPATION			
		Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar
Completely Successful	53.5	48.1	60.2	51.4	40.0
Partly Successful	30.2	35.6	24.6	33.0	31.1
No Successful Planning	16.3	16.3	15.2	15.6	28.9
Total	100.0	100.0	100.0	100.0	100.0

$X^2 = 20.64$, d.f., 6, $p < .01$

TABLE C-48

PERCENTAGE DISTRIBUTION OF ALL USERS, BY DEGREE OF PLANNING SUCCESS, BY RESPONDENT'S HOME LANGUAGE

DEGREE OF PLANNING SUCCESS	ALL USERS	HOME LANGUAGE	
		English	Afrikaans
Completely Successful	53.5	54.3	45.9
Partly Successful	30.2	32.5	28.5
No Successful Planning	16.3	13.2	25.6
Total	100.0	100.0	100.0

$X^2 = 16.28$, d.f., 2, $p < .01$

TABLE C-49

PERCENTAGE DISTRIBUTION OF ALL USERS BY DEGREE OF PLANNING SUCCESS, BY RESPONDENT'S STANDARD OF EDUCATION

DEGREE OF PLANNING SUCCESS	ALL USERS	STANDARD OF EDUCATION			
		University/ College	Matriculation	Secondary School	Primary School
Completely Successful	53.5	53.1	59.7	47.5	37.5
Partly Successful	30.2	31.3	28.3	32.3	31.2
No Successful Planning	16.3	15.6	12.0	20.2	31.2
Total	100.0	100.0	100.0	100.0	99.9

$X^2 = 10.23$, d.f., 6, $p > .05$

TABLE C-50

PERCENTAGE DISTRIBUTION OF UNIVERSITY, COLLEGE AND MATRICULATED EVER-PREGNANT USERS, ACCORDING TO DEGREE OF PLANNING SUCCESS, BY RESPONDENT'S HOME LANGUAGE

DEGREE OF PLANNING SUCCESS	ALL EVER-PREGNANT USERS N = 647	HOME LANGUAGE	
		English N = 127	Afrikaans N = 46
Completely Successful	48.4	53.6	69.6
Partly Successful	32.8	35.4	15.2
No Successful Planning	18.8	11.0	15.2
Total	100.0	100.0	100.0

$X^2 = 6.25$, d.f.,2, $p < .05$

TABLE C-51

PERCENTAGE DISTRIBUTION OF UPPER-WHITE-COLLAR EVER-PREGNANT USERS ACCORDING TO DEGREE OF PLANNING SUCCESS, BY RESPONDENT'S HOME LANGUAGE

DEGREE OF PLANNING SUCCESS	ALL EVER-PREGNANT USERS N = 647	HOME LANGUAGE	
		English N = 97	Afrikaans N = 28
Completely Successful	48.4	41.2	67.9
Partly Successful	32.8	44.3	10.7
No Successful Planning	18.8	14.5	21.4
Total	100.0	100.0	100.0

$X^2 = 11.05$, d.f., 2, $p < .01$

TABLE C-52

PERCENTAGE EXCLUSIVE USE OF APPLIANCE METHODS OF CONTRACEPTION OF EVER-PREGNANT USERS, BY HUSBAND'S OCCUPATION, BY DEGREE OF PLANNING SUCCESS

DEGREE OF PLANNING SUCCESS	OCCUPATION OF HUSBAND				X^2 READING
	Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar	
Completely Successful	65.6	47.6	45.2	50.0	$X^2 = 9.39$, d.f., 3, $p < .05$
Partly Successful	52.1	38.8	36.6	34.1	$X^2 = 20.63$, d.f., 3, $p < .01$

TABLE C-53

PERCENTAGE DISTRIBUTION OF ALL COMPLETELY SUCCESSFUL PLANNERS BY TYPE OF CONTRACEPTION USED, BY RESPONDENT'S EDUCATIONAL LEVEL

TYPE OF CONTRACEPTION USED	ALL USERS N=680	EDUCATIONAL LEVEL	
		Higher N = 100	Lower N=210
Appliance Methods Only	51.6	59.0	47.1
Mixed Methods	20.8	25.0	20.0
Non-Appliance Methods Only	27.6	16.0	31.9
Total	100.0	100.0	100.0

$X^2 = 9.07$, d.f., 2, $p < .05$

TABLE C-54

DISTRIBUTION OF MEDIAN INTERVAL BETWEEN BIRTH OF FIRST CHILD AND SECOND CHILD, BY HUSBAND'S OCCUPATION, BY DEGREE OF PLANNING SUCCESS

