



Rural Montanans' attitudes toward birth control correlated with selected personal factors
by Pauline Odegard Johnson

A thesis submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE in Home Economics

Montana State University

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Abstract:

The purpose of this study was to discover what attitudes rural Montanans have toward birth control and to correlate this finding with their attitudes toward marital roles, marital communication and their knowledge of sex and methods of birth control. The random sample included a total of 332 men and women 18 years or older, who lived in cities, towns, or on farms in 12 randomly selected counties in Montana. A survey booklet was used to collect the data. Five instruments were used to elicit information for this study: an instrument that collected personal background information, a scale developed by Wang and Thurstone to obtain attitudes toward birth control, an inventory designed by the investigator to gather family planning and sex knowledge, the Marriage Role Expectation Inventory developed by Marie S. Dunn, and an attitude scale of marital communication created by Millard J. Bienvenu, Sr. Several significant relationships were found to exist, some of which were: as age went up, attitudes toward birth control were less favorable; the less one attended church, the less favorable were his attitudes toward birth control; as the number of children a family had increased, attitudes toward birth control became less favorable; the less education one had the less favorable were his attitudes toward birth control; as education increased, sex knowledge increased; and marital communication increased as knowledge of birth control increased. In addition the mean scores for this sample indicated that: their attitudes were quite favorable toward birth control, their attitudes toward marital roles were traditional, their level of marital communication was relatively high, and they answered more than half of the questions on the sex inventory correctly.

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CORRELATED WITH SELECTED PERSONAL FACTORS

by

PAULINE ODEGARD JOHNSON

A thesis submitted to the Graduate Faculty in partial
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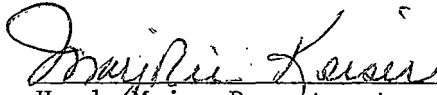
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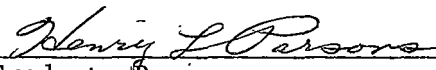
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ABSTRACT

The purpose of this study was to discover what attitudes rural Montanans have toward birth control and to correlate this finding with their attitudes toward marital roles, marital communication and their knowledge of sex and methods of birth control. The random sample included a total of 332 men and women 18 years or older, who lived in cities, towns, or on farms in 12 randomly selected counties in Montana. A survey booklet was used to collect the data. Five instruments were used to elicit information for this study: an instrument that collected personal background information, a scale developed by Wang and Thurstone to obtain attitudes toward birth control, an inventory designed by the investigator to gather family planning and sex knowledge, the Marriage Role Expectation Inventory developed by Marie S. Dunn, and an attitude scale of marital communication created by Millard J. Bienvenu, Sr. Several significant relationships were found to exist, some of which were: as age went up, attitudes toward birth control were less favorable; the less one attended church, the less favorable were his attitudes toward birth control; as the number of children a family had increased, attitudes toward birth control became less favorable; the less education one had the less favorable were his attitudes toward birth control; as education increased, sex knowledge increased; and marital communication increased as knowledge of birth control increased. In addition the mean scores for this sample indicated that: their attitudes were quite favorable toward birth control, their attitudes toward marital roles were traditional, their level of marital communication was relatively high, and they answered more than half of the questions on the sex inventory correctly.

CHAPTER I

INTRODUCTION

Background Information

Metropolitan areas and the urban poor have been the focal point of most family life research. As a result there has been little emphasis on studying the rural family and virtually no research has been done on the life styles of rural Montanans. In the rural west a vast majority of the research funded by state agricultural experiment stations is aimed at crop and livestock production.

It was therefore an especially important step when in June of 1972 the Montana Agriculture Experiment Station at Montana State University, Bozeman, Montana approved a research proposal submitted by Dr. Robert W. Lind, titled "Rural Family Life Styles in Montana." The purpose of the study was to learn the attitudes, practices, and degree of knowledge of rural Montanans in various areas pertaining to family life styles.

The total survey instrument, besides providing general background information on the subjects, dealt with housing and homemaking, marital roles, marital communication, family planning and sex knowledge, child rearing, nutrition knowledge, consumer knowledge, education, social life and recreation.

Purpose

The present study focuses on only a small portion of the total study. The specific purpose addressed by this research is to determine

the influence of certain personal and demographic variables on four major indices: attitudes toward birth control, marital roles, marital communication, and sex knowledge.

