

THE UNIVERSITY OF MANITOBA

FERTILITY AND FAMILY PLANNING CONCERNS OF  
THE POOR: A RE-EXAMINATION

BY

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## ABSTRACT

This thesis examines the general hypothesis that the poor have unique problems with family planning because their life situation or day-to-day lifestyle makes planning in general a meaningless activity. The assumption underlying this research is that planning for the future, essentially a middle-class phenomenon, tends to be lacking among poor persons. Consequently, the motivation to delay or prevent pregnancies by means of contraception is rejected as a meaningless, futile activity. The unique life situation of the poor eventually results in higher numbers of births for poor women than for other socio-economic groups.

The conceptual framework, loosely based on suggestions made by Chilman (1968, 1973), maintains that attitudes theoretically related to the life situation of the poor will have an effect on both family planning attitudes and behaviours. Five attitudinal scales based on research by Rainwater (1960, 1965) and others were utilized in order to operationalize the life situation concept: planning orientation, sex role attitude, attitude toward sex, locus of control, and conjugal role relationships. Attitudinal scales measuring concerns with family planning were selected to define attitudes toward family planning, and "actual births" provides a measure of family planning behaviour.

Ten specific hypotheses were generated to test the general hypothesis. They were designed to test each life situation attitudinal scale against family planning attitudes

and behaviours. Briefly, they were:

There will be a positive relationship between life situation (planning orientation, sex role attitude, attitude toward sex, locus of control, conjugal role relationships) and family planning concerns.

There will be a negative relationship between life situation and actual births.

Stated simply, the more favourable or liberal a person's attitude is toward the various life situation scales, the more likely she is to be concerned with family planning, and the less children she is likely to have. The more unfavourable or conservative a person's attitude toward the life situation scales, the less likely she is to be concerned with family planning, and the more children she is likely to have.

The study is a primary analysis of data collected in a survey conducted in the Winnipeg Health Sciences Women's Centre Outpatients Clinics. The research hypotheses dealing with family planning concerns were tested using Pearson's  $r$  correlations. Those hypotheses dealing with actual births were tested using first order partial correlations in order to control for the effect of age on births. The sample population was divided into two subsamples, poor and non-poor, in an attempt to demonstrate that the life situation variables would have a greater effect on the attitudes and behaviour of the poor.

The results show a statistically significant positive correlation between the life situation variables and family planning concerns. Differences between poor and non-poor subsamples were evident in all five tests of hypotheses, as

predicted.

Three of the five hypotheses testing the effect of life situation on actual births produced statistically significant negative correlations. Differences between poor and non-poor subsamples were not always evident.

The general hypothesis was accepted, with reservations. The conclusion arrived at was that poor persons are affected by their life situation in such a way that they tend to be unconcerned with family planning, and they experience slightly more births as a result. The study ends with generalizations and implications for further research.

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## CHAPTER I

### INTRODUCTION: THE RESEARCH PROBLEM

In the area of family planning, the poor<sup>1</sup> are frequently recognized as a group with special needs and problems. The difficulties which poor people tend to experience in delaying and preventing pregnancies are well documented in the family planning literature. These problems include high proportions of unwanted births and abortions, risks to health, and large numbers of teenage pregnancies. Many of the poor attempt to plan their families, but conflicting motivations often render this planning ineffective. The family planning attitudes of the poor generally indicate a lack of concern with the issues involved, even while practising birth control. Under these circumstances, it is not surprising that the poor are frequently characterized as ineffective family planners. For this reason, the study of family planning among the poor was selected as the subject of this sociological study.

The most promising framework for understanding the unique and problematic "family planning profile" of the

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<sup>1</sup>For the purpose of this thesis, "the poor" are defined in terms of the category outlined by the National Council of Welfare (1977) as the "non-working poor"; i.e., those respondents who identify themselves as currently receiving social assistance. That smaller segment of the population that is currently employed but reports an annual income of less than \$4,000.00, often termed the "working poor" (National Council of Welfare, 1975), is also included in this definition of the poor.

poor is the "life style" or life situation concept advanced by Chilman. Basically, the life situation approach contends that family planning is a practice not generally accepted by the poor as a solution to their problems. According to Chilman, planning for the future is primarily practiced by the middle class, and is largely irrelevant to persons in a situation of extreme poverty. This general lack of planning is mirrored in the specific lack of concern with family planning as a means of improving one's situation in life. As Chilman states:

The poverty situation itself tends to lead to inadequate family planning practices. As we have seen, early family formation and large family size are associated with such situational factors as low occupational status, low income, little education, discrimination, isolation in rural slums or urban ghettos, and inaccessibility of contraceptive services. Large family size is one of the outcomes of this total situation; in turn this outcome tends to reinforce the poverty situation. And this situation tends to produce life styles that foster attitudes and practices inimical to effective contraceptive behaviour.

These life styles tend to stand in the way of actively planning (as opposed to vaguely hoping) for a stable marriage, child-spacing, small family size and positive marriage, child-spacing, small family size and positive future goals for one's self and one's children. (Chilman, 1973: 176-177).

Thus, the context in which the poor attempt to plan their families appears to present obstacles to the effective prevention of unwanted pregnancies. The life situation concept would seem to be a useful framework for investigating the problems of family planning among the poor. The con-

tribution made by Chilman, however extends no further than her excellent suggestion of the life situation of the poor as an explanation for their difficulties with family planning. No research was carried out by Chilman on family planning and the poor. Consequently, the life situation concept was not applied in research.

Lee Rainwater attempted to provide an understanding of family planning difficulties of the poor by outlining the social context in which they operated. While his studies preceeded those of Chilman, they also suggested that an environment of poverty had an effect on the attitudes, concerns, and behaviour of individuals, (particularly with reference to family planning). By means of lengthy interviews with relatively small numbers of respondents, Rainwater uncovered a number of general factors which seem to inhibit effective practice of family planning. A "life history" approach to family design enabled Rainwater to make a number of generalizations about the family planning practices of the poor. For the most part, he found the poor lacked knowledge about sex and were often misinformed about contraceptives. In working families, the activities of men and women tend to be sharply separated, with women doing housework and raising children while men "support the family". Children often provide a source of status and gratification to poor couples.

Although Rainwater's findings seemed to be a reasonable report on the family planning concerns and behaviour of the poor, his methodological procedure limited

generalizations which might be made about the poor. Though his findings supported the independent suggestion of Chilman; i.e., that the life situation of the poor raised barriers to effective family planning, one would hesitate to state that all poor people are ineffective family planners. In addition, Rainwater's studies were published thirteen and eighteen years ago. Advances in contraceptive methods and changing attitudes and values may have altered the family planning profile of the poor in the meantime. Whether or not his findings apply to Canadian society also requires investigation.

In the research on family planning (c.f. Balakrishnan, et. al., 1975, Hill, et. al., 1959), the poor are usually treated as the lowest "rung" of the socio-economic ladder of upper, middle and lower classes. They are seldom isolated for study, in spite of the fact that each class has motivations and interests concerning family planning which are far different from those of other socio-economic groups.

Evidently, no real attempt has yet been made to empirically test the effect of the life situation of the poor on family planning. In this study an effort is made to apply the promising "life situation" approach suggested by Chilman, while at the same time avoiding the weaknesses of previous research.

This research strives to determine what effect, if any, the life situation of the poor has on family planning attitudes and behaviour. The life situation concept is measured by

five attitudinal scales theoretically related to family planning. Attitudes toward family planning, or family planning concerns, are also measured by attitudinal scales. A single item is employed to investigate family planning behaviour. In order to determine whether the family planning attitudes and behaviour of the poor are indeed unique, respondents were classified as either "poor" or "non-poor" according to the criterion previously set forth.

This study is expected to make several important contributions to sociological knowledge about family planning. As previously stated, this family planning research is one of few attempts to focus on the poor. This can be expected to have policy implications for those social agencies currently attempting to provide family planning services for the poor. The present study also appears to be the first to use the "life situation" approach to analyze the family planning attitudes and behaviour of the poor. Canadian data is also generated by this study. This will hopefully add to the information available on family planning in Canada. By concentrating on attitudes toward family planning as well as actual behaviour, an attempt has been made to investigate the underlying reasons for the unique "family planning profile" of the poor.

Thus, by investigating the affect of the life situation of the poor on family planning attitudes and behaviours in a Canadian setting, the study endeavours to contribute to existing knowledge in the sociology of family

planning.

### Organization of Thesis

The remainder of the thesis is organized in the following manner. The existing research literature in the area of family planning and the poor is outlined and evaluated in Chapter II. The emergence of the "life situation" as a relatively new concept utilized to predict both a lack of concern with family planning and higher parity among the poor is outlined.

In Chapter III, the methods by which scales were developed to measure the independent and dependent variables are presented. The operationalization of the life situation concept and family planning concerns is discussed. The research hypotheses developed through examination of the inadequacies of existing research outlined, and the methods of data manipulation and statistical analysis are set forth.

The fourth chapter deals with the results of the study. The correlations between independent and dependent variables are presented and discussed in light of the research hypotheses.

Chapter V consists of a summary and discussion of the results. Shortcomings apparent in the results are also discussed. The relative "success" of this research in meeting the original objectives is also dealt with. The implications of this study in terms of the field of family planning and of future research in the area are also presented.



## CHAPTER TWO

### REVIEW OF THE LITERATURE

#### Introduction

The following review critically evaluates the existing research dealing with family planning among the poor. The manner in which family planning and related activities differs between the poor and other socio-economic groups is set forth in the overview. Fertility patterns, family size (ideal, desired, expected, and actual), and use of contraceptives are discussed as examples of the unique "family planning profile" of the poor.

Explanations for these social class differences include the "life situation" of the poor and various aspects of the irrelevance of planning for an uncertain future. These aspects include: lack of planning orientation, locus of control, conjugal role relationships, sex role attitudes, and attitude toward sex. The differences between the poor and other socio-economic groups, in terms of these life situation dimensions, are useful in predicting class differentials in family planning concerns. The unique "life situation" of the poor is expected to result in a failure to consider the planning of one's family as a viable course of action.

With the exception of the work by Rainwater, Chilman,

and a few others, most family planning studies do not isolate the poor as the object of study; rather, broad social classes are analysed for differences in attitudes and behaviour. For the purpose of this review, however, discussion of research findings will be limited to those findings dealing (with the poor socio-economic group). Emphasis will be placed on Canadian data when it is available.

### Family Planning and the Poor: An Overview

#### Fertility Differentials:

One of the factors most commonly associated with differentials in fertility is socio-economic status. According to Wrong:

The higher fertility of the lower classes has been observed so often in so many different countries that the existence of a negative correlation between fertility and class or socio-economic status has virtually acquired the force of a socio-demographic law (Wrong, 1967: 71).

The population of the United States as a whole is currently undergoing a general decline in fertility (Sweet, 1974). Despite the fact that the difference in reproduction rates between the upper, middle and lower classes is beginning to narrow, the poorest segment of the population is still unique in terms of several fertility variables which serve to accentuate the differences between their fertility patterns and those of the rest of the population. The poor tend to marry at an earlier age and to be younger at the birth of the first child than other socio-economic groups (Schorr, 1966: 173).

In addition, "large family size, children born more closely together, and a greater span of years of childbearing are behaviours more likely to occur for low-income families" (Schorr, 1966: 173).

As Canadian research indicates, fertility in Canada has been steadily declining for the past twenty years (Balakrishnan, et. al., 1975). In addition, a slight inverse relationship has been demonstrated between socio-economic indicators and both age at marriage and the time between marriage and the first birth in the Balakrishnan et. al. Metropolitan Toronto Study (1975). Henripin (1972) reports that, on the whole, Canadian fertility decreases as family income increases. According to Berg and Jackson: "Generally, studies have shown that people with higher occupations or professions have lower rates of reproduction than those lower on the occupation scale" (1975: 41). However, Balakrishnan et. al. (1975) did not find any significant variation between socio-economic status and the spacing of births. This may be due to the use of very broad socio-economic categories, which could tend to blur the type of results found when the poorest segment of the population is isolated for study (as in Rainwater's 1960 and 1965 studies, for instance).

### Reproductive Ideals, Desired and Expected Family Sizes

#### A. Reproductive Ideals

It has been suggested that the poor may also differ

from the non-poor in terms of what they feel is the ideal number of children for families to have.

Early in life, a normative range of family size is internalized. Class, ethnic and religious membership all have some influences on family size values (Westoff and Potvin, 1966). In analyses of national surveys on public opinion, Blake (1966, 1967) determined that the two to four child family has encompassed the ideals of 80-90% of men and women since the 1930's. The average ideal in the 1960 survey was 3.6 children. The ideal number of children reported in the Canadian study by Balakrishnan et. al. (1975) also ranged from two to four, with three children being held as the most popular ideal family size.

Methodological problems with ideal family size have been raised by Ryder and Westoff (1971) and Blake (1967), particularly the possibility that respondents may not be answering from the same frames of reference. Since most Americans see themselves as "average", Blake considers that their answers generally refer to their notion of the average number of children under normal conditions, rather than ideal conditions (Blake, 1967). Consequently, differences between poor and non-poor groups in terms of ideal numbers of children should be expected only to the extent that the two groups have differentially internalized the norms.

#### B. Desired Family Size

The desired number of children, or the number wanted

at the time of interview as opposed to ideal family size, is considered to be a more realistic measure of family size preference. In the 1960 Growth of American Families Study by Whelpton, et. al., (1966) and the 1965 National Fertility Study by Ryder and Westoff, (1971), the survey results indicated that the desired family size was either insignificantly related to socio-economic status, or that there existed a positive relationship between social status and the number of children desired. These survey results seemed to raise doubts about the common assertion that low socio-economic couples want more children than the rest of society (Harkavy, et. al., 1969).

#### C. Expected Family Size

According to Blake (1966), the number of children a woman expects to have by the time she has reached menopause is a relatively good predictor of actual family size. If most couples have an expected family size of three children, the average family size in the country will likely be three children.

The poor are frequently characterized as reporting an expected family size which is greater than their desired family size. This means that they probably give birth to more children than they would actually prefer to have. Since there is an obvious difference between expected and desired family size, poor families are experiencing unwanted children. In both the Growth of American Families Study (Whelpton et. al.,

1966) and the National Fertility Study (Ryder and Westoff, 1971), "expected" exceeded "desired" family size in all socioeconomic classes. In contrast, the Balakrishnan et. al. (1975) study found that the total number of children expected was lower than both the ideal and desired family size and was not related to income.

#### D. Actual Family Size

Most studies include information on parity, which is the number of children to whom a woman has ever given birth. This includes children who have died, been given up for adoption, or are living away from home. Parity is of use in gaining descriptive information about the sample, when compared with the other three family size variables mentioned above. For example, if parity exceeded the number of children a woman desired, this would provide a measure of unwanted births. Similarly, if expected family size is greater than parity, one could predict that the respondent is planning for more births. This approach was used successfully by Bumpass and Westoff (1970) in their study of family planning among older women.

Parity is also useful in differentiating between socioeconomic groups. The poor have generally been portrayed as having larger numbers of children than the non-poor (Westhoff et. al., 1961; Whelpton et. al., 1966).

On the basis of these findings, we would expect the poor segment of our sample to have family size desires similar

to the results found in other studies; i.e., within the two-to-four child range. "Expected" family size should be greater than "desired" family size, if the women in our study fit in with our expectations and did not use contraceptives to as great a degree as other groups in the population. Parity is expected to be greater for the poor, on the average, than for the non-poor in the sample.