ALL RESPONDENTS (YEARS)	UPPER-WHITE-COLLAR			X^2 READING
	Completely Successful	Partly Successful	No Successful Planning	
2.4	2.9	2.0	1.9	$X^2 = 9.74$, d.f., 2, $p < .01$
	LOWER-WHITE-COLLAR			
2.4	2.7	2.4	2.1	$X^2 = 2.06$, d.f., 2, $p > .05$
	UPPER-BLUE-COLLAR			
2.4	2.6	2.2	2.4	$X^2 = 1.98$, d.f., 2, $p > .05$
	LOWER-BLUE-COLLAR			
2.4	2.8	2.0	1.7	$X^2 = 8.95$, d.f., 2, $p < .05$

TABLE C-55

DISTRIBUTION OF MEDIAN INTERVAL BETWEEN BIRTH OF FIRST CHILD AND SECOND CHILD, BY RESPONDENT'S EDUCATIONAL LEVEL, BY DEGREE OF PLANNING SUCCESS

HIGHER LEVEL OF EDUCATION			X^2 READING
Completely Successful	Partly Successful	No Successful Planning	
3.0	1.8	1.4	$X^2=24.32$, d.f., 2, $p < .01$
LOWER LEVEL OF EDUCATION			
2.6	2.3	2.0	$X^2= 5.23$, d.f., 2, $p > .05$

TABLE C-56

DISTRIBUTION OF MEDIAN NUMBER OF CHILDREN EXPECTED IN COMPLETED FAMILY OF ALL COMPLETELY SUCCESSFUL AND PARTLY SUCCESSFUL PLANNERS BY HUSBAND'S OCCUPATION, BY ANNUAL FAMILY INCOME, BY WIFE'S RELIGION

DEGREE OF PLANNING SUCCESS	HUSBAND'S OCCUPATION				X^2 READING
	Upper-White-Collar	Lower-White-Collar	Upper-Blue-Collar	Lower-Blue-Collar	
Completely Successful	3.2	3.1	3.1	3.8	$X^2 = 7.94$, d.f., 3, $p < .05$
Partly Successful	3.9	3.6	4.3	4.2	$X^2 = 2.85$, d.f., 3, $p > .05$
	ANNUAL FAMILY INCOME				
	High	Medium	Low		
Completely Successful	3.2	3.2	3.5		$X^2 = 3.85$, d.f., 2, $p > .05$
Partly Successful	3.6	3.7	4.5		$X^2 = 10.61$, d.f., 2, $p < .01$
	WIFE'S RELIGION				
	English Protestant	Afrikaans Protestant	Jewish	Catholic	
Completely Successful	3.1	3.5	3.1	3.4	$X^2 = 4.83$, d.f., 3, $p > .05$
Partly Successful	3.7	4.3	4.5	4.1	$X^2 = 4.51$, d.f., 3, $p > .05$

TABLE C-57

PERCENTAGE DISTRIBUTION OF ALL EVER-PREGNANT USERS, BY TIME RESPONDENT HAS WORKED SINCE MARRIAGE, BY STRICT PLANNING STATUS

STRICT PLANNING STATUS	ALL EVER-PREGNANT USERS N = 479	TIME WORKED SINCE MARRIAGE				
		Always N=30	Almost Always N=49	About Half the Time N = 54	Some of the Time N = 205	Never Worked N= 135
Completely Motive	38.4	76.7	42.9	38.9	33.7	36.3
Completely Action	11.3	16.7	6.1	13.0	8.3	15.6
Mixed	50.3	6.6	51.0	48.1	58.0	48.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

X^2 = 31.87, d.f., 8, $p < .01$

TABLE C-58

PERCENTAGE DISTRIBUTION OF ALL EVER-PREGNANT USERS, BY OCCUPATION OF RESPONDENT'S HUSBAND, BY STRICT PLANNING STATUS

STRICT PLANNING STATUS	ALL EVER-PREGNANT USERS N = 479	OCCUPATION OF HUSBAND			
		Upper-White-Collar N = 102	Lower-White-Collar N= 146	Upper-Blue-Collar N =150	Lower-Blue-Collar N=80
Completely Motive	38.4	43.1	47.9	32.7	26.2
Completely Action	11.3	6.9	8.9	13.3	17.5
Mixed	50.3	50.0	43.2	54.0	56.3
Total	100.0	100.0	100.0	100.0	100.0

X^2 = 17.14, d.f., 6, $p < .01$