Specifically the variables are: age, occupation, number of children, educational attainment, income, marital status, and the church attendance of a rural Montana sample.

In addition to the purpose mentioned above, any inter-relationships that exist between attitudes toward birth control, marital roles, marital communication, and general sex knowledge will be determined.

Justifications

Very often when agencies and people in the helping professions are planning programs for the people they will be serving they fail to do research about them. Instead, they decide what is best for the consumers, what they need, and what they should know. An effort must be made to determine who the consumers really are, their attitudes, practices, and knowledge. Without this information the programs planned would only be guessing at the needs of the people.

Knowledge derived on birth control could be utilized in many ways. For example, the State Department of Health, the public health departments, and the family planning clinics would be aided by this information in designing programs of activity, education, and information which will meet the real needs of Montanans and enhance their lives.

The information could also be used by schools, extension agents, churches, youth leaders and any other interested community organizations.

The U. S. Department of Health, Education and Welfare has made a request for information that would provide direction and guidance to administrators in the field of family planning at the national, regional, state, and local levels (U. S. Government Printing Office, 1971). This study could provide such information.

Finally, this research is addressed to a major goal established for home economics research by 82 professionals in 1970. This group of professionals included representatives from 39 colleges and universities, business and industry, social services and welfare, consumer institutes, the Cooperative State Research Service and the Agricultural Research Service divisions of the U. S. Department of Agriculture, the U. S. Department of Health, Education and Welfare, regional Agricultural Experiment Station Directors, the Experiment Station Committee on Organization and Policy, the Extension Committee on Policy, the American Home Economics Association, the Home Economics Commission of the National Association of State Universities and Land Grant Colleges, and the National Council of Administrators of Home Economics. Other college home economics administrators and researchers also contributed by outlining goals, examining resources, and establishing priorities of needed research in the area of home economics.

The following research goals were formulated:

- Goal I. IMPROVE THE CONDITIONS CONTRIBUTING TO MAN'S PSYCHOLOGICAL AND SOCIAL DEVELOPMENT
- Goal II. IMPROVE THE CONDITIONS CONTRIBUTING TO MAN'S PHYSIOLOGICAL HEALTH AND DEVELOPMENT
- Goal III. IMPROVE THE PHYSICAL COMPONENTS OF MAN'S NEAR ENVIRONMENT
- Goal IV. IMPROVE CONSUMER COMPETENCE AND FAMILY RESOURCE USE
- Goal V. IMPROVE THE QUALITY AND AVAILABILITY OF COMMUNITY SERVICES WHICH ENRICH FAMILY LIFE

This research is primarily concerned with Goal I, Research Problem Area 7--Family Planning, although the research makes some contributions to all give of the goals (Schlater, 1970: 15-26).

CHAPTER II

REVIEW OF LITERATURE

The Meaning of Family Planning

Family planning is often misconstrued by the general public as meaning just reduction of family size. This is the goal in some cases, but the essential idea of family planning is that it is a health measure that enables a couple to have the number of children they want, and at the time they want them. It is parenthood by choice rather than by chance and it is completely voluntary. The ultimate goal is the elimination of all unwanted births.

History of Family Planning

According to Norman Himes, who has recorded the history of contraception, limiting the number of children that are born is not a modern idea (Westoff and Westoff, 1971). Himes found that abortion and infanticide were the main means of limiting births in primitive societies.

Other primitive methods of limiting births, many of which are still in use, follow: in East Africa women placed certain roots under their heads at night or wore a magic cord tied tightly around their stomach; in North Africa some women used herbs and walked over a grave and ate castor beans; in Central Africa women plugged their vaginas with rags or grass; in North America, Cherokee women chewed and swallowed the musquash root for four consecutive days; the women of Guiana douched with a solution of lemon juice and juice from the husks of the mahogany

nut; the women Bush Negroes of Dutch Guiana inserted an okra-like seed pod about five inches long with the end snipped off into their vaginas; in Australia the primitive natives drank herbs and roots mixed with spider's eggs and snakeskins; the Australian aborigines made an incision above the penis so that during intercourse the semen came out this incision rather than entering the female's vagina (Westoff et. al., 1971).