#### Contraceptive Use and Contraceptive Failure

There are clear differences between the poor and the non-poor in terms of contraceptive use. Firstly, the poor tend to use contraceptives at a later date in the family life cycle than do the non-poor. Rainwater (1965) reports that they frequently wait until after they have all the children they want, or after they have one or more unwanted pregnancies, before they even begin to use contraceptives regularly. This is related to the general lack of planning orientation; the poor tend not to consider their entire child-bearing careers (and the likelihood of further births) to as great a degree as do other sections of the population.

Secondly, the poor tend to use less effective methods of contraception than they might. They are said to use non-prescription methods with lower efficacy rates, such as foam and suppositories, to a greater extent than the non-poor. On the other hand, they are said to avoid highly effective methods such as pills and I.U.D.'s, which require a doctor's supervi-

sion. This pattern usually leads to higher unwanted fertility, as the less effective methods prove incapable of effectively preventing pregnancy for the poor.

Thirdly, as Rainwater states, the poor are characterized by higher rates of contraceptive failure. The contraceptive methods are often used improperly. He reports a higher incidence among the poor in his study of the responsible partner "forgetting" to use the method at times, using the method only intermittently in other cases, or taking a chance once in awhile, and purposely neglecting to use the method in other cases in attempts to "trick" their partners for a variety of reasons (Rainwater, 1960).

Another factor in the lack of success in the use of contraceptive methods by the poor is the emotional cost linked to some of the methods. For example, in their study of illegitimacy among black females in the United States, Zelnik and Kantner (1974) found that in many cases "being ready" for intercourse by carrying about or using a method of contraception suggested wantonness and promiscuity. Day (1975) suggested that ambivalence about male and female roles in sex and contraception are also part of the emotional costs involved. A conflict develops, according to Day, between traditional assumptions of male dominance in sexual relationships and the assertiveness required by females to use the most effective contraceptive methods, which are female-related.

We can see that the poor indeed tend to display mar-



kedly different attitudes and behaviour in terms of fertility, reproductive ideals, and use of contraceptives. If the life situation concept is to be of use in accounting for these differences, it must be operationalized along the lines set forth in the research literature.

### Explanations in the Literature

#### Life Situation of the Poor

According to Rainwater (1960, 1965) and Chilman (1968, 1973) the "social marginality" of the poor has important implications in terms of their basic orientation--to life in general, and to family planning in particular. Middle class life is popularly characterized as concerned with a "planning orientation". This is defined by Rainwater (1965) and others as the setting of long and short term goals for material goods, the socialization of children, occupational and social mobility and the systematic striving for these goals.

For the poor, however, the situation is quite different. In a milieu where employment is at best uncertain, where food and housing are not always assured, striving toward the achievement of long or short term goals is largely irrelevant. It is meaningless for the people in this situation to concern themselves with "what the future may bring" when their circumstances frequently change drastically from one week to another. The "live for today" orientation said to characterize the poor appears to serve as a defence against the frustrations and

disappointments inherent in long-range planning.

In particular, the family life styles (or life situation) of the poor appear to be closely related to a lack of motivation to practice family planning and to a lack of success in birth planning. Pohlman sees this situation as one of the factors preventing a family from escaping from the situation of severe poverty:

To break out of the cycle of poverty, parents must give their children education and other advantages. The barriers to the poor are manifold, including the psychological factors associated with a whole way of life. But the financial barrier is an important one. The financial costs of having additional children play an important role in this group. Poor people do not want more children than do others--indeed, they often want fewer--but they have more. They have larger families and more unwanted children than higher economic groups (Pohlman, 1969: 172-173).

Not many would agree with Pohlman that family planning would enable the poor to "break out of the cycle of poverty". Having fewer or more widely spaced offspring will not necessarily result in an easing of the financial burden for those on welfare, for instance. Nonetheless, the effective practice of family planning might be of some use to the poor in relieving some of the pressures on their daily life. In the case of many of those living in a situation of extreme poverty, however, problems associated with the practice of family planning preclude this solution to the problem.

It must be stressed that the "lack of planning orientation" found in the literature is interpreted for the purpose of this research not as an inability of the poor to systematically plan their future, but as the irrelevance of this type

of planning to the more unstable life situation of the poor.

Naturally, the unstable life situation has important implications in terms of the "day-to-day life" of this group of people. The family structure, when judged by middle class standards, appears to be much more unstable--earlier age at marriage, higher rate of dissolution of marriages, earlier age at the birth of the first child, higher incidence of single parent families, etc. (Chilman, 1968).

#### Components of the Life Situation Concept:

In addition to the socio-demographic variables commonly used for classifying subjects and their responses, a number of attitudinal variables were evident in much of the literature. In a review article, Chilman summarized the findings up to 1968 dealing with family planning and the poor.

[A]spects of family life styles more prevalent among groups dwelling in long-term, severe poverty are likely to be associated with their problems in family planning. Various studies (Rainwater, 1965; Komarovsky, 1962; Herzog, 1963; Misra, 1967) indicate that:

1. A larger proportion of working-class and middle-class families than very poor families report happy marriages and mutually satisfying sex relationships.
2. Very poor men and women have a greater tendency to live in quite separate social and psychological worlds with little communication between husband and wife, whereas communication and shared activities are clearly related to marital happiness, and sex satisfaction, communication, and marital happiness are closely associated with effective family planning.
3. Hostile and mutually exploitative attitudes are more

likely to occur between the sexes in poverty groups, the male tends to play an authoritarian role in the family, illegitimacy rates are higher; a larger number of marriages are broken by divorce, desertion, and separation; very poor people are likely to have extremely limited knowledge about sex, reproduction, and childbirth.

4. Sex relations are likely to be seen as proof of one's prowess as a man or woman rather than as a part of an interpersonal relationship. Peer group pressures for premarital and extramarital sex experiences are strong. These experiences are apt to be impulsively entered into and situationally determined. The male often sees little reason to protect the female from pregnancy in such relationships and the female frequently sees little point in preparing herself in advance for sex relations that may or may not occur and a pregnancy that may or may not take place in consequence.
5. Parents are apt to fear giving sex education to their children in the belief that this may lead to "trouble". Misra's study (1967) provides clues to the relation between ignorance, shame and fear of sex, and lack of contraceptive effectiveness. Males in his sample who were shy and modest about sex were less likely to approve of family planning, less informed about it, and less apt to practice it (Chilman, 1968: 177).

The following five dimensions of the life situation of the poor either differentiated between the poor and the non-poor or were found to be of utility in explaining the family planning attitudes and behaviour of the poor.

A. Planning Orientation:

A lack of planning orientation is considered to be an aspect of the life style of the poor which helps to explain their family planning concerns to a certain degree. According to Rainwater (1960), planning for the future is essentially a middle-class phenomenon, not found to as great a degree among the poor:

Working class people are uncertain about the future; they accept things as given and pour little energy into either self-exploration or exploration of the outer world. They tend to view thinking negatively, to regard thought and planning as painful activities to be engaged in only under the pressure of great necessity. Even then they are not optimistic, since they feel that the best they can do will not be sufficient to overcome adversity--one may be spared unpleasantness by good fortune, one may be lucky, but one cannot be personally successful against difficulty. Such a world view and way of thinking about oneself in the world are not conducive to effective family planning. Indeed, they tend to discourage family planning and the hope it implies, lest one court disappointment (Rainwater, 1960: 52-53).

In terms of planning one's family, what one is in essence planning is not really parenthood at all, but nonparenthood. Rainwater states that people thus tend to consider not planning as the natural way of doing things, and planning as an artificial way of behaving (Rainwater, 1960). Consequently, it seems that a lack of planning orientation is likely of some importance in attempting to explain the difficulty of spacing births and preventing pregnancies that is frequently associated with poor couples.

B. Locus of Control:

Another aspect of the life style of the poor is usually dealt with in terms of fatalism, or locus of control. Fatalism is usually defined as a belief that what happens in the world is determined by external forces (e.g., fate, luck, destiny) against which people's efforts are not likely to be effective. God or fate or some other force which is held to be responsible, will bestow the number of children a couple is felt to "deserve"

no matter how they feel about the matter. In light of this, the poor are held to believe that planning is not really necessary in terms of decisions made or actions taken with reference to family planning.

There is even considered to be an element of luck involved in the use of contraceptives. According to Rainwater, many ineffective users behave as if using a contraceptive were important mainly as an indication of good intention. If one is "good" about contraception, one deserves to be treated kindly by fate, and occasional lapses in use may therefore be "forgiven" by fate.

Macdonald utilized the notion of internal-external locus of control in an attempt to predict the practice of birth control. He defined the terms as follows:

People who believe that their destinies are controlled by chance or powerful others are labelled "externals". . . . "Internals" are those that believe that they can exercise some control over their reinforcements (Macdonald, 1970: 206).

These concepts were also utilized by Williamson, who predicted that those subjects with external orientations might be less likely to attempt to control their own pregnancies since they lack belief in personal control in general. Using Rotter's (1966) I-E scale (internal-external), he found that this relationship held for the unmarried subjects in his sample (Williamson, 1970).

#### C. Conjugal Role Relationships:

Conjugal role relationships and communication between

spouses are another aspect of the life situation of the poor which is closely related to their family planning attitudes and behaviour. Rainwater states that the role relationships of the poor are more highly segregated than are those of the middle class. He has found that, in the lower-lower class, the husband tends to participate minimally and in specialized ways around the home. The wife carries the responsibility for the home and children largely by herself, and she seldom participates with her husband (Rainwater, 1965) in outside activities.

In research carried out by Hill, Stycos and Back in Puerto Rico, communication between spouses was used an explanatory variable in attempting to discover some correlates of fertility control. They found that interpersonal communication was strongly associated with continued use of birth control (Hill, et. al., 1959).

According to Rainwater, those couples with highly segregated role relationships will be less effective family planners than those couples who communicate with each other and participate in joint activities (Rainwater, 1965).

In his study of poor women in Cali, Colombia, however, Sear (1975) found that communication between spouses was of little value in predicting current use of contraceptives. He suggests that modern contraceptives, such as the Pill and the I.U.D., which have come into common usage since the studies by Rainwater (1960, 1965) and Hill, et. al., (1959), require

less consensus and communication for effective use than the traditional methods. As a result, women's independence in decision-making in terms of matters of family planning has increased in the years since the other studies were conducted (Sear, 1975).

D. Sex Role Attitudes:

The configuration of attitudes toward the status of women is considered to be another aspect of life style of the poor which will have some bearing on their attitudes and behaviour in terms of family planning. Rainwater states that, as women increase in status by becoming more involved in the labour force, with concomitant higher education, they will be more fully exposed to family planning ideas, and with them the notions of spacing births and delaying pregnancies. Basically, the act of bearing and raising children serves to cement the wife's status as dependent on the husband's. Family planning behaviour may become more appealing to the women who are increasingly coming to desire independence from their spouses (Rainwater, 1965). For the poor, increasing responsibility on the part of women in other areas may also bring about an increase in their feeling of responsibility for the planning associated with delaying or preventing pregnancy.

E. Attitude Toward Sex:

Another consideration in an attempt to deal with the



family planning attitudes and behaviour of the poor is attitude toward sex. Rainwater has classified the couples interviewed into two groups: those displaying an attitude of mutuality in their sexual relations (in which husband and wife enjoy intercourse often) and those displaying an attitude of rejection (in which sex is rejected, usually by the wife, as a meaningless activity). Rainwater maintains that those with an attitude of mutuality will generally be satisfied with their family planning method, and that these women tend to use female-related methods of contraception more readily. Among those with an attitude of rejection, he has found very few effective contraceptive users. For these couples, effectiveness frequently depends on the ability to badger husbands into using condoms, or any other method which permits the wife's avoidance of her own genitals. Contrary to the assumptions about the high rate of sexual activity among the poor which are frequently made in the family planning literature, Placek and Herdershot (1974) reported that the poor are, if anything, less sexually active than other socio-economic classes. In addition, many of the subjects in Rainwater's interviews reported no experience with, and little knowledge of sex before their marriages (Rainwater, 1960).

The above findings on family planning attitudes and behaviour of the poor, as contrasted with the non-poor, only deal in a selective fashion with the literature of the last

few decades. A number of other attitudinal variables theoretically related to family planning could also have been mentioned, including attitude toward abortion (Blake, 1971) and degree of traditionalism (Hill, et. al., 1959). However, the results of these studies are often contradictory, and questions and scales are not always relevant to the modern Canadian context.

### Summary

In conclusion, this review of the literature has illustrated the differences between the poor and other socio-economic groups with reference to family planning and related activities. The unique "life situation" of the poor, demonstrated by a number of attitudinal concepts, has been suggested as a possible reason for the lack of concern with family planning evidenced by the poorest socio-economic groups in several previous studies. Consequently, this basic framework was utilized as the strategy for this research.

Since the various components of the "life situation" concept were expected to have an effect on the family planning concerns of the poor, they were operationalized as independent variables based on attitude scales designed for the purpose of this thesis. These scales were intended to measure the five dimensions of life situation outlined above: planning orientation, locus of control, conjugal role relationships, sex role attitudes, and attitude toward sex.

Similarly, concerns with family planning are considered to be merely one aspect of the multi-dimensional concept of family planning. The four concerns dealt with previously are considered together to be one of the dependent variables in this study. (The actual births, the number of births a woman has experienced ... higher number of unwanted births, as measured by expected family size minus desired family size for each respondent,) provided a measure of fertility for both the poor and other socio-economic groups. As the life situation concept was expected to have an effect on this measure, "actual births" was also treated as a dependent variable. The operationalization of these concepts and the methodology employed in the study are discussed in Chapter Three.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### Introduction:

In this chapter, the procedures followed in the conduct of this research are outlined. The background information is first of all presented, dealing with the pretest, the sample, and the questionnaire administration. The selection of items from the pretest by means of factor analysis to form attitudinal scales measuring the independent and dependent variables is then discussed. The research hypotheses derived from the review of the literature are presented. Finally, the means by which the data were manipulated are set forth.

#### Background Information:

##### A . The Pretest

Prior to the actual collection of the data, a pilot study was conducted in February of 1976 in order to develop adequate scales for the measurement of relevant variables. A questionnaire containing a large pool of items derived from the literature constituted the tool for the pretest. The questionnaire was administered to a random sample drawn from a population of family planning clinic patients and university students. An attempt was made to select items which

could be answered in a Likert-type format.

As the pilot test questionnaire contained a large set of items which were considered to be measures of the variables for the study, factor analysis was performed on the items. This analysis was performed on responses collected from 150 respondents. Factor analysis is often used to extract common factors in order to determine whether or not the clustering effect among several indices would warrant the use of a smaller number of conceptual variables. Consequently, the responses to each set of items were intercorrelated and the matrix of intercorrelations was factor analyzed.

It was decided to perform four initial and derived factor solutions on each set of items to guard against any statistical artifacts which might enter our analysis. The initial solutions were: principal factor analysis, principal component analysis, alpha factor analysis, and image analysis. The derived solutions utilized in the analysis of the pretest results were varimax and direct oblimin rotations (Hunter, 1972). This procedure has been recently recommended by Hunter and Latif (1973) as a test of significance for the extracted factors. As Hunter and Latif state, "if factors can be found that are robust across all solutions, then we should have some confidence that our results are not simply artifacts of the solutions we use" (1973: 213).