Himes points out that the oldest written medical prescriptions mentioning contraception are from the Petri Papyrus dating back to 1850 B. C. Crocodile dung mixed with a pastelike substance and put into the vagina was advised. In 1500 B. C. a tampon covered with honey and gum arabic was prescribed (Westoff et al., 1971).

Even Greek philosophers, Aristotle and Plato, were concerned about limiting births. Plato believed that the age during which a couple could have children should be set by law (Westoff et al., 1971).

In addition superstition and physical action, such as jumping and sneezing were used. A method mentioned in the Old Testament and still used today is withdrawal (Jones, Shainberg, and Byer, 1969). The early Egyptians used protectors similar to the present day condom. The ancient desert travelers in Africa used a crude form of the IUD, inserting stones into their camels' uterus so the animals could not conceive on their long journeys. Casanova provided his women with used lemon halves to use as diaphragms (Wood, 1971).

English writers B. E. Finch and Hugh Green noted another ancient technique suggested to women by the first Chinese philosophers who urged an attitude of complete passivity during intercourse, because to enjoy intercourse was satanical in origin and often resulted in pregnancy (Finch and Green, 1971).

In 1820, an Englishman named Francis Place, and father of 15 children urged women to place a piece of sponge with a string attached into the vagina before intercourse. He is credited with being the founder of the English birth control movement (Westoff et al., 1971).

The American birth control movement followed the English movement in 1828. It was begun by two doctors, Robert Dale Owen and Charles Knowlton, author of The Fruits of Philosophy which was the first book published in the United States dealing with contraception. Probably the most famous crusader for birth control in America was Margaret Sanger, who devoted herself to teaching women about contraception so they could escape the burden of unwanted pregnancies. In 1914, The Voluntary Parenthood League, today known as Planned Parenthood/World Population, was founded by a group of feminists led by Margaret Sanger (Westoff et al., 1971).

The Necessity for Family Planning

Margaret Sanger believed that, "The first right of every child is to be wanted, to be desired, to be planned with an intensity of love that gives it its title to being (Planned Parenthood of Missoula, Inc.,

1971)." According to Dr. Karl Menninger, the world famous psychiatrist, "Nothing is more tragic, more fateful in its ultimate consequences, than the realization by a child that he was unwanted (Wood, 1971: 141)." Princeton University population expert, Dr. Charles F. Westoff et al., reported that 35 to 45 percent of the population growth in the United States is accounted for by unwanted births (Wood, 1971).

The Westoffs in their book, From Now To Zero, state that,

Most of the unwanted children are probably loved and happily raised; however, many of the children may grow up suffering the consequences of their parents' inability to control pregnancies. At one possible extreme, there are the thousands of children in pitifully battered condition in children's wards of local hospitals, having received broken bones and beatings from mothers and fathers who cannot cope with them. Other children no doubt, bear the strain of overcrowded living conditions and lack of personal care and attention; many may add to the emotional tension in a family that did not plan for them or want them; many may inadvertantly contribute to the breakup of marriages and must thus be raised without fathers in a matriarchal world of overwork, fatigue and depression. Many such children later on surely turn to harmful drugs, become mentally ill or criminally aggressive because of the atmosphere they innocently enter (Westoff et al., 1971: 295).

Dr. E. James Lieberman, a psychiatrist at the Center for Studies of Child and Family Mental Health at the National Institute of Mental Health has done research on the effect family size has on children. He concluded that there are biological differences between youngsters from small and large families. Children in smaller families are brighter, bigger and taller, and more creative than children from large families. In addition children from large families very often do

not have their emotional needs met, because their mother is too busy or tired; very often older brothers and sisters are given the responsibilities of caring for the younger children (Westoff et al., 1971).

In a number of studies reviewed by Edward Pohlman it was suggested that a developing fetus may be affected by a mother's negative feelings towards the developing baby. One study suggests that a baby born to a mother that is unhappy about the birth is more likely to be hyperactive and irritable and later have personal, social and intellectual problems. A study of 103 delinquents supported these findings. In 84 percent of the cases the mother of the delinquent admitted her child had been unwanted. An important piece of research completed in this area was done by Professors Hans Forssman and Inga Thuwe in Sweden. One hundred and twenty children born to women who had applied for a legal abortion, but were denied, were observed for 21 years. The researchers compared these children to 120 who were born wanted. Sixty percent of the unwanted children grew up under undesirable circumstances, compared to 28 percent for the control group. More of the unwanted children had received psychiatric care, more had records of delinquency, more had received public assistance, more had been declared unfit for military service, fewer had attended college, and more had married and had children at an earlier age (Westoff et al., 1971).

Research on Rural Attitudes, Practices, and Knowledge

As stated in the introduction of this paper very little research

has been done on the attitudes of rural people in the western United States and virtually no research has been done with rural Montanans and their attitudes. During the investigator's review of literature a 1967 masters thesis in nursing titled "A Survey of Knowledge And Use of Family Planning Methods In A Selected Group of Mothers" by Mary Ingalls Brown was found. Her sample included mothers living in married student housing in Bozeman, Montana. Mrs. Brown found that these mothers learned more about contraception before marriage than after marriage; and the more education the mother had, the more methods she knew. The study also showed that age and education of the mother and number of children did not affect the use of family planning.

Editor Donald Bogue, Professor of Sociology at the University of Chicago said in his book that family planning research is just beginning. The family planning research presented in his book was performed by his graduate students at the Community and Family Study Center. No research, however, was done with the rural populations in the United States or in the areas of interest related to in this paper (Bogue, 1970). A book edited by Clyde Kiser on family planning research also failed to provide information on family planning in the United States' rural areas (1962).

In the spring of 1955 the Survey Research Center of the University of Michigan and the Scripps Foundation for Research in Population Problems, Miami University, Oxford, Ohio conducted the first nationwide

effort to find out about family planning attitudes and practices. In the summer of 1960 the same research centers conducted a second survey. The results of this second study are the subject of Pascal Whelpton, Arthur Campbell, and John Patterson's book Fertility and Family Planning in the United States (1966).

According to Whelpton, Campbell and Patterson rural couples have been having more children than urban couples in the United States ever since the Colonial period. This existed of economic necessity because children were a good source of labor. The 1960 study showed that the rural farm wives wanted as well as expected more children than the other wives. As a group, rural wives said they wanted an average of 3.1-3.4 children; whereas, rural husbands reported they wanted an average of 3.1-3.2 children. Wives who lived in rural areas but not on farms anticipated having the same size families as wives who lived in cities and towns. Data also showed that wives who had lived on farms at some time since they were first married but were now living in a city or town, expected to have almost as many children as women living on farms.

The studies found that education and religion are two socio-economic characteristics that are strongly related to attitudes toward birth control. It was found that the better educated had more favorable attitudes toward birth control than the less educated. Ninety-three percent of the college educated wives had used or expected to use

contraception in comparison to 72 percent for those with a grade-school education. Also college educated wives used the more effective methods of contraception sooner and more effectively in married life than grade-school wives. The proportion of wives who were against any form of fertility control was one percent for those with a high school or college education and eight percent for those with a grade-school education.

David Van Vleck in his book The Crucial Generation stated that the rate of unwanted births is highest among those that were less educated (1971). Whelpton et al., (1966) said that a higher proportion of less educated couples live in rural areas. It would therefore appear that rural couples have more unwanted children, if what Whelpton et al. and Van Vleck state is true.

Charles and Leslie Westoff were hopeful that the rural areas would become more accepting of birth control as people with more education replaced the older women (1971). Findings from Whelpton, Campbell, and Patterson's book agree with this; he found more of the young and recently married couples using contraception (1966).

As for religion, Whelpton and associates wrote that Protestants had more favorable attitudes toward birth control than Catholics and that the Jewish had even more favorable attitudes towards family planning than Protestants. Among Catholics, it was found that the greater a member's participation in church attendance and the sacraments

the more unfavorable were his attitudes toward birth control. Whelpton et al. believed that poor education was more responsible for extreme feelings against contraception than was religion (1966).

Husband's occupation was found to be directly related to number of children. In the study Whelpton, Campbell, and Patterson related it was found that the wives of farmers and farm laborers expected 13 percent more births than the wives of husbands in other occupations.

Westoff and Westoff found that people of all incomes want a similar number of children but the poorer people expect more. Whelpton et al. showed that the higher a husband's income the sooner contraception was used in the couple's marriage and also that it was used longer before the first birth and less children were born.