It was hoped that by using this procedure a more valid and reliable series of scales could be constructed for the

final questionnaire. The scales employed for this study were validated in terms of face and factorial validity.

B. The Sample:

The data were collected in the Spring of 1977 from 200 females attending family planning, prenatal and gynaecology clinics in the Outpatients' Department of the Women's Centre in Winnipeg. In order to test the various generalizations derived from the existing literature, a quota sample was obtained. According to Kerlinger:

One form of non-probability sampling is quota sampling, in which knowledge of strata of the population--sex, race, religion, and so on--is used to select sample members that are representative, "typical", and suitable for certain research purposes" (1973: 129).

For the purpose of this research, a quota of approximately 50% was set for the "poor" category. Because of the difficulty of obtaining a sample of women on welfare from any other sources than the Women's Centre clinics, it was felt that a minimum subsample of approximately one hundred out of a total sample of two hundred should be aimed for.

C. The Questionnaire:

A self-administered questionnaire was employed as the method by which data were collected. This method of inquiry is not the general rule for family planning research: an interview format is more frequently employed (e.g., Ryder and Westoff, 1971; Whelpton, et.al., 1966; Balakrishnan, et.

al., 1975). However, these studies tend to focus on family planning behaviour to a greater extent than on attitudes. Since this study was designed to concentrate on the attitudinal component of family planning, it was felt that the anonymity assured respondents in a questionnaire situation might aid them in answering honestly. Indeed, this was confirmed by comments made by several of the respondents returning completed questionnaires, many of whom expressed relief at not having to sign their names to the forms. The questionnaire can be found in the Appendix to this thesis.

D. Questionnaire Administration:

Prior to the actual administration of the questionnaire the Assistant Head Nurse of the Outpatients' Department of the Women's Centre co-operated by providing a schedule of the clinics for the four week period during which data were collected.

The questionnaires were administered during the first half hour of each of the Outpatient Clinics. Each potential respondent was approached individually by the interviewer/author. Upon identification of the interviewer as an affiliate of the Family Planning Research Project at the University of Manitoba, the nature of the study was then explained. At this point, the individual was asked if she would be interested in helping the study by filling out a questionnaire. If the response was affirmative, the respondent was given a

blank questionnaire and a pencil, and was informed of the exact location of the interviewer in the waiting room, in the event of any questions or problems. It was expected that this approach would lessen some of the problems with the wording of some of the questions which respondents with relatively low education might experience.

About 20% of the individuals approached stated that they did not wish to fill out the questionnaire. The reason offered most often was lack of skill with the English language. Since no facilities for translation were available, these individuals were thanked for their trouble, as were those who expressed no interest in the study at all.

The rate of non-participation was lower than expected. This was attributed, for the most part, to the long wait between registering at the beginning of the clinic and seeing a doctor, which varied between twenty minutes and an hour and fifteen minutes. Those familiar with Outpatient Clinic procedure for the most part welcomed the questionnaire as a diversion which would "give them something to do" during this long wait. The questionnaire took an average of fifteen minutes to complete. Those respondents who were called into the doctors' offices before completing the questionnaire were able to finish while waiting for prescriptions or nurses' advice.

#### Operational Definitions of the Key Variables:

##### A. Measuring the DEPENDENT Variables:

1. Actual Births: The number of children to whom a woman



has given birth was selected as a measure of family planning behaviour. On the basis of differences between social classes found in the review of the literature, it was suspected that the poor might have larger number of children than the non-poor in the sample. Whether or not actual births would be influenced by the life situation independent variables became one of the focuses of this research.

A measure of actual births was obtained with the following item: "How many live-born children have you had, including those that may have died?" The analysis of the relationships between life situation and actual births would have been misleading if Pearson's  $r$  had been used to arrive at the correlations, for the number of children a woman has given birth to is partially a function of her age. The older a person is, the more children she is likely to have. For this reason, partial correlations were computed between life situation and actual births, controlling for age. This procedure serves to remove the effect of age on parity, suiting it better to the aims of this research.

Originally, "excess expected fertility" was to have been used as a dependent variable measuring family planning behaviour. This variable is constructed by subtracting a respondent's desired family size from her expected family size, thus providing a measure of unwanted births. The item selected to measure expected family size was: "How many children do you expect to have by the time you are fifty years

old?" Desired family size was measured thus: "If you have children, forget for a moment the number you have. If you could have the number of children you wanted, how many would you have?"

Although satisfactory results were gained from the pilot study conducted in 1976, a number of difficulties arose in the use of excess expected fertility in the actual study. For a number of possible reasons, there was not a sufficient "spread" between expected and desired family size to enable the analysis to be carried out. Most respondents desired and expected the same number of offspring. Others reported that they would like to have more children than they expected.

One possible reason for this discrepancy with most existing studies is the relative youth of the respondents. If a respondent has not experienced any unwanted births, she may not expect to experience excess fertility by menopause. Another possible reason for the lack of range in the responses is the difficulty the respondents may have had in understanding these two items. The education level of respondents in the sample was relatively low. Although every effort was made to ensure that the clinic patients would understand all of the items in the questionnaire, the wording of these two items seems unclear and confusing, in retrospect. This would be a prime source of inaccuracies in a self-administered questionnaire situation such as this one.<sup>1</sup>

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<sup>1</sup>The low correlations between "excess expected fertility" and all other variables for the total sample, the poor, and the non-poor, are presented in Tables 8, 9 and 10.

TABLE 1

FACTOR LOADINGS ON QUESTIONS RELATED TO  
FAMILY PLANNING CONCERNS\*

	Factor I	Factor II	Factor III	Factor IV	$h^2$
FPC <sub>01</sub>	.169	.217	-.097	.059	.088
FPC <sub>02</sub>	.289	.110	.014	.267	.167
FPC <sub>03</sub>	(.646)	.229	-.041	.152	.494
FPC <sub>04</sub>	(.912)	.107	-.072	.051	.852
FPC <sub>05</sub>	(.687)	.176	-.058	.186	.541
FPC <sub>06</sub>	.167	.242	-.138	(.522)	.378
FPC <sub>07</sub>	.128	.108	-.022	(.746)	.585
FPC <sub>08</sub>	-.062	.004	(.918)	-.007	.847
FPC <sub>09</sub>	-.064	.172	(.613)	-.090	.417
FPC <sub>10</sub>	.062	.385	.053	.144	.176
FPC <sub>11</sub>	.136	(.638)	.108	.127	.453
FPC <sub>12</sub>	.175	(.594)	.125	.209	.443
FPC <sub>13</sub>	.099	(.515)	.021	-.011	.276
Eigenvalues	3.361	1.856	1.256	1.129	
Percent of Variance Explained	25.9	14.3	9.7	8.7	

\*The questions can be found in Appendix 1, Section B, items 1-13.

Consequently, actual births, or parity, was employed as the sole dependent variable measuring family planning behaviour.

## 2. Family Planning Concerns:

A set of items developed by Bogue (1970)', designed to conduct a general inventory of motives for the practice of contraception, was adopted as the measure of family planning concerns. The scale employed in the pilot study is a modification of the one suggested by Bogue in A Model Interview for Fertility Research and Family Planning Evaluation (1970). It is also similar to that used by other investigators.

A total of twenty-one items measuring various family planning concerns was included in the pilot study questionnaire. Factor analysis was employed to reduce the number of items, and to organize them into family planning concern scales. Only thirteen items which yielded a factor loading of  $\pm .4$  were retained for the actual study. The factor loadings for the actual study are presented in Table 1.

These thirteen Likert scale items appeared to measure the four dimensions of concern with family planning discussed in the review of the literature. These are:

1. Concern over the well-being of mother and children;
2. Concerns regarding the cost of having a child, and

the future of one's children;

3. Concerns regarding one's values and religious beliefs as they relate to family planning behaviour; and

4. Concerns regarding the family size norm.

Once the actual survey was conducted, these results were also submitted to factor analysis, in order to determine whether the four family planning concerns were again factorially validated. Table 1 shows the extracted factors defining family planning concerns in the actual study. It is evident that only ten of the items were factorially validated; items 1, 2 and 10 had factor loadings of less than  $\pm 0.4$ .

Concern over the well-being of mother and children was measured by the following three items:

a. One way to maintain females' physical and mental health is to practice family planning.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

b. Practicing family planning is one way to insure both mothers' and children's well-being.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

c. Family planning is important both for me and for other people.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

The next three items were factorially validated as measuring concerns regarding the cost of having a child, and the future of one's children:

a. Most parents always need enough money to care

for their children.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

b. People should be encouraged to practice family planning as a way to help with the money situation in their family.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

c. Parents should spend as much time as they can with their children.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

The third concern listed, regarding one's values and religious beliefs as they are related to family planning behaviour, was operationally defined by two items:

a. It is my religious duty to have children.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

b. I feel that I have moral obligations to produce children during my lifetime.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

Concern over the family size norm was the fourth factor to emerge in the analysis of the study results, and consisted of the following two items:

a) Each couple can control how many children it will have.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

b) Newly married couples should plan ahead as to how many children they should have.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

Although items 1, 2 and 10 loaded in the pilot study, they were not part of any of the four family planning concern factors in the actual study. They were presented as follows:

Item 1. How successful the children are going to be in getting a good job in the future should receive much attention by most parents.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

Item 2. Having more children than I think is the ideal number would make it harder for me to give them the things I want them to have in life.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

Item 10. The length of time between marriage and the birth of the first baby is a matter of economic consideration.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

Clearly, the first two items are worded in a confusing manner, and it is not surprising that consistent results were not obtained. Although the first two items were expected to measure concern over the future of one's children, this factor did not emerge on the basis of these two items. The tenth item was chosen to measure concern over the cost of having a child, but the factor loading of .385 was not high enough to merit including it with the other three items. Consequently, the above three items were not included in the analysis of family planning concerns as a dependent variable.

Each of the four family planning concerns was operationalized in the following way. A summary index was made for

each factor. This method is suggested by Likert as a means of scoring such scales, and is further encouraged by Babbie (1975). Briefly, as long as all items in a particular scale are measuring the same dimension, the scores a respondent gives for a scale concern are totalled. For example, if a woman in our study "strongly disagreed" with all three items measuring concern over well-being of mother and children, her circled scores of 5, 5 and 5 would be added together for a score of 15. This "summary index" would then be employed as the measure of her concern on this particular dimension. Consequently, the family planning concern indices composed of three items ranged from a score of 3 to a score of 15, measuring responses of "strongly agree" to "strongly disagree" on the items. Those indices composed of only two items ranged from a score of 2 for a respondent who strongly agreed with both items, to a score of 10 for one who strongly disagreed.

#### B. Measuring the INDEPENDENT Variables:

As discussed in the review of the literature in Chapter Two, it was decided that the life situation of the poor would be employed as a predictor of differences between the poor and the non-poor in family planning concerns and parity. The five dimensions the life situation concept are utilized in order to operationalize the independent variables.

1. Planning Orientation: Planning Orientation is measured by a series of statements which are face-valid indi-



cators of this construct. A total of four attitudinal items were included in the final questionnaire. The four items constituting the scale were previously used by Spillane and Ryser (1975) in their study of the fertility knowledge, attitudes and practices of married men on welfare. Spillane and Ryser factorially validated this scale by utilizing principal component analysis with orthogonal rotation. The items which were defined as measuring "planning orientation" of the respondents are:

(a) It is important to make plans for one's life and not just accept what comes.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(b) With things the way they are today, a person ought to worry about the present and not the future.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(c) It is important to know clearly in advance your plans for the future.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(d) Planning only makes a person unhappy since plans hardly ever work out.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

In order to construct a final scale for this variable, factor analysis was performed. Since all of the items had high factor loadings, all were retained for the scale employed in the actual study.

TABLE 2  
FACTOR LOADINGS ON QUESTIONS RELATED  
TO PLANNING ORIENTATION

Variables	Factor 1	Factor 2	$h^2$
Planning Orientation 1	(.750)	-.108	.575
Planning Orientation 2	-.030	(.625)	.391
Planning Orientation 3	(.607)	-.051	.371
Planning Orientation 4	-.132	(.711)	.523
Eigenvalue	1.68	1.24	
Percent of Variance Explained	41.9	31.1	

As shown in Table 2, the two factors which emerged roughly corresponded to "planning orientation" and "lack of planning orientation". For the purpose of constructing the summary index, items 1 and 3 were recorded. As a result, all four items now measured a "planning orientation" toward the future. The scores ranged between 4 and 20. The higher a respondent scored on this Likert scale, the more strongly she displayed a favourable attitude toward planning her future. If a respondent scored low, on the other hand, she did not manifest a favourable attitude toward planning for the future.

2. Sex Role Attitudes: A total of 14 items for measuring sex role attitudes, or attitudes toward the status of

women were included in the pilot study questionnaire. Factor analysis was used to reduce the number of items to 8 to form the sex role attitude scale for the actual study. These items are based on the 1970 National Fertility Study conducted by Ryder and Westoff. They were refined by Mason and Bumpass (1974-75) in their study of sex role attitude changes, and recently used by Krishnan and Krotki (1976) in the Growth of Alberta Families Study. The items which appeared to be factorially validated on the sex role attitude scale are:

(a) A pre-school child is likely to suffer if his mother works.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(b) A working mother can establish just as warm and secure a relationship with her children of elementary school age as a mother who does not work.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(c) It is much better for everyone involved if the man is the achiever outside the home and the women takes care of the home and family.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(d) Women are much happier if they stay at home and take care of their children.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(e) Young girls are entitled to as much independence as young boys.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(f) Women should be considered as seriously as men for jobs as executives or politicians.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(g) If anything serious happened to one of the children while the mother was working, she could never forgive herself.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(h) Many of those in women's rights organizations today seem to be unhappy misfits.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

TABLE 3  
FACTOR LOADINGS ON QUESTIONS RELATED  
TO SEX-ROLE ATTITUDES

Variables	Factor 1	Factor 2	$h^2$
Sex Role 1	(.704)	-.073	.500
Sex Role 2	(-.488)	(.774)	.839
Sex Role 3	(.681)	.172	.493
Sex Role 4	(.730)	.187	.568
Sex Role 5	-.214	.055	.049
Sex Role 6	-.231	.088	.061
Sex Role 7	(.564)	.147	.340
Sex Role 8	(.585)	.214	.387
Eigenvalues	3.010	1.109	
Percent of Variance Explained	37.6	13.9	

Since sex-role attitudes were selected to measure



one dimension of the life situation of the poor, it was expected that an unfavourable traditional attitude toward sex role typing would be positively related to both a lack of concern over family planning and to parity.

The results of factor analysis of the actual study, as shown in Table 3, demonstrate that traditional and modern sex-role attitudes are being measured. For the purpose of constructing the final scale, the fifth and sixth items were excluded since they did not have a factor loading of  $\pm .4$  in either of the two factors. Item two was recoded in order to measure a traditional attitude toward the role of women. Thus, all six items chosen for the final scale measured traditional sex role attitudes. The Likert method of scaling was again employed. Respondents' scores could range from 6 which denotes the most modern attitude toward sex-roles, to 3 which indicates a highly traditional attitude.