In an article titled "Family Size and Sex Role Stereotypes" results indicated that women who accept more masculine roles for themselves have fewer children than women who see themselves as possessing socially feminine or the traditional female roles (Clarkson, Vogel, Broverman, and Rosenkrantz, 1971). Whelpton and co-authors reported that wives who worked because they wanted to expected fewer children than those who worked out of necessity. Wood (1971) suggested that our society's basic attitudes toward parenthood and reproduction need to change. This change would enable women to work if that is what they choose without feeling a sense of disapproval from family, friends, and the rest of society. President Nixon's 24 member Commission on

Population Growth agreed. They stated that it would be "particularly helpful if marriage, childbearing, and childrearing could come to be viewed as more deliberate and serious commitments rather than as traditional almost compulsory, behavior (Lincoln, 1972: 18)." Westoff and Westoff believe that today's young people, now of marriageable age, will have fewer children because of inflation and increased competition for good jobs.

The review of literature revealed very little in the way of research findings that deal with the relationship between marital communication and birth control. Yahraes stated that couples with birth control knowledge are relieved of much worry and tension over the fear of an unwanted child (1948). Westoff and Westoff said that birth control has created happier marriages and more satisfying sexual enjoyment because the worry over pregnancy doesn't exist if effective methods of contraception are used (1971). Lawrence Lader (1955) believed that the impact of birth control on family life and the relations between the husband and wife is extremely crucial. Kenneth Jones expressed that the number of children a couple had and when they had them would have a great effect on marriage happiness (1969).

Two interesting findings regarding methods of birth control were cited by Whelpton, Campbell, and Patterson (1966) and Westoff and Westoff (1971). Whelpton and associates reported that sterilization was more commonly practiced in the rural areas and among the less

educated than by educated people living in cities of 50,000 or more. The reasons for this are not known; however, it could be due to differences in medical practice or to different tendencies of rural and city couples or a difference in reporting a sterilization. Westoff and Westoff stated that the use of the contraceptive pill is greatest for Westerners. Their explanation was Westerners are less traditional and more willing to try new things.

According to a 1971 report by the Department of Health, Education and Welfare (HEW), rural couples need and want family planning. However, lack of access to family planning services because of great distances has caused them to use less effective, nonmedical methods, often resulting in method failures. HEW strongly recommended expansion of services to these people (U. S. Government Printing Office, 1971). In a pamphlet distributed by Planned Parenthood of Missoula, Inc. it was shown that only one in eight of the 15,800 medically indigent Montana women in need of family planning were served (Planned Parenthood of Missoula, Inc., 1971). However, Whelpton et al. found that the use of contraception has increased even among rural couples and that their birth rate no longer differs significantly from that for couples in towns and cities (1971).

CHAPTER III

METHODOLOGY

Sample

Definition of Sample

The sample, for this study, is rural Montanans. By definition all of Montana is rural, so the potential sample included all men and women 18 years or older, who live in cities, towns, or on farms, regardless of occupation.

Selection of Sample

A stratified random sampling process was used to obtain the population of rural Montanans. A map of Montana, which the Cooperative Extension Service at Montana State University had divided into six areas, was used to subdivide the state. Two counties from each of the six districts were randomly drawn from a hat. When completed a total of twelve counties were selected: Fergus, Musselshell, Powder River, McCone, Roosevelt, Phillips, Blaine, Teton, Madison, Meagher, Flathead, and Sanders.

The names of all the towns and cities within each of the twelve counties were obtained. Towns and cities were randomly chosen from each county, until enough to obtain a survey population of at least 60 from each county was reached.

The names of possible participants were gathered from the telephone directories of each of the towns and cities chosen. Twenty

numbers were put in a hat and the number four was drawn, meaning that every fourth name listed would be contacted to participate.

By random process no counties were drawn that had major cities, and in the counties drawn no larger towns were drawn first, except for Roundup, Montana, population 2116. This makes the sample most decidedly rural in the strongest sense of the term.

Communication With Sample

A letter was sent to all potential participants. It explained who the survey was sponsored by, the areas of knowledge that would be investigated, the approximate time required to complete the survey, the importance of an individual's participation, the number of people asked to participate, and how the results would be used. If they or any members of their family, over 18 years of age, agreed to participate in this study, they were asked to send their names on the enclosed acceptance sheet (see Appendix A).

Another motivational technique used to encourage participation was a write-up that appeared in all the state newspapers. This article appeared before the letters were sent to the potential participants and helped to familiarize the people with the study. A total of 720 families were contacted, 60 families from each of the 12 counties.

Instrument

Purpose of Instrument

The instrument was designed to elicit the attitudes rural Montanans have toward birth control, to determine their sexual knowledge, and to determine their knowledge of contraception.

Birth Control Attitude Scale

The 20-item scale developed by Wang and Thurstone was used. The items question the value of birth control on both moral and pragmatic bases. The investigator used this scale because it elicited the information desired, and the reliability (ranging from .62 to .93) and the validity were established (Shaw and Wright, 1967).

Family Planning and Sex Knowledge

The questions pertaining to this area were designed after a review of existing instruments dealing with sexual knowledge and family planning was made. The questions were pretested by several experts in the field.

This portion of the instrument included 40 questions. Only questions 16-35, however, were used by the investigator in the final analysis of this material. Questions 1-15 were omitted because a significant number of individuals did not answer these questions pertaining to personal family planning practices. The 20 questions

dealt with contraceptive methods, the male and female reproductive systems, and venereal disease.

Additional Instruments Used

As explained in the introduction, the instrument on birth control family planning, and sexual knowledge was only one part of a larger study. Data from three other parts of the survey were used: the personal background information, the attitude scale of marital roles, and the attitude scale on marital communication.

Personal background information. The information the investigator was interested in was: sex, age, marital status, total number of children, educational attainment, occupation of chief wage-earner, income, and church attendance. These personal variables were chosen because it was felt that they would be the most useful means of determining the basis for any differences that might exist with respect to the four major indices in the study.

Attitude scale of marital roles. The Marriage Role Expectation Inventory used in this study was developed by Marie S. Dunn. The validity differentiated at the .05 level of significance, between high scoring and low scoring respondents. Also the reliability (.95) was established. The scale measured equalitarian versus authoritarian marital roles (Family Life Publications, Inc., 1963).

Attitude scale on marital communication. A marital communication inventory developed by Millard J. Bienvenu, Sr. was used. The instrument showed the level of communication between spouses. The

reliability (.93) and validity (.01 level) were acceptable (Family Life Publications, Inc., 1969).

Procedures

Coding

After the data were gathered the survey booklets were coded for transfer to electronic data processing equipment at the Montana State University Computer Center, where the statistical analyses were done.

Scoring

Birth control attitude scale. This scale was scored in the following manner: a positive response to a question on birth control was scored as one, a question that was answered undecided was scored as two, and a negative response to a question on birth control was scored as three. The 20 score numbers were totaled and a score from 20-60 was recorded for that individual. A high score constituted an anti-birth control attitude. A low score showed a favorable attitude towards birth control.

Family planning and sex knowledge. One item (No. 16) dealt with methods of contraception. The participants listed the number with which they were familiar. The coded score for this item was the number of methods named.

There were 19 items (Nos. 17-35) which had one correct answer. A correct answer was scored as one, an incorrect answer was scored

as zero. The total of the numbers was the score. This permitted a range from 0-19 for each individual. A higher score equaled a greater knowledge of family planning and sexual matters.

Attitude scale of marital roles. The 20 items in this scale were scored as one if the question was answered in a nontraditional, equalitarian way; two if the participant was undecided; and three if the question was answered in a traditional, authoritarian manner. The numbers were totaled and a score from 20-60 was recorded. A high score designated a traditional attitude about marital roles and a low score an equalitarian attitude.

Attitude scale on marital communication. A question was scored as one when the participant responded that communication with spouse was not high, as a two when communication about a particular topic occurred only sometimes, and as a three when communication between spouses was high. The 20 numbers were totaled and the participant received a score between 20-60. A higher score showed better communication between spouses than a lower one.

Statistical Analyses

There were a total of 20 variables considered: sex, age, occupation of chief wage earner, engaged, times engaged, married, times married, divorced, times divorced, widowed, times widowed, income, frequency of church attendance, number of children, level of education, methods of birth control, total on attitudes toward birth control,

total on attitudes of marital roles, total of attitudes on marital communication, and total knowledge of physiology and reproduction.