3. Attitudes Toward Sex: A total of 34 attitude items obtained from several studies of university students conducted by Reiss (1960 and 1967) were also included in the pilot questionnaire. Only eight items, which were factorially validated, were selected to constitute the attitude toward sex scale for the actual study. They are presented as follows:

(a) A man and woman who marry should have their first full sexual experience together.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(b) Single women should feel free to initiate sexual relations.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(c) Premarital sex is wrong.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(d) I would prefer to marry a virgin.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(e) It would trouble me to marry someone with previous sexual experience.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(f) A person can have numerous sexual affairs and still bring deep, enduring emotional commitment to the person he or she marries.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(g) Sex for its own sake is an empty, hollow experience.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(h) Love is the only thing that really gives sex meaning.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

The factor analysis performed on the above items, as presented in Table 4, indicates that all eight items were indeed measuring conservative-liberal attitudes toward sex. It was decided that the Likert scale should measure a liberal attitude toward sex. The second and sixth items were recoded so that all eight items in the scale measured a conservative

attitude toward sex. The responses on the Likert scale thus ranged from 8 to 40. A score of eight would indicate that a respondent strongly agreed with all conservative statements concerning sex. With a score of forty, on the other hand, a woman would have strongly disagreed with every conservative statement, thus displaying a liberal attitude toward sex. Thus, the higher the respondent's score on this summary index, the more liberal attitude toward sex she displayed.

TABLE 4  
FACTOR LOADINGS ON QUESTIONS RELATED  
TO ATTITUDE TOWARD SEX

Variables	Factor 1	Factor 2	$h^2$
Sex	(.504)	.249	.315
Sex	(-.456)	.133	.226
Sex	(.789)	.115	.637
Sex	(.610)	.359	.501
Sex	(.577)	.229	.386
Sex	(-.510)	-.147	.282
Sex	.067	(.407)	.170
Sex	.100	(.577)	.343
Eigenvalues	2.922	1.234	
Percent of Variance Explained	36.5	15.4	

On the basis of Rainwater's (1965) study, it was

predicted that an attitude of rejection concerning sex, or a conservative attitude, would be positively related to a lack of concern with family planning and to excess expected fertility. Conversely, an attitude of mutuality or a liberal attitude toward sex, was expected to be positively related to concern with family planning and a lack of excess expected fertility. Since Rainwater and others reported finding a more conservative attitude toward sex among the poor, this aspect of the life situation concept was expected to differentiate between the poor and the non-poor.

4. Locus of Control: Five items measuring internal/external locus of control were adopted from an intensive study by Schopler (1971) and a replication of that study by Thompson, Appelbaum and Allen (1974) for the purpose of the pilot study. On the basis of factor analysis of the pilot study, these five items were included in the actual study as a unidimensional scale measuring locus of control. The items are:

(a) I am happiest when I don't have to make decisions.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(b) Some of the best things that happen in life are due to luck.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(c) Life is essentially a game of chance.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(d) Things just seem to happen to me.

Strongly Agree: 1 2 3 4 5 Strongly Disagree



(e) Everything worth knowing has been discovered already.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

TABLE 5  
FACTOR LOADINGS ON QUESTIONS RELATED  
TO LOCUS OF CONTROL

Variables	Factor 1	Factor 2	$h^2$
Locus 1	.275	(.437)	.267
Locus 2	(.449)	.300	.292
Locus 3	(.769)	.123	.607
Locus 4	(.400)	.308	.255
Locus 5	.122	(.628)	.410
Eigenvalues	2.097	1.897	
Percent of Variance Explained	41.9	17.9	

As shown in Table 5, all five items had a factor loading greater than  $\pm .4$  in the analysis of the actual sample. In order to measure locus of control, each respondent's answers to these five questions were added together to form a summary index. Scores thus ranged from 5 to 25. A lower score would indicate that a respondent strongly agreed with many of these items measuring external locus of control. In this case, she would feel that an outside force was controlling events in her life. A higher score, on the other hand, would suggest that,

since the respondent strongly disagreed with many of the items, she felt responsible for events in her life. Macdonald (1970) has suggested that the poor are more likely to display an attitude of fatalism, where locus of control is external. For this reason, it is expected that external locus of control will be positively related to both a lack of concern with family planning and excess expected fertility.

5. Conjugal Role Relationships: A scale which consists of six items describing patterns of wife-husband authority or dominance relationships, employed by Cartwright (1970) and Rainwater (1960 and 1965), was selected for inclusion in the final questionnaire. The six item scale was presented in an arbitrary order and a Likert type system of scoring was used. The respondents were asked to indicate their responses on a scale from 1 to 5. Like the procedure adopted to measure Planning Orientation and the other scales, questions which displayed strong item-to-item correlations were retained for the final analysis. The scale items are as follows:

(a) Decisions within the household should be made by both husband and wife.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(b) Marriages work best when the husband pays the bills and the wife takes care of the children.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(c) The father should always have the final say in

disciplining the children.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(d) A husband and wife get along better when they have activities and interests in common.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(e) From time to time, a husband and wife should discuss how many children they would like to have.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

(f) Since the woman is the one who takes the risk of getting pregnant, it is up to her to decide which form of birth control the couple will use.

Strongly Agree: 1 2 3 4 5 Strongly Disagree

Table 6 demonstrates that the sixth item in the factor analysis of attitudes toward conjugal role relationships did not have a factor loading of  $\pm .4$  in either factor. For this reason, it was excluded from the summary index of attitudes toward conjugal role relationships in the actual study. It is evident that the first, fourth and fifth items in the scale measure a modern attitude toward sex roles, while the second and third items measure a traditional attitude. For this reason, the responses to Items 1, 4 and 5 were recoded. Consequently, all items now represented a scale measuring traditional conjugal role relationships.

The responses for these five items were added together for each person in the sample in order to form the summary index. Thus, responses ranged from 5 for a respondent who strongly agreed to all five items, to 25 for a respondent who

strongly disagreed with the items. A lower score consequently indicates an attitude favouring segregated or traditional conjugal role relationships, where husband and wife each have separate, well-defined roles within the family unit. A higher score indicates strong disagreement with segregated roles, or an attitude of sharing or overlap between the roles of spouses.

According to the research literature, this attitude of sharing roles may lead to more communication about family planning, and may result in greater success with chosen methods. One could then expect respondents displaying an attitude favouring segregated conjugal roles to also have a higher actual family size (parity) and a lack of concern with family planning. This attitude will be found to a greater degree among the poor than among the non-poor, it is expected.

TABLE 6  
FACTOR LOADINGS ON QUESTIONS RELATED  
TO CONJUGAL ROLE RELATIONSHIPS

Variables	Factor 1	Factor 2	$h^2$
Role 1	-.057	(.636)	.408
Role 2	(.722)	.013	.521
Role 3	(.718)	-.022	.516
Role 4	.120	(.505)	.269
Role 5	.089	(.653)	.434
Role 6	.276	.159	.100
Eigenvalue	8.49	5.49	
Percent of Variance Explained	30.8	25.8	

In the preceding section, the operationalization of all dependent and independent variables was explained. The results of the actual study were factor analyzed. Items which did not have a factor loading of  $\pm .4$  were discarded. The remaining items were formed into summary indices based on the Likert format of questionnaire design. All items measuring a particular attitude were added together to give an additive score for each respondent. This index score was compared to the index scores for the other attitudes by means of correlation analysis.

The following brief section outlines the research hypotheses which provided the framework of this study. It utilizes the two dependent variables, parity and family planning concerns, and the five independent variables theoretically related to the life situation of the poor: planning orientation, sex-role attitudes, attitude toward sex, locus of control, and conjugal role relationships.

#### Research Hypotheses:

Hypothesis I: There will be a positive relationship between planning orientation and Family Planning Concerns.<sup>1</sup> The more positive a respondent's attitude toward planning for the future, the more likely it is that she will be concerned with family planning.

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<sup>1</sup>All four Family Planning Concerns will be treated separately in the analysis.

Hypothesis II: There will be a positive relationship between Locus of Control and Family Planning Concerns. If a respondent displays an internalized locus of control, she will be more likely to be concerned with family planning than if she displays an externalized locus of control.

Hypothesis III: There will be a positive relationship between Conjugal Role Relationships and Family Planning Concerns. A respondent who favours integrated conjugal role relationships is more likely to be concerned with family planning than a respondent who favours segregated role relationships.

Hypothesis IV: There will be a positive relationship between Sex Role Attitudes and Family Planning Concerns. A respondent who reports a favourable attitude toward improved status for women is more likely to be concerned with family planning than a respondent satisfied with the status quo in sex roles.

Hypothesis V: There will be a positive relationship between Attitude Toward Sex and Family Planning Concerns. A respondent with a liberal attitude toward sex is more likely to be concerned with family planning than a respondent with a conservative attitude toward sex.

Hypothesis VI: There will be a negative relationship between Planning Orientation and Actual Births. A respondent reporting a concern with planning for the future is likely to have less children by age than is a respondent

unconcerned with planning for the future.

Hypothesis VII: There will be a negative relationship between Locus of Control and Actual Births. A respondent displaying an internal locus of control will have less children by age than a respondent displaying an external locus of control.

Hypothesis VIII: There will be a negative relationship between Conjugal Role Relationships and Actual Births. A respondent who favours integrated conjugal role relationships is likely to have less children by age than a respondent who favours segregated conjugal role relationships.

Hypothesis IX: There will be a negative relationship between Sex Role Attitudes and Actual Births. A respondent who displays a liberal attitude toward the status of women will be likely to have less children by age than a respondent who displays a conservative attitude toward the status of women.

Hypothesis X: There will be a negative relationship between Attitude Toward Sex and Actual Births. A respondent with a liberal attitude toward sex will be likely to have less children than a respondent with a conservative attitude toward sex.

All five independent variables have been designed to differentiate between the poor and other socio-economic groups (the non-poor). The non-poor are expected to plan for the future, have an internalized locus of control, favour integrated conjugal role relationships and display liberal atti-

tudes toward sex roles and sex. Conversely, the poor, it is expected, live from day to day without planning for the future, have an externalized locus of control, favour segregated conjugal role relationships, and display conservative or traditional attitudes toward sex roles and sex.

For this reason, the sample population can be divided into two halves, poor and non-poor, which are roughly equal in size. Large differences between the subsamples are anticipated. The non-poor should be more concerned with family planning and should have less children than the non-poor when age is controlled.

The study results will be presented separately for poor and non-poor subsamples.

#### Data Manipulation and Statistical Analysis:

To test the above stated hypotheses, and for the purpose of the present study, the following steps were followed in our statistical manipulation:

1. Scores for both the dependent and independent variables were calculated according to the operational definitions discussed earlier. Summary indices were used as our measures for the independent variables.

2. In order to test the stated hypotheses, a correlation analysis routine (both zero-order and partial correlations) provided by the Statistical Package for the Social Sciences (SPSS) was utilized.



The Pearson's correlation was used to indicate the strength of the linear relationships between each pair of variables. The indices derived from the attitudinal variables to measure each of the attitudinal scales satisfied the interval level of measurement and continuous scale assumptions. The formula for Pearson's  $r$  which was the basis of our calculation is the one suggested by Nie, et. al., (1975):

$$r = \frac{XY - (X)(Y)/N}{[X^2 - (X)^2/N][Y^2 - (Y)^2/N]}^{1/2}$$

Hypothesis VI to X, where actual births served as the dependent variable, were submitted to partial correlation, in order to adjust for the effects of the control variables upon each independent and dependent variable under scrutiny. The formula for the computation of first-order partials (controlling for one variable) is:

$$r_{ijk} = \frac{r_{ij} - (r_{ik})(r_{jk})}{\sqrt{1 - r_{ik}^2} \sqrt{1 - r_{jk}^2}}$$

where  $k$  is the control variable

$i$  and  $j$  are the independent and dependent variables.

The results of this analysis are presented in the following chapter.

## CHAPTER FOUR

### PRESENTATION OF THE RESULTS

#### Introduction:

In this chapter, results of the analysis of the data are presented. The socio-demographic characteristics of the sample are discussed. The author then sets forth the intercorrelations between all variables for the entire sample as well as the poor and non-poor subsamples. The results of the hypothesis testing are presented, with comparisons made between poor and non-poor. The overall results are discussed, and the research is finally assessed in terms of limitations of the study and contributions made.

#### Sample Characteristics:

Selected socio-demographic characteristics of the sample are presented in this section. Of these variables, only the age of the respondents was employed in the analysis, controlling for the effects of age on the actual births. The other variables are included for the purpose of providing background information on respondents in the study.

Table 7 shows the following personal characteristics of the respondents. Almost half of the respondents in the sample (48.5%) are either married or living in a common-law relationship. In addition, one would expect a certain amount of under-reporting of "living together" relationships in the "single" category.

In terms of the education of the respondents, 42.5%

TABLE 7

PERSONAL CHARACTERISTICS OF SAMPLE POPULATION

Characteristic	N	%	Characteristic	N	%
<u>Marital Status</u>			<u>Religion</u>		
Single	75	37.5	Catholic	81	40.5
Married	61	30.5	Protestant	81	40.5
Common-Law	36	18.0	Other	33	16.5
Separated, Divorced			No Info	5	2.5
Widowed	28	14.0			
<u>Education</u> ( $\bar{x} = 10.0$ ) <sup>1</sup>			<u>Residence</u>		
Primary (0-9)	85	42.5	Winnipeg	181	90.5
Secondary (10-12)	94	47.0	Outside Winnipeg	19	9.5
Post-Secondary	12	6.0			
No Info	9	4.5			
<u>Age</u> ( $\bar{x} = 25.5$ ) <sup>1</sup>					
Under 19	21	10.5			
18-20	48	24.0			
21-25	60	30.0			
26-35	47	23.5			
Over 35	21	10.5			
No Info	3	1.5			
<u>Parity</u>			<u>Terminated Pregnancy</u>		
0	64	32.0	Yes	52	26.0
1	43	21.5	No	135	67.5
2	21	10.5	No Info	13	6.5
3	26	13.0			
4	12	6.0			
5	25	2.5			
6+	12	6.0			
No Info	17	8.5			

<sup>1</sup> Mean education and mean age were calculated on the basis of ungrouped data.

report having completed Grade Nine or less. Only 23.4% have graduated from high school or received any post-secondary instruction.

In the age category, 10.5% of the respondents are under eighteen years of age. Respondents between the ages of eighteen and twenty make up approximately 25% of the sample. Another 30% reported ages between twenty-one and twenty-five. Only 24% of the sample are between the ages of twenty-five and thirty-five, and another 10% are over thirty-five years of age. Thus, the sample was composed of relatively youthful respondents. This is likely representative of the population of females seeking medical advice on female-related matters.

Religious affiliation was divided, for the most part, between Protestants and Catholics. Forty and one half percent of the sample identify themselves as either Roman Catholic or Ukrainian Catholic. Another 40.5% are Anglican, United, or other Protestant denominations. Those with no religious affiliation, Jews, Pentecostals and other religions are included in the "other" category, which makes up 16.5% of the sample. Two and one-half percent of the respondents did not provide information on religious affiliation.

Ninety percent of the respondents identified Winnipeg as their place of residence.

In terms of fertility patterns, over one-half of the sample (53.5%) have had either no live births or only one live birth. This is in part due to the relative youth of the respondents. Roughly one-quarter of persons in the

sample have experienced a pregnancy which did not result in a live birth.

The sample was divided into two roughly equal halves labelled "poor" and "non-poor". To be classified as "poor" for the purpose of this research, a respondent fulfilled one or more of the following requirements: either respondent or spouse was receiving social assistance and income was less than \$4,000 (or less than \$6,000 for a family). Thus, a respondent who was working for extremely low wages would also be classified as "poor". The "non-poor" category was made up of those respondents who were working or had recently worked, or whose spouses worked, and whose income was greater than \$4,000 for an individual or \$6,000 for a family. This division facilitated comparisons made between poor and non-poor in the analysis of the data.

#### General Overview of the Intercorrelations:

##### A) The Entire Sample

The incercorrelations between all of the independent and dependent variables employed in the study are presented in Table 8. As indicated in the matrix, the relationships between the dependent variables, actual births and family planning concerns, are quite weak. Only "religious and moral duty to have children" correlates in a statistically significant manner with parity ( $r = .229$ ).

The intercorrelations of the four family planning concerns for the entire sample ranged from weak to moderate ( $r =$

TABLE 8  
CORRELATION OF ALL VARIABLES  
(Total Sample, N=200)

	Planning Orien- tation	Sex Role Attitude	Attitude Toward Sex	Locus of Control	Conjugal Role Relation- ships	Well-being Concern	Cost of Children Concern	Religious and moral Duty	Family Size Norm	Actual Births
PLANNING ORIENTATION	-									
SEX POLE ATTITUDE	.313*	-								
ATTITUDE TOWARD SEX	.260*	.473*	-							
LOCUS OF CONTROL	.414*	.356*	.306*	-						
CONJUGAL ROLE RELATIONSHIPS	.376*	.401*	.446*	.410*	-					
WELL-BEING CONCERN	.334*	.169*	.114	.154*	.314*	-				
COST OF CHIL- DREN CONCERN	.360*	-.075	.095	.122	.359*	.372*	-			
RELIGIOUS AND MORAL DUTY	.245*	.518*	.457*	.509*	.451*	.157*	-.005	-		
FAMILY SIZE NORM	.448*	.146*	.168*	.225*	.390*	.434*	.417*	.231*	-	
ACTUAL BIRTHS	-.017	-.282*	-.361*	-.103	-.224*	.029	.041	.229*	-.014	-
EXCESS EXPECTED FERTILITY	-.082	-.004	-.114	-.029	.007	-.021	-.043	.069	-.003	.426*

\* Significant at .01 level or higher.

.157 to .434). Only the correlation between "concern over the value of children" and "religious and moral duty to have children" was not statistically significant ( $r = -.005$ ), and did not even correlate in the expected positive direction. One could safely say that the correlation between these two dependent variables is non-existent.

All five independent variables measuring "life situation" attitudes correlated weakly to moderately with each other. These correlations ranged from  $r = .260$  to  $r = .473$ , and were all statistically significant. Thus, a respondent is likely to hold similar attitudes for all five independent variables.

In terms of the relationships between the life situation (independent) variables and family planning concerns and parity (dependent variables), these will be discussed in detail for the poor and non-poor subsamples in a later section. For the entire sample, planning orientation ( $r = .245$  to  $.448$ ) and conjugal role relationships ( $r = .314$  to  $.451$ ) are the two most powerful predictors of family planning concerns. The other three independent variables (sex role attitudes, attitude toward sex, and locus of control) are less powerfully correlated with family planning concerns. All three correlate moderately with "religious and moral duty to have children" ( $r = .457$  to  $.518$ ), and weakly with "concern over well-being of children" ( $r = .114$  to  $.169$ ) and "concern over the family size norm" ( $r = .146$  to  $.225$ ). There is no statistically significant relationship between these three independent variables and concern

over the future of children.

All five life situation variables are weakly correlated with actual births. Thus, life situation is not a particularly powerful predictor of the number of births a woman has experienced, for the entire sample.

#### B) The Poor Subsample

Table 9 presents the zero-order correlation matrix for the poor respondents in the sample. The intercorrelations are, for the most part, improved over those for the entire sample.

The intercorrelations of the dependent variables range from weak to strong. Family planning concern correlates range from  $r = .205$  to  $r = .617$ , all statistically significant. Only the relationship between "concern over the future of children" and "religious and moral duty to bear children" is not significant ( $r = .152$ ). One significant correlation between parity and religious and moral duty to bear children emerged ( $r = -.224$ ), indicating that the more one feels it is a duty to bear children for moral and religious reasons, the less children one is likely to have. This appears to be in contradiction with expected results.

The independent variables all correlated above the significant statistical level, ranging from  $r = .296$  to  $r = .513$ . This would seem to indicate that a respondent's attitude toward life situation components are quite closely interrelated.

Thus the correlations between all variables are higher



TABLE 9

CORRELATION OF ALL VARIABLES

(Poor, n = 102 )

	Planning Orientation	Sex Role Attitude	Attitude Toward Sex	Locus of Control	Conjugal Role Relationships	Well- Being Concern	Cost of Children Concern	Religious and moral Duty	Family Size Norm	Actual Births	Excess Expected Fertility
PLANNING ORIENTATION	-										
SEX ROLE ATTITUDE	.354*	-									
ATTITUDE TOWARD SEX	.352*	.506*	-								
LOCUS OF CONTROL	.513*	.413*	.296*	-							
CONJUGAL ROLE RELATIONSHIPS	.490*	.476*	.442*	.470*	-						
WELL-BEING CONCERN	.441*	.239*	.190*	.241*	.465*	-					
COST OF CHILD- REN CONCERN	.500*	.045	.216*	.243*	.579*	.538*	-				
RELIGIOUS AND MORAL DUTY	.338*	.562*	.421*	.517*	.570*	.205*	.152	-			
FAMILY SIZE NORM	.493*	.170	.344*	.397*	.553*	.452*	.617*	.354*	-		
ACTUAL BIRTHS	-.020	-.268*	-.372*	-.053	-.230*	-.063	-.067	-.224*	-.134	-	
EXCESS EXPECTED FERTILITY	.151	.002	-.192*	.029	-.027	-.091	-.147	-.005	-.047	.460*	-

\* Significant at .01 level or higher.

for the poor subsample than for the entire sample. The intercorrelations between independent and dependent variables are dealt with in much greater detail in the section on "testing of the specific hypotheses".

### C) The Non-Poor Subsample

The intercorrelations for all variables in the study are presented in Table 10. In terms of the correlations between the dependent variables (family planning concerns and actual births) they are generally weak. Only four are even statistically significant. Family size norm correlates moderately with concern over the well-being of children ( $r = .469$ ) and weakly with concern over the future of children ( $r = .238$ ).

The correlation between actual births and "religious and moral duty to have children",  $r = -.271$ , indicates that those concerned with having children have less offspring than those who are less concerned. Possibly, these respondents are more carefully planning the family they feel obliged to produce. In contrast, actual births correlate weakly but positively with family size norm ( $r = .243$ ), suggesting that those aware of a norm concerning family size are having more children.

In terms of the independent variables measuring the life situation concept, intercorrelations are again lower than they were for the poor subsample. The most powerful variable is conjugal role relationship which correlates with sex role attitudes ( $r = .239$ ), attitude toward sex ( $r = .404$ ) and

TABLE 10

CORRELATION OF ALL VARIABLES

(Non-Poor, n = 98 )

	Planning Orien- tation	Sex Role Attitude	Attitude Toward Sex	Locus of Control	Conjugal Role Relation- ships	Well- Being Concern	Cost of Children Concern	Family Size Norm	Actual Births	Excess Expected Fertility
PLANNING ORIENTATION	-									
SEX ROLE ATTITUDE	.106	-								
ATTITUDE TOWARD SEX	.115	.423*	-							
LOCUS OF CONTROL	.263*	.159	.316*	-						
CONJUGAL ROLE RELATIONSHIPS	.142	.239*	.404*	.187*	-					
WELL-BEING CONCEPN	.220*	.107	.056	.073	.215*	-				
COST OF CHIL- DREN CONCEPN	.236*	-.211*	-.040	-.092	.136	.150	-			
RELIGIOUS AND MORAL DUTY	.009	.374*	.507*	.429*	.275*	.141	-.171			
FAMILY SIZE NORM	.423*	-.014	-.078	-.065	.099	.469*	.238*	-		
ACTUAL BIRTHS	.126	-.254	-.340*	-.455*	-.124	.134	-.011	.243*	-	
EXCESS EXPECTED FFFTILITY	.100	.014	-.033	-.292*	.051	.120	.162	.161	.393*	-

\* Significant at .01 level or higher.

locus of control ( $r = .187$ ). Attitude toward sex correlates moderately with sex role attitudes ( $r = .423$ ). In addition, locus of control correlates weakly with planning orientation ( $r = .263$ ) and attitude toward sex ( $r = .316$ ). These intercorrelations are all in the direction expected; if a respondent "agrees" with one life situation component, she is likely to "agree" with the rest.

In comparison with the entire sample (Table 8) and the poor subsample (Table 9), the non-poor subsample shows the lowest correlations between independent as well as dependent variables. Since the research was designed to differentiate between the poor and the non-poor, it appears that this objective has been met, on the basis of this overview of all the variables. The following section deals with the treatment of the specific hypotheses being tested.

#### Testing the Specific Hypotheses:

In general, the five components of the "life situation of the poor" concept were more effective in predicting the family planning concerns of the poor than of the non-poor in the sample. Indeed, all of the attitudinal variables were designed to measure the family planning attitudes and behaviour of the poor. There appear to be other forces, not dealt with in this study, operating upon the family planning attitudes and behaviour of the non-poor. This indicates that the life situation of the poor does in fact affect the family planning concerns and parity of the "poor" respondents in this study.

The first hypothesis suggests that planning orientation has a positive effect on family planning concerns. The Pearson's  $r$  correlations (zero-order) between planning orientation and each of the four family planning concerns are presented in Table 11. Orientation toward planning for the future is evidently more powerful in predicting concern with planning a family among the poor than among the non-poor.

TABLE 11  
CORRELATIONS BETWEEN PLANNING ORIENTATION  
AND FAMILY PLANNING CONCERNS

Planning Orientation with..	Poor	Non-poor
Concern over Well-Being of Children	.441*	.220*
Concern over Cost/Future of Children	.500*	.236*
Religious and Moral Duty to Have Children	.338*	.009
Concern over Family Size Norm	.493*	.430*

\* Significant at .01 level or higher

Among the poor in the study, those respondents who held a favourable attitude toward planning for the future tended also to be concerned with family planning. The four correlations varied from weak to moderate, and were all statistically

significant.

The results for the non-poor subsample supported the first hypothesis to a lesser degree. The correlations between planning orientation and the four family planning concerns ranged from nil to moderate, and all were much lower than those of the poor. The non-poor who reported agreement with the idea of planning for the future tended to be mildly concerned over the well-being and future of children, and quite aware of a norm dealing with family size.

These results can be interpreted as supporting the positive relationship between planning orientation and family planning concerns, to a greater extent among the poor than among the non-poor.

Hypothesis II:

According to the second hypothesis, the relationship between sex role attitudes and family planning concerns was expected to be positive. As shown in Table 12 there is less support for this hypothesis. A "poor" respondent's attitude toward the status of women is weakly related to her concern over the well-being of children. The correlation between sex role attitudes and religious and moral duty to have children is much more powerful ( $r = .568$ ). Sex role attitudes are weakly correlated with concern over the family size norm, but this relationship is not statistically significant at the .01 level. There is no correlation between concern over the value of children and attitude toward the status of women ( $r = .045$ ) for the poor subsample. Briefly, a poor respondent who agrees that the status of women should

be improved will also be concerned with the well-being of children and will feel that she has a religious and moral duty to have children.

TABLE 12  
CORRELATIONS BETWEEN SEX ROLE ATTITUDES  
AND FAMILY PLANNING CONCERNS

Sex Role Attitudes with...	Poor	Non-poor
Concern over Well-Being of Children	.239*	.107
Concern over Cost of Children	.045	-.211
Religious and Moral Duty to Have Children	.562*	.374*
Concern over Family Size Norm	.170	-.014

\* Significant at .01 level or higher

The results for the non-poor subsample are less supportive of the second hypothesis. Only one family planning concern, "religious and moral duty to have children", is correlated in a statistically significant fashion with sex role attitudes ( $r = .374$ ). Surprisingly, the correlation between attitudes toward the status of women and concern over the value of children is negative, but not statistically significant ( $r = -.211$ ). In other words, the more favourable is a respondent's attitude toward the minimization of sex role differences, the less likely she is to be concerned

with the value of children.

In attempting to account for this departure from the expected direction of this correlation, it might be suggested that the more traditional or conservative respondents in the non-poor subsample are expressing concern over the future of children, and are rather unfavourable to the idea of women with children working, etc.

Thus, support for the second hypothesis is slight. Sex role attitudes are positively related to two of the four family planning concerns for the poor subsample and to one of the four concerns for the non-poor.

#### Hypothesis III:

Hypothesis three predicted a positive relationship between attitude toward sex and the four family planning concerns. According to the existing literature, an attitude of mutuality in sexual relations suggests that a respondent will be concerned with various aspects of family planning. Conversely, a woman with an attitude of rejection toward sex would likely disagree with items measuring family planning concerns (Rainwater, 1965).

According to the results presented in Table 13, attitude toward sex is a reasonable predictor of family planning concerns for the poor subsample. Concerns over well-being of children, the future of children and family size norm were positively related to attitude toward sex at statistically significant levels. Only the correlation with concern over the well-being of children was unacceptably low ( $r = .189$ ) for the "poor" respondents in the study. This would seem to indicate that those respondents who have a



modern or liberal attitude toward sex will be more concerned with certain aspects of family planning than those with an attitude of "rejection" of sexual matters. As Rainwater (1965) suggested, an attitude of "mutuality" between sexual partners may lead to greater interest in and acceptance of effective contraceptive methods.

TABLE 13  
CORRELATIONS BETWEEN ATTITUDE TOWARD SEX  
AND FAMILY PLANNING CONCERNS

Attitude Toward Sex With...	Poor	Non-poor
Concern over Well-Being of Children	.189	.056
Concern over Cost of Children	.216*	-.040
Religious and Moral Duty to Have Children	.421*	.507*
Concern over Family Size Norm	.344*	-.078

\* Significant at .01 level or higher

For the non-poor subsample, however, attitude toward sex is moderately correlated with only one family planning concern; i.e., religious and moral duty to produce children ( $r = .507$ ). All other correlations are very close to zero, indicating that no relationship is present. An attitude of "mutuality" in sexual relations among the non-poor, it seems, is reasonably predictive of a concern that children

should be produced for religious and/or moral reasons. Obviously, other forces than attitude toward sex might be more effective predictors of family planning concerns.

While there is reasonable support for a positive relationship between attitude toward sex and family planning concerns among the poor in this study, there is little evidence to confirm this relationship for the non-poor.

#### Hypothesis IV:

The fourth hypothesis predicts a positive relationship between locus of control and family planning concerns. These results are presented in Table 14. According to the research, an individual whose locus of control is internalized will feel that she can make decisions in terms of family planning and other aspects of her life (Macdonald, 1971). An "external" locus of control, on the other hand, indicates that a woman feels that her life is controlled by outside forces such as fate or God, and attempting to plan her family would be useless.

This hypothesis is supported for the poor subsample. Those "poor" women with an internalized locus of control tend to agree with the four attitudinal family planning concern scales. The strongest correlation is with religious and moral duty to have children ( $r = .517$ ), indicating that women who indicate control of their own lives generally feel that they should have children for religious and moral reasons. The other three family planning concerns correlate weakly with locus of control, but all are statistically significant. Thus, internal locus of control is also an acceptable predictor of concerns over well-being of children,

future of children, and family size norm for the poor subsample.

TABLE 14  
CORRELATIONS BETWEEN LOCUS OF CONTROL  
AND FAMILY PLANNING CONCERNS

Locus of Control with...	Poor	Non-poor
Concern over Well-Being of Children	.241*	.073
Concern over Cost of Children	.243*	-.092
Religious and Moral Duty to Have Children	.517*	.429*
Concern over Family Size Norm	.396*	-.065

\* Significant at .01 level or higher

Results are again less supportive for the non-poor in the study. Internal locus of control correlates moderately with religious and moral duty to have children ( $r = .429$ ), suggesting that the non-poor women who feel capable of controlling their own lives feel obliged to bear children for religious and moral reasons. There is no relationship between locus of control and the other three family planning concerns.

Consequently, the fourth component of the life situation of the poor, locus of control, is an adequate predictor of the family planning concerns of the poor subsample in this study. The family planning concerns of the non-poor, on the

other hand, are affected hardly at all by locus of control. Since the same pattern was in evidence when attitude toward sex was employed as the independent variable in the previous hypothesis, it appears that the "life situation of the poor" concept is successfully separating the poor, with their unique problems and concerns, from the population as a whole.

Hypothesis V:

Conjugal role relationships should be positively related to family planning concerns if the fifth hypothesis is to be supported. In Table 15, the results for poor and non-poor subsamples are presented. According to Rainwater (1965) and other researchers, a woman in a relationship where duties and recreation are carried out jointly with her spouse, and where communication between the pair is open, will be much more likely to be familiar with ideas about family planning. In addition, a couple such as this is expected to be more effective at choosing a contraceptive method suitable to each partner. Since the poor are frequently characterized as having highly segregated role relationships with little communication between spouses, this is expected to have an adverse effect on family planning concerns.

As the results demonstrate, conjugal role relationships are one of the most powerful predictors of family planning concerns among the poor. The correlations are all moderately strong ranging from  $r = .465$  to  $r = .579$ . Thus, the more a woman respondent favours less segregated role relationships and communication between spouses, the more likely she is to be concerned with the well-being of children, the cost of having children, her duty to produce them, and

the family size norm. All correlations are statistically significant.

TABLE 15  
CORRELATIONS BETWEEN CONJUGAL ROLE RELATIONSHIPS  
AND FAMILY PLANNING CONCERNS

Conjugal Role Relationships With ...	Poor	Non-poor
Concern over Well-Being of Children	.465*	.215*
Concern over Cost of Children	.579*	.136
Religious and Moral Duty to Have Children	.570*	.275*
Concern over Family Size Norm	.553*	.099

\* Significant at .01 level or higher

The non-poor subsample is once more differentiated from the poor on the basis of the results of this component of the life situation concept. Conjugal role relationships correlate weakly with concern over well-being of children and religious and moral duty to have children, but the relationships are much smaller in magnitude than those of the poor. No statistically significant relationships are evident with regard to the other two dependent variables.

Once again, there are clear differences between the poor and non-poor subsamples with reference to this component of the life situation of the poor. Attitudes con-

cerning conjugal role relationships are one of the strongest predictors in this study of the various family planning concerns of the poor. There is only a hint of any relationship between these independent and dependent variables among the non-poor. Thus, the fifth hypothesis is supported.

The results of these tests of the first five hypotheses demonstrate the utility of the life situation concept in predicting the family planning concerns of the poor. There are clear differences between poor and non-poor in every attitudinal component employed as an independent variable. Although the correlations are not high, they are statistically significant, for the most part, and they operate in the expected positive direction in every case.

In contrast, the correlations between life situation components and family planning concerns for the non-poor are much lower. While support for the hypotheses could not be found on the basis of the responses of the non-poor, these results serve to differentiate between the poor and non-poor groups in the study. The life situation concept was operationalized with five attitudinal scales in an effort to explain the widely recognized difficulties the poor experience in planning their families. The difference in the predictive power of the independent variables seems to suggest that the life situation of the poor is more closely related to the family planning concerns of the poor than of the non-poor.

Actual births, the second dependent variable, consists of only one measure (number of children to whom a woman has

ever given birth), controlling for the effect of age. The zero-order correlations between actual births and the life situation variables for poor and non-poor subsamples are presented in Tables 9 and 10. Table 16 presents the first order partial correlations on which the analysis is based.

TABLE 16  
PARTIAL CORRELATIONS BETWEEN  
LIFE SITUATION VARIABLES AND ACTUAL BIRTHS

Actual Births With...	Control Variable	Poor	Non-poor
Planning Orientation	AGE	-.080	.119
Sex Role Attitudes		-.200*	-.229*
Attitude Toward Sex	AGE	-.263*	-.261*
Locus of Control		-.065	-.498*
Conjugal Role Relationships	AGE	-.244*	-.150

\* Significant at .01 level or higher

Hypothesis VI:

Hypothesis six predicted a negative relationship between planning orientation and actual births. Expressed simply, the more strongly a respondent agrees that planning for the future is worthwhile and meaningful, the less births she is likely to have experienced. It is expected that a general planning orientation is predictive of an orientation toward planning one's family. For the poor subsample, there is no support for this hypothesis. Although the

correlation is positive it is so close to zero that it should be considered as indicating no relationship between the independent and dependent variable. The correlation between planning orientation and actual births is slightly higher for the non-poor, but is still not statistically significant. In addition, the direction of the relationship is positive rather than negative, as expected. If the possibility that this correlation was due to chance could be eliminated, it would appear that those non-poor respondents oriented toward planning for the future were having more children than those who "lived for today".

Thus, there is no support for the hypothesis predicting a negative relationship between planning orientation and parity. One possible explanation would be the lack of sufficient variance in responses on the item measuring actual births. Many of the respondents had never given birth, and this would have the effect of lessening the magnitude of the correlations.

Hypothesis VII:

Sex role attitudes should also correlate negatively with parity, as predicted in the seventh hypothesis. A respondent who favours improvement of the status of women is likely to have less children than a respondent who disagrees with the items in the sex role scale.

For the poor subsample, the correlation is weak but statistically significant ( $r = -.200$ ). This would seem to suggest that the sex role component of the life situation has a very small measure of predictive power in terms of this dependent variable.



Oddly, the correlation is improved for the non-poor subsample, ( $r = -.261$ ) and is also statistically significant. This would seem to indicate a weak inverse relationship between sex role attitudes and parity for the non-poor as well as the poor in the sample.

There is slight support in these results for the seventh hypothesis. The fact that the correlation is higher for the non-poor in the sample than for the poor, however, raises some doubts about the usefulness of sex role attitudes for differentiating between the two subsamples.

Hypothesis VIII:

The eighth hypothesis predicts a negative relationship between attitude toward sex and actual births. According to the literature reviewed in Chapter II, one might expect a respondent with an attitude of "mutuality" toward sexual relations to have less children than a respondent with an attitude of rejection. As Rainwater (1965) suggested, a woman who does not enjoy intercourse may be uncomfortable touching her genitals, which would hinder the use of many effective female-related forms of contraception. This is certainly one possible means by which a woman might produce a higher number of children.

As shown in Table 16, the partial correlation between attitude toward sex and actual births for the poor subsample is weak, but in the expected direction ( $r = -.263$ ). This would indicate limited support for the hypothesis under examination.

In terms of the non-poor subsample, however, the

correlation is almost identical to that of the poor ( $r = -.261$ ). It would appear that another independent variable is failing to differentiate between poor and non-poor in the sample. Possibly, an attitude of rejection has the same effect on poor and non-poor alike; i.e., more children. At any rate, there is weak support for a negative relationship between attitude toward sex and actual births.

Hypothesis IX:

As stated in the ninth hypothesis, a negative relationship is expected between locus of control and actual births. A woman whose attitudinal responses indicate an external locus of control is predicted to have experienced more births than a respondent whose locus of control is internalized.

As shown in Table 16, there is no relationship between locus of control and parity for the poor subsample when the effect of age is controlled ( $r = -.065$ ). Clearly, the number of offspring to whom a poor woman has given birth is not dependent on whether or not she feels capable of taking control of the course of events in her life.

Unexpectedly, the highest correlation with actual births was found among the non-poor subsample when locus of control was employed as the independent variable ( $r = -.498$ ). The internal/external locus of control scale clearly differentiates between poor and non-poor respondents in the sample. Instead of predicting the parity of the poor, however, locus of control is a moderate predictor of non-poor parity. The more a non-poor individual feels that she can take responsibility for events in her own life, the less children she is likely to have.

In attempting to account for the lack of predictive power of locus of control for actual births among the poor, one might refer to the respondents' youth. Although the effect of age on parity is controlled by partial correlation, if too many poor respondents all have the same numbers of offspring, there will be inadequate results for the correlations.

There is slight support for the ninth hypothesis, Predicting a negative relationship between locus of control and actual births, although it is tempered by the lack of significant responses among the poor subsample.

Hypothesis X:

The tenth and last hypothesis suggests a negative relationship between conjugal role relationships and actual births. The results are presented in Table 16. On the basis of the research literature, the more "overlap" between the roles of spouses and the greater degree of communication between them, the less live births they will have experienced. Conversely, those who favour segregation of conjugal roles and who find communication with spouses difficult, will have greater parity (when the effects of age are controlled).

For the poor subsample, a weak negative correlation did emerge between the conjugal role relationships and actual births, at a statistically significant level ( $r = -.244$ ). This would indicate some support for the hypothesis, when the effects of age on actual births are controlled.

The concept of conjugal role relationships has differentiated between the poor and non-poor subsamples, for

no statistically significant results are evident for the non-poor in terms of parity ( $r = -.150$ ). This final component of the "life situation of the poor" concept has proven to be an adequate predictor of the parity of the poor. Thus, support for the tenth and final hypothesis is weak, but present.

Summary:

The results of the research on family planning and the poor were set forth in this chapter. Sample characteristics and intercorrelations between all variables were initially discussed. Findings from tests of the ten hypotheses were set forth in the form of comparisons between poor and non-poor subsamples.

In the next chapter, research findings are discussed and analysed. The utility of the "life situation of the poor" concept is evaluated in terms of the strongest and weakest predictors among the five attitudinal independent variables. The research is assessed in terms of the generalizations which can be derived and the limitations which should be placed on the study results.

CHAPTER FIVE  
SUMMARY, DISCUSSION OF RESULTS  
AND IMPLICATIONS

In this chapter, the results of hypothesis testing are discussed. The research is assessed in light of its relative success in meeting objectives. Implications for further research and family planning policies are also presented.

At this point, it would be useful to discuss the overall results of the hypothesis testing in a general fashion. In an attempt to operationalize the "life situation of the poor", five attitudinal scales theoretically related to family planning were devised. These five life situation scales were utilized as independent variables in the research. Family planning attitudes and fertility were employed as the dependent variables, measured by concerns with family planning and parity. The ten hypotheses, which formed the focus of this research, tested the effect of the life situation of the poor on actual births and family planning concerns. Since these hypotheses were designed to explore the difficulties with family planning experienced by the poor, the total sample was divided into two roughly equal halves, the poor and the non-poor. In this manner, the results of the hypothesis testing can be compared between the two groups.

When family planning concerns are treated as the dependent variable (Hypotheses 1 to 5), the most powerful independent variable is conjugal role relationships. As Rainwater (1965) and Hill, Stycos and Beck (1959) indicated, couples who communicate with each other and participate in

joint activities are more likely to be concerned with family planning. Communication and sharing of duties are a part of marriage, it might be agreed. Yet the "traditional" segregation of male and female in terms of labour and recreation (Rainwater, 1960) and reluctance to discuss sexual or personal matters are characteristic of the poor (Hill, et. al., 1959).

These findings contradict those emerging from Sear's study in Cali, Colombia. Sear (1975) suggested that newer, female-related contraceptive methods such as the Pill and the I.U.D. could be successfully used without discussing such matters with one's spouse. This would lessen the importance of communication in the practice of family planning. In the present study, however, communication and joint conjugal role relationships were important predictors of family planning concerns among the respondents in the poor subsample.

Other variables would be much more useful in predicting the family planning concerns of the non-poor. While this does not contribute a great deal to our knowledge of the family planning concerns of non-poor persons, it confirms the basic idea underlying this research; the motivations and concerns of the poor that influence their family planning attitudes and behaviours are significantly different from those in any other socio-economic group.

The second most useful independent variable was planning orientation. It will be recalled from the literature review in Chapter II that planning for one's future is

considered to be a "middle-class" phenomenon (Chilman, 1973). It was expected that those who favor the idea of planning in general will find the notion of planning their families more acceptable. If planning for the future is seen by respondents as relevant and meaningful, they might also view family planning as a possible means of escaping from the "cycle of poverty". The findings of the present study appear to support these suggestions. Among the poor, those respondents who demonstrated a planning orientation tended to also be concerned with the well-being of children, the future of children, the religious and moral duty to bear children, and the family size norm. The planning orientation of the non-poor in the sample tended to be predictive of family planning concerns to a much lesser extent. Since the attitude scale measuring planning orientation was designed with the poor in mind, this tendency was expected.

Locus of control was the next most powerful predictor of family planning concerns among the poor. As Macdonald's (1970) research suggested, those respondents who demonstrated an internal locus of control tended to also display a concern with family planning. The correlations were for the most part weak, however. This would seem to indicate that either the attitudinal scale measuring locus of control could be improved, or that other "life situation" variables are better predictors of family planning concerns.

The predictive value of locus of control for the non-poor is almost non-existent. This demonstrates the clear differences in attitudes between poor and non-poor respondents

in the sample. It also points out, however, the gross inadequacy of the concept of locus of control in attempting to understand the family planning concerns of the non-poor.

Attitude toward sex was not a powerful predictor of family planning concerns. This independent variable was only weakly predictive of family planning concerns for the poor subsample. Results were almost non-existent for the non-poor.<sup>1</sup> According to Rainwater (1966) poor persons tended to have inadequate knowledge about sex. In addition, many of his female respondents did not enjoy intercourse and tended to avoid touching their genitals. This naturally interfered with communication about sexual matters and made effective contraception difficult.

In the twenty years since Rainwater's study, attitudes toward sex have been undergoing a change. Teenagers are becoming sexually active at younger ages, and attitudes are becoming more tolerant. Thus family planning concerns are not as closely related to attitudes toward sex as they might once have been. Methods of contraception have also changed over the years. The "Pill" has made it possible for a woman to reject her sexuality, avoiding her genitals, and yet still effectively prevent pregnancies. Consequently, it seems that attitude toward sex is not as essential a

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<sup>1</sup> Four out of five independent variables correlated with "Religious and moral duty to have children" at statistically significant levels for the non-poor sub-sample. This would seem to indicate that this family planning concern was of particular importance to the non-poor in the study.



component of the life situation of the poor as it might once have been. Although it was weakly correlated with family Planning concerns in the study, other independent variables were more powerful.

Sex role attitudes formed the least effective independent variable in predicting family planning concerns. For the poor subsample, only two of the four family planning concern dependent variables were correlated with sex roles in a statistically significant manner. The results for the non-poor subsample were not even always operating in the expected direction. On the basis of Rainwater's (1965) study, we expected increasing independence and status for women would result in greater familiarity with family planning concerns. Thus, attitudes favouring increased status for women and less differentiation between male-female roles were expected to relate to concerns with family planning, for the purpose of this study.

One possible reason for the inconsistent results in the present research is that attitudes toward the increased status of women are still in the process of changing. Although more women are entering the labour force, the proportion of women in the lowest income categories is higher than ever. Women are getting jobs, but their education and job skill levels are denying them the increased independence and responsibility they were expected to acquire. Consequently, changes in attitudes about differences in sex roles need not bring about increasing concern with family planning. The present research appears to confirm

this.

In hypotheses VI to X, where actual births are employed as the dependent variable, the results are rather more erratic. The five independent variables, measuring the life situation of the poor, are at best weak predictors of parity. Attitudes toward sex, conjugal role relationships and sex role attitudes are the only attitudinal scales which provided statistically significant results for the poor subsample. This would seem to indicate that those respondents who held modern or liberal attitudes on these subjects tended to have less births than the others. These results appear to support the suggestions of Rainwater, Chilman, and others who suggested that mutuality in sexual relations, sharing of conjugal responsibilities and activities, and attitudes favouring improvement of the status of women will ultimately result in lower fertility.<sup>1</sup> Chilman's (1968) orientation toward planning for the future and Macdonald's (1970) internal locus of control have an insignificant effect on parity. This could in part be due to the lack of range the number of births reported, since the majority of respondents had experienced no births or one birth. In addition, planning orientation and locus of control might be inadequate life situation components in terms of predicting actual births.

The results for the non-poor sample are at variance with expectations. Three independent variables correlated negatively with parity: locus of control, attitude toward

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<sup>1</sup> measured in the present study by actual births.

sex, and sex role attitudes. Thus, for Hypotheses VII, VIII and IX, the life situation attitudinal scales were more effective in predicting the parity of the non-poor subsample than the poor subsample. Locus of control in particular was a powerful predictor of non-poor parity. This would seem to indicate that the independent variables employed are not as effective in predicting the actual births of the poor as might be desired.

Thus, unexpected results emerged when "actual births" was employed as the dependent variable. The life situation independent variables were slightly more successful in predicting actual births for the non-poor than the poor subsample. These irregularities can be attributed to sampling errors for the most part, since the range of responses on the parity item was too narrow.

The following section discusses the relative "success" of the present research: whether the objectives have been met, what generalizations might be offered, and what improvements might be made.

#### Assessment of the Research:

The objectives of the research were threefold. First, the researcher attempted to determine whether differences between the poor and other socio-economic groups existed, in terms of family planning attitudes and behaviour. Second, the attempt was made to discover, within the context of poverty, a number of factors which might explain the expected lack of concern with family planning and higher number of

actual births among the poor. Third, the researcher endeavored to devise an operationalization of these concepts on the basis of previous research which would effectively demonstrate these relationships.

On the whole, these objectives were met. Differences between the poor and non-poor subsamples emerged in almost every test of hypotheses. The attitudinal scales designed to measure "life situation of the poor" adequately predicted family planning concerns and actual births for the poor in the study. Finally, the operationalization of the concepts was moderately successful, in that significant results were obtained from the testing of hypotheses. Some of the life situation variables proved more useful than others, however, indicating that further refinement of the attitude scales might be advisable.

The goal of an inferential study such as this is to provide knowledge of the population from which the sample was drawn. Once the results have been presented, the way is clear for generalizations about the entire population to be stated. In this study, however, there are a number of limitations which must be placed on these generalizations.

The limitations can be set forth briefly. The clinic population from which the quota sample was drawn does not have the same characteristics as the population of Winnipeg. In light of its situation in the core of downtown Winnipeg, it is likely to attract more of Winnipeg's poor than other socio-economic groups. Consequently, the sample contains higher proportions of persons of native and recent immigrant

backgrounds, and more young women (21 and under). The approximate half of the sample designated as "non-poor" contains few middle-class respondents and no upper-class respondents. If respondents from these socio-economic groups had been included in the study, we would expect the differences between poor and non-poor which emerged to be even greater. The author would also hesitate to generalize from a sample of two hundred to the population of an entire Canadian city. The clinic at which the data was collected was not equipped to serve extremely large numbers of patients, and it consequently provided a modest number of respondents.

The above limitations do not necessarily indicate shortcomings in the study. Middle and especially upper-class respondents are in short supply in almost all sociological research. Due to the sensitivity of the entire population to birth control and sexual matters, a random sample of the population of Winnipeg might never have been obtained.

In light of these qualifications the following generalizations can be offered: in the core area of Winnipeg, the unique life situation of the poor affects their concerns about family concerns and their actual births.<sup>1</sup> Lack of planning orientation, differentiation of sex roles, attitude of rejection toward sex, external locus of control, and segregated conjugal role relationships are related to a

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<sup>1</sup> when the effect of age on actual births is removed.

lack of concern with family planning and a higher number of actual births.

In order to improve the results of this study, a number of modifications might be made. Attitude scales which produced inconsistent results (such as sex role attitudes and religious and moral duty to bear children) need revision. Items which would better measure reproductive ideals; desired, expected and actual family size, would provide superior indicators of family planning behaviour. Other components of the life situation of the poor besides the attitudinal scales selected might strengthen the existing relationship with family planning concerns and actual births.

#### Implications and Recommendations for Further Research:

The results of the research on family planning and the poor are expected to have a bearing on both future research in the area of family planning and the policies of social agencies attempting to provide the poor with family planning services. In terms of future family planning research, several findings should be noted.

As noted in the present research, the situation of extreme poverty in which many individuals attempt to delay and prevent pregnancies has an effect on their ultimate success or failure. Consequently, care should be taken in future studies to avoid "lumping" the poor with other broad socio-economic groups.

Attitudes toward family planning are evidently dependent on the life situation of the poor. These attitudes consequently provide useful information on how the poor feel about family planning. Although the specific relationship between family planning attitudes and behaviours (in this case, concerns with family planning and actual births), it will likely be useful in future research. A person who lacks motivation, for any of a number of reasons, is less likely to be successful at family planning. This finding will hopefully be useful for those attempting to "understand" the family planning "problems" of the poor.

The study of family planning and the poor has important implications for social agencies providing family planning services. As the research findings indicate, special attention must be paid to the unique motivations and interests of the poor. If a person has specific reasons for her lack of concern with family planning, handing her a packet of pills will not necessarily help her prevent pregnancy. Similarly, if the rewards of bearing children outweigh the advantage of delaying pregnancies, social services will never be effective. Family planning services, therefore must take account of the economic, social and cultural factors which affect the decisions made by the poor.

Lastly, although the poor were treated as a homogeneous group for the purpose of this study, the group actually contains many diverse ethnic and socio-demographic categories. Future studies might profitably investigate the

values and attitudes of specific poverty groups (such as motives and recent immigrants) to better determine their family planning needs.

Conclusion:

The "life situation of the poor" is a moderately successful predictor of socio-economic differences in fertility patterns and family planning concerns. A clear difference between poor and non-poor subsamples emerged in the study when the five attitude scales measuring life situation were correlated with four family planning concern scales. This indicates that the life situation of the poor is positively correlated with a lack of concern with family planning. As a result of sampling difficulties, correlations between the life situation scales and actual births, (controlling for the effect of age) did not demonstrate clear differences between poor and non-poor. In spite of this, life situation tended to be negatively correlated with actual births among the poor, as expected.

For future research and family planning services for the poor, the "life situation" concept shows promise of usefulness.



## APPENDIX

The following pages contain the questionnaire administered in the Family Planning, Gynaecology, and Prenatal clinics held in the Women's Centre Outpatient Department for a four week period beginning May 9th, 1977 and ending June 3rd, 1977.

FAMILY PLANNING RESEARCH PROJECT  
DEPARTMENT OF SOCIOLOGY  
UNIVERSITY OF MANITOBA

The following questionnaire is part of the research being carried out by the Family Planning Research Project. We would like your opinions on family planning and other matters of interest. Some personal information is also requested, for purposes of analysing the data only. There is no need to sign your name, since all of the responses are anonymous.

SECTION A

First of all, we would like your opinions on some matters concerning size of families. Please fill in the blanks or respond with check marks (✓) where applicable.

1. What do you regard as the ideal number of children for the average Canadian family today? (please check one)

<input type="checkbox"/> No children	<input type="checkbox"/> 4 children
<input type="checkbox"/> 1 child	<input type="checkbox"/> 5 children
<input type="checkbox"/> 2 children	<input type="checkbox"/> 6 or more children
<input type="checkbox"/> 3 children	

2. If you have children, forget for a moment the number you now have. If you could have exactly the number of children you wanted, how many would you have?

children

3. How many of these would be boys and how many would be girls?

boys       girls       no preference

4. How many children do you expect to have given birth to by the time you are fifty years old?

children

- No

SECTION B

The following statements are about family planning, population, status of women, sex and other issues which are of relevance. We would like you to express your opinion on each of the statements by circling the number that most agrees with your feelings on the subject:

Strongly Agree (1), Agree (2), Disagree (4), or Strongly Disagree (5).

If you feel that you don't know, or if you are uncertain, circle Don't Know (3).

	<u>Strongly</u> <u>Agree</u>	<u>Agree</u>	Depends on Circumstances Uncertain <u>Don't Know</u>	<u>Disagree</u>	<u>Strongly</u> <u>Disagree</u>
	1	2	3	4	5
(CIRCLE NUMBER)					
1. How successful the children are going to be in getting a good job in the future should receive much attention by most parents.	1	2	3	4	5
2. Having more children than what I think is the ideal number would make it harder for me to give them the things I want them to have in life.	1	2	3	4	5
3. One way to maintain females' physical and mental health is to practice family planning.	1	2	3	4	5
4. Practicing family planning is one way to insure both mothers' and children's well-being.	1	2	3	4	5
5. Family planning is important both for me and for other people.	1	2	3	4	5

	<u>Strongly</u> <u>Agree</u>	<u>Agree</u>	<u>Depends on</u> <u>Circumstances</u> <u>Uncertain</u> <u>Don't Know</u>	<u>Disagree</u>	<u>Strongly</u> <u>Disagree</u>
	1	2	3	4	5
6. Each couple can control how many children they will have.	1	2	3	4	5
7. Newly married couples should plan ahead as to how many children they should have.	1	2	3	4	5
8. It is my religious duty to have children.	1	2	3	4	5
9. I feel that I have moral obligations to produce children during my life time.	1	2	3	4	5
10. The length of time between marriage and the birth of the first baby is a matter of economic consideration.	1	2	3	4	5
11. Most parents always need enough money to care for their children.	1	2	3	4	5
12. People should be encouraged to practice family planning as a way to help with the money situation in their family.	1	2	3	4	5
13. Parents should spend as much time as they can with their children.	1	2	3	4	5
14. Other countries may now have problems because of too many people but Canada doesn't.	1	2	3	4	5
15. We must all be concerned about the large number of persons being born in this country.	1	2	3	4	5

(CIRCLE NUMBER)

	Strongly Agree	Agree	Depends on Circumstances Uncertain Don't Know	Disagree	Strongly Disagree
	(CIRCLE NUMBER)				
16. We must do something about the over- large number of people being born in this country.	1	2	3	4	5
17. Our natural resources are already being threatened by the number of people now being born in Canada.	1	2	3	4	5
18. Canada would be better off if there were more children being born in the country.	1	2	3	4	5
19. It is important to make plans for one's life and not just accept what comes.	1	2	3	4	5
20. With things the way they are today, a person ought to worry about the present and not the future.	1	2	3	4	5
21. It is important to know clearly in advance your plans for the future.	1	2	3	4	5
22. Planning only makes a person un- happy since plans hardly ever work out.	1	2	3	4	5
23. A pre-school child is likely to suffer if his mother works.	1	2	3	4	5
24. A working mother can establish just as warm and secure a relation- ship with her children of elemen- tary school age as a mother who does not work.	1	2	3	4	5



	<u>Strongly</u> <u>Agree</u>	<u>Agree</u>	<u>Depends on</u> <u>Circumstances</u> <u>Uncertain</u> <u>Don't Know</u>	<u>Disagree</u>	<u>Strongly</u> <u>Disagree</u>
	(CIRCLE NUMBER)				
25. It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family.	1	2	3	4	5
26. Women are much happier if they stay at home and take care of their children.	1	2	3	4	5
27. Young girls are entitled to as much independence as young boys.	1	2	3	4	5
28. Women should be considered as seriously as men for jobs as executives or politicians.	1	2	3	4	5
29. If anything serious happened to one of the children while the mother was working, she could never forgive herself.	1	2	3	4	5
30. Many of those in women's rights organizations today seem to be unhappy misfits.	1	2	3	4	5
31. A man and woman who marry should have their first full sexual experience together.	1	2	3	4	5
32. I feel confident most of the time.	1	2	3	4	5
33. Single women should feel free to initiate sexual relations.	1	2	3	4	5

	Strongly Agree	Agree	Depends on Circumstances Uncertain Don't Know	Disagree	Strongly Disagree
(CIRCLE NUMBER)					
34. Premarital sex is wrong.	1	2	3	4	5
35. I would prefer to marry a virgin.	1	2	3	4	5
36. I am attractive to persons of the opposite sex.	1	2	3	4	5
37. It would trouble me to marry someone with previous sexual experience.	1	2	3	4	5
38. A person can have numerous sexual affairs and still bring deep, enduring emotional commitment to the person he or she marries.	1	2	3	4	5
39. I am good-looking.	1	2	3	4	5
40. Sex for its own sake is an empty, hollow experience.	1	2	3	4	5
41. I am popular.	1	2	3	4	5
42. Love is the only thing that really gives sex a meaning.	1	2	3	4	5
43. I am happiest when I don't have to make decisions.	1	2	3	4	5
44. Some of the best things that happen in life are due to luck.	1	2	3	4	5
45. Life is essentially a game of chance.	1	2	3	4	5

	Strongly Agree	Agree	Depends on Circumstances Uncertain Don't Know	Disagree	Strongly Disagree
(CIRCLE NUMBER)					
46. Things just seem to happen to me.	1	2	3	4	5
47. Everything worth knowing has been discovered already.	1	2	3	4	5
48. Decisions within the household should be made by both husband and wife.	1	2	3	4	5
49. Marriages work best when the husband pays the bills and the wife takes care of the children.	1	2	3	4	5
50. The father should always have the final say in disciplining the children.	1	2	3	4	5
51. A husband and wife get along better when they have interests and activities in common.	1	2	3	4	5
52. From time to time, a husband and wife should discuss how many children they would like to have.	1	2	3	4	5
53. Since the woman is the one who takes the risk of getting pregnant, it is up to her to decide which form of birth control the couple will use.	1	2	3	4	5

SECTION C

The following information is necessary in order to analyze the data. It will not be used in any other way. It is not necessary to sign your name, as this information will be kept confidential.

1. What is your present marital status? (Please check one)

\_\_\_\_\_ Single  
\_\_\_\_\_ Married  
\_\_\_\_\_ Separated  
\_\_\_\_\_ Divorced  
\_\_\_\_\_ Common Law  
\_\_\_\_\_ Widowed

2. What was the last grade in school you actually completed?

Grade \_\_\_\_\_ or University year \_\_\_\_\_

3. If applicable, what was the last grade in school your husband or partner actually completed?

Grade \_\_\_\_\_ or University year \_\_\_\_\_

4. How old are you?

\_\_\_\_\_ years

5. If applicable, how old is your husband or partner?

\_\_\_\_\_ years

6. In what occupation are you currently employed?

<input type="checkbox"/> Clerical (office)	<input type="checkbox"/> Sales Clerk
<input type="checkbox"/> Waitress and Food Services	<input type="checkbox"/> Student
<input type="checkbox"/> Technician	<input type="checkbox"/> Unemployment Insurance Benefits
<input type="checkbox"/> Telephone Operator	<input type="checkbox"/> Social Assistance (welfare, Mothers' allowance, etc.)
<input type="checkbox"/> Professional (Nurse, etc.)	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> Housewife	

7. If applicable, in what occupation is your husband or partner presently employed?

<input type="checkbox"/> Carpenter	<input type="checkbox"/> Plumber
<input type="checkbox"/> Business owner or manager	<input type="checkbox"/> Unemployment Insurance Benefits
<input type="checkbox"/> Labourer	<input type="checkbox"/> Workmen's Compensation
<input type="checkbox"/> Salesman	<input type="checkbox"/> Social Assistance (welfare, etc.)
<input type="checkbox"/> Construction Worker	<input type="checkbox"/> Other (Specify) _____

8. In general, what was your family income for the past year, including earnings, welfare, and so on?

<input type="checkbox"/> \$2,000 - 3,999	<input type="checkbox"/> \$10,000 - 11,999
<input type="checkbox"/> \$4,000 - 5,999	<input type="checkbox"/> \$12,000 - 15,999
<input type="checkbox"/> \$6,000 - 7,999	<input type="checkbox"/> \$16,000 and over
<input type="checkbox"/> \$8,000 - 9,999	

9. Did you receive any form of social assistance (welfare, mother's allowance, unemployment insurance, etc.) at any time during the past year?

\_\_\_\_\_ Yes          \_\_\_\_\_ No

10. What is your religion or denomination?

01. Anglican	_____	08. Presbyterian	_____
02. Baptist	_____	09. Roman Catholic	_____
03. Greek Orthodox	_____	10. Salvation Army	_____
04. Jewish	_____	11. Ukrainian Catholic	_____
05. Lutheran	_____	12. United Church	_____
06. Mennonite	_____	13. None	_____
07. Pentecostal	_____	14. Other (Specify)	_____

11. What effect would you say religion has on your life? (Please check one)

\_\_\_\_\_ It affects everything I do.  
\_\_\_\_\_ It has some effect on my life.  
\_\_\_\_\_ Religion has little or no effect on my life.

12. Where are you presently residing?

\_\_\_\_\_ Winnipeg  
\_\_\_\_\_ In a city or town other than Winnipeg  
\_\_\_\_\_ In a rural area

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Thank you very much for completing this questionnaire. Your cooperation is greatly appreciated.

## BIBLIOGRAPHY

- Anderson, J.E. and Smith, J.C.  
1975 "Planned and Unplanned Fertility in a Metropolitan Area: Black and White Differences," Family Planning Perspectives, Vol. VII.
- Balakrishnan, T.R., Kantner, J.F., and Allingham, J.D.  
1975 Fertility and Family Planning In a Canadian Metropolis. Montreal: McGill-Queen's Press.
- Babbie, E.R.  
1975 The Practice of Social Research. Belmont, Cal.: Wadsworth Publishing.
- Berelson, B.  
1966 "KAP Studies on Fertility," Berelson, B. (editor) Family Planning and Population Programs. Chicago: University of Chicago Press.
- Berg, D.H. and Jackson, E.L.  
1975 Delivering Family Planning and Information Services. Winnipeg: University of Manitoba.
- Blake, J.  
1960 Family Structure in Jamaica: The Social Context of Reproduction. New York: Free Press.
- 
- 1966 "Ideal Family Size Among White Americans: A Quarter of a Century's Evidence," Demography, Vol. III, No. 1.
- 
- 1967 "Income and Reproductive Motivation," Population Studies, Vol. XXXI.
- 
- 1971 "Abortion and Public Opinion: The 1960-1970 Decade," Science, Vol. CLXXII.
- Bogue, D.J.  
1966 "Family Planning Research: An Outline of the Field," B. Berelson, (editor) Family Planning and Population Programs. Chicago: University of Chicago Press.
- 
- 1970 A Model Interview For Fertility Research and Family Planning Motivation. Chicago: Community and Family Study Center.
- Bumpass, L.L. and Westoff, C.W.  
1970 The Later Years of Childbearing. Princeton: Princeton University Press.

- Cartwright, A.  
1970 Parents and Family Planning Services. London: Routledge and Kegan Paul.
- Chilman, D.  
1968 "Fertility and Poverty in the United States: Some Implications for Family Planning Programs, Evaluation, and Research," Journal of Marriage and the Family, Vol. XXX.
- 
- 1973 "Some Psychological Aspects of Fertility, Family Planning, and Population Policy in the United States," Fawcett, J. (editor), Psychological Perspectives on Population. New York: Basic Books.
- Commission on Population Growth and the American Future.  
1972 Population Growth and the American Future. Washington: U. S. Government Printing Office.
- Day, A.T.  
1975 "Unplanned Pregnancies in the Seventies: An Australian Paradox?" Unpublished paper presented for International Women's Year Conference, Brisbane.
- Dyck, A.J.  
1972 "Population Policy and Ethical Acceptability," Rapid Population Growth, Vol.II. Baltimore: Johns Hopkins Press.
- Easterlin, R.A.  
1969 "Toward a Socioeconomic Theory of Fertility: A Survey of Recent Research on Economic Factors in American Fertility," S.J. Behrman, et.al.(editors), Fertility and Family Planning: A World View. Ann Arbor: University of Michigan Press.
- Fawcett, J.  
1970 Psychology and Population. New York: Population Council.
- 
- (editor)  
1973 Psychological Perspectives on Population. New York: Basic Books.
- 
- 1974 "Psychological Research on Family Size and Family Planning in the United States," Professional Psychology, Vol. V.
- Freedman, R.  
1962 "Next Steps in Research on Problems of Motivation and Communication in Relation to Family Planning," C.V. Kiser (editor) Research in Family Planning. Princeton: Princeton University Press.



- 
- 1967 "Applications of the Behavioral Sciences to Family Planning Programs," Population Studies, Vol. XX.
- 
- , and Bumpass, L.L.
- 1966 "Fertility Expectations in the U.S., 1962-1964," Population Index, Vol. XXXII.
- Friedman, H.L.
- 1974a "Psychological Research on Family Planning in Europe," Professional Psychology, Vol. V.
- 
- 1974b "Some Recommendations on Measuring Family Planning Behaviour," Family Planning Perspectives, Vol. IV
- Goldberg, D., Sharp, H., and Freedman, R.
- 1959 "The Stability and Reliability of Expected Family Size Data", Millbank Memorial Fund Quarterly, Vol. XXXVII, No. 4.
- Groat, H.T., and Neal, A.G.
- 1967 "Social Psychological Correlates of Urban Fertility," American Sociological Review, Vol. XXXII.
- Harkavy, O. and Maier, J.
- 1970 "Research in Reproductive Biology and Contraceptive Technology: Present Status and Needs for the Future", Family Planning Perspectives, Vol. 2, No. 3.
- Hass, P.H.
- 1974 "Wanted and Unwanted Pregnancies: A Fertility Decision-Making Model," Journal of Social Issues, Vol. XXX, No. 4.
- Henripin, J.
- 1972 Trends and Factors of Fertility in Canada. Statistics Canada.
- Herzog, E.
- 1963 "Some Assumptions About the Poor," The Social Science Review, Vol. XXXVI.
- Hill, R., Stycos, J.M., and Back, K.W.
- 1959 The Family and Population Control. New Haven, Conn.: College and University Press.
- Hunter, A.A.
- 1972 "Factorial Ecology: A Critique and Some Suggestions," Demography, Vol. IX.
- 
- and Latif, A.H.
- 1973 "Stability and Change in the Ecological Structure of Winnipeg: A Multi-Method Approach," Canadian Review of Sociology and Anthropology, Vol. X, No. 4.

- Kerlinger, F.N.  
1973 Foundations of Behavioural Research (2nd edition). New York: Holt, Rinehart and Winston.
- Komarovsky, M.  
1962 Blue Collar Marriage. New York: Random House.
- Krishnan, P. and Krotki, K.  
1976 Growth of Alberta Families Study (GAFS). Population Research Laboratory. Edmonton: University of Alberta.
- Laing, T.E.  
1969 "The Relationship Between Attitudes and Behavior: The Case of Family Planning," Unpublished doctoral dissertation, University of Chicago.
- Latif, A.H.  
1976 "Research into the Non-medical Factors Affecting Contraceptive Practices of Women-at-Risk: A Review and Critique," Unpublished, Working Paper No. 1, Family Planning Research Project, University of Manitoba.
- Leibenstein, H.  
1973 "The Economic Theory of Fertility Decline," Research Paper No. 1, Center for Population Studies. Cambridge: Harvard University.
- Liu, K.  
1977a "Trends and Differentials in Pregnancy and Contraceptive Use Rates," Unpublished, Working Paper No. 9, Family Planning Research Project, University of Manitoba.
- 1977b "Acceptance and Continuation of Family Planning Services at Federal and Other Sources: The U.S.," Unpublished, Working Paper No. 10, Family Planning Research Project, University of Manitoba.
- Macdonald, A.P., Jr.  
1970 "Internal- External Locus of Control and The Practice of Birth Control," Psychological Reports, Vol. XXVII.
- Marsden, L.R.  
1972 Population Probe: Canada. Toronto Copp Clark Publishing Co.
- Mason, K.O. and Bumpass, L.L.  
1975 "U.S. Women's Sex Role Ideology, 1970," American Journal of Sociology, Vol. LXXX.

- Misra, B.  
1967 "Correlates of Males' Attitudes Toward Family Planning,"  
D. Bogue (editor), Sociological Contributions to Family Planning.  
Chicago: Family Planning and Study Center.
- National Council of Welfare  
1975 Poor Kids. Ottawa: National Council of Welfare.
- 
- 1977 Working Poor. Ottawa: National Council of Welfare.
- Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K., and Bent, D.H.  
1975 Statistical Package for the Social Sciences (Second Edition).  
McGraw-Hill, Inc.
- Orshansky, M.  
1965 "Who's Who Among the Poor: A Demographic View of Poverty,"  
Social Security Bulletin, Vol. XXVIII, No. 7.
- Placek, P.J. and Hendershpot, G.E.  
1974 "Public Welfare and Family Planning: An Empirical Study of the  
'Brood Sow' Myth," Social Problems, Vol. XXI, No. 5.
- Pohlman, E.  
1969 The Psychology of Birth Planning. Cambridge, Mass.:  
Schenkman Publishing.
- Rainwater, L. with Weinstein, K.  
1960 And the Poor Get Children. Chicago: Quadrangle Books.
- 
- 1965 Family Design. Chicago: Aldine.
- Reiss, I.L.  
1960 Premarital Sexual Standards in America. New York: Macmillan.
- 
- 1967 The Social Context of Premarital Sexual Permissiveness.  
New York: Holt, Rinehart and Winston.
- 
- 1975, Banwart, A. and Foreman, H.  
"Premarital Contraceptive Usage: A Study and Some Theoretical  
Explanations," Journal of Marriage and the Family, Vol. XXXVII.
- Rotter, A.P.  
1966 "Generalized Expectancies for Internal Versus External  
Control of Reinforcement," Psychological Monographs, Vol. LXXX,  
No. 1.

- Ryan, W.  
1971 Blaming the Victim. New York: Vintage Books.
- Ryder, N.B.  
1973 "A Critique of the National Fertility Study," Demography, Vol. X, No. 4.
- \_\_\_\_\_, and Westoff, C.F.  
1967 "The Trend of Expected Parity in the U. S., 1955, 1960 and 1965," Population Index, Vol. XXXIII, No. 2.
- \_\_\_\_\_  
1971 Reproduction in the United States, 1965. Princeton, N.J.: Princeton University Press.
- \_\_\_\_\_  
1972 "Wanted and Unwanted Fertility in the United States: 1965 and 1970," Westoff, C.W. and Parke, R., Jr. (editors) Demographic and Social Aspects of Population Growth, Research Report, Vol. 1, Commission on Population Growth and the American Future. Washington.
- Schopler, J.  
1971 Personal Communication in Thompson, et. al.; Op. Cit.
- Schorr, A.  
1966 "The Family Cycle and Income Development," Social Security Bulletin, Vol. XXIX, No. 2.
- Sear, A.M.  
1975 "Predictors of Contraceptive Practice for Low-Income Women in Cali, Colombia," Journal of Biosocial Science, Vol. VII.
- Special Senate Committee on Poverty.  
1971 Poverty in Canada. Ottawa: Information Canada.
- Spillane, H., and Ryser, P.E.  
1975 Male Fertility Survey: Fertility Knowledge, Attitudes and Practices of Married Men. Cambridge: Ballinger Publishing Co.
- Steinhoff, P. Palmore, J., Smith, R., Morisky, D. and Pion, R.  
1975 "Pregnancy Planning in Hawaii," Family Planning Perspectives, Vol. VII, No. 3.
- Stephan, F.F.  
1962 "Possibilities and Pitfalls in the Measurement of Attitudes and Opinions on Family Planning," Kiser, C.V. (editor) Research in Family Planning. Princeton, N.J.: Princeton University Press.

- Stycos, J.M.  
1955 Family and Fertility in Puerto Rico. New York: Columbia University Press.
- \_\_\_\_\_, and Back, K.W.  
1964 The Control of Human Fertility in Jamaica. Ithaca, N.Y.: Cornell University Press.
- Sweet, J.A.  
1974 "Differentials in the Rate of Fertility Decline: 1960-1970," Family Planning Perspectives, Vol. VI.
- Thompson, V.D., Appelbaum, M.I. with Allen, J.E.  
1974 Population Policy Acceptance: Psychological Determinants. Chapel Hill, N.C.: Carolina Population Center.  
Westoff, C.F., Potter, R.G., Jr., Sagi, P.C. and Mishler, E.G.
- Westoff, C.F., Potter, R.G., Sagi, P.C., and Mishler, E.G.  
1961 Family Growth in Metropolitan America. Princeton, N.J.: Princeton University Press.
- \_\_\_\_\_, Potter, R.G., Jr., and Sagi, P.C.  
1963 The Third Child. Princeton, N.J.: Princeton University Press.
- \_\_\_\_\_, and Potvin, R.H.  
1966 "Higher Education: Religion and Women's Family Size Orientations," American Sociological Review, Vol. XXI, No.4.
- Westoff, L.A. and Westoff, C.F.  
1971 From Now to Zero. Toronto: Little, Brown and Company.
- Whelpton, P.K., Campbell, A.A. and Patterson, J.E.  
1966 Fertility and Family Planning in the United States. Princeton: Princeton University Press.
- Williamson, J.B.  
1970 "Subjective Efficacy and Ideal Family Size as Predictors of Favorability Toward Birth Control," Demography, Vol. VII, No.3.
- Wrong, D.  
1967 Population and Society (Third Edition). New York: Random House.
- Zelnik, M. and Kantner, J.F.  
1970 "United States: Exploratory Studies of Negro Family Formation-Factors Relating to Illegitimacy," Studies in Family Planning, Vol. 1.