The following statistical analyses were used: frequency distributions and crosstabulations were done on the 20 variables; the Pearson product-moment correlation coefficients and the analysis of variance correlated the personal background information with the total scores on the birth control attitude scale, the marital roles scale, the marital communication scale, and the total on the sex knowledge inventory; the Duncan multiple range test was performed on the significant F values derived from the analysis of variance tests; and a correlation matrix correlated the total scores on the three attitude scales and the sex knowledge inventory.

Level of Significance

The .05 level of significance was used throughout the study as the criterion for identifying significant relationships.

CHAPTER IV

RESULTS AND DISCUSSION

Description of Sample

A letter was sent to 720 rural Montana families living in cities, towns, or on farms in the 12 randomly selected counties in Montana. The letter invited the participation of all family members 18 years or older regardless of occupation. Any individuals who wished to participate were asked to return the acceptance sheet enclosed in the letter (see Appendix A).

Replies were received from 248 families confirming their desire to participate, a total of 479 individuals. Forty-two people replied and expressed that they did not want to participate for a variety of reasons. Thirty-three letters were returned by the U. S. Post Office undelivered for several reasons.

Survey booklets were sent to the 479 people who agreed to cooperate. Three hundred and thirty-two booklets were completed and returned, a total of 69.3 percent.

After a reasonable length of time two follow-up letters were sent out, as reminders, to the individuals who agreed to participate but had not returned the booklets. The letters re-emphasized the purpose of the study, the importance of their participation, and how the information gathered would be used. These letters were very helpful and added 15-20 percent to the return (see Appendix B).

Sex

More females than males participated in this study; 60 percent (198) of the respondents were females and 40 percent (134) were males.

Age

An older population made up the sample. The mode occurred in the 51-65 age group. The median was found in the 36-65 age group. The under 21 and the 22-28 age groups combined accounted for only 18 percent of the sample.

Occupation

Four percent (14) of the participants were professionals. This group included engineers, doctors, lawyers, and biologists, etc. The largest occupational group represented was the farm and ranch group 141 (43%). Anyone who owned, managed, or worked on a farm or ranch was included in this group. The commercial business group was comprised of owners and managers of small businesses. There were less people in social services (postmasters, highway patrolmen, Federal officers, etc.) than any other group 8, or (2%). The white collar group included clerks, typists, telephone technicians, and the like. The laborers were truckdrivers, electricians, loggers, etc. The last group, 33 retired and disabled persons comprised 10 percent of the sample.

Marital Status

Ninety-three percent of the sample were or had been married, eight percent were or had been divorced, and nine percent were or had been widowed.

Income

The mean, median, and mode for income all occurred in the \$10,000-14,999 income bracket. Fourteen percent of the sample (45) had an income over \$25,000. Eight percent of the population (26) had an income under \$3,000.

Church Attendance

The largest percentage of people attended church three or more times per month (38%). The smallest percentage never attended church (14%).

Number of Children

Twenty-four percent of the sample had families with two children. Two families had nine children. The mean was three children.

Education

The mean level of education for this sample was college attendance, without a college degree. The mode was a high school education.

Examination of Data by Pearson Product-Moment
Correlation Coefficients

Total scores on the birth control attitude scale, the marital roles scale, the marital communication scale, and the total on the sexual knowledge inventory were correlated with the personal background information by means of the Pearson Product-Moment Correlation Coefficients. The .05 level of significance was used throughout the study as the criterion for identifying significant relationships.

TABLE 1
Pearson Product-Moment Correlation Coefficients

Personal Variables	Level of Significance On The Attitude And Inventory Scales			
	Birth Control	Marital Roles	Marital Communication	Sex Knowledge
Sex	N.S.	N.S.	N.S.	N.S.
Age	+ .021	+ .042	+ .001	- .001
Occupation	N.S.	N.S.	+ .018	- .001
Married	N.S.	+ .018	+ .001	+ .001
Times Married	N.S.	N.S.	+ .001	+ .041
Divorced	N.S.	N.S.	N.S.	N.S.
Times Divorced	N.S.	N.S.	N.S.	N.S.
Widowed	+ .046	N.S.	- .001	N.S.
Times Widowed	+ .047	N.S.	N.S.	-.021
Income	N.S.	N.S.	- .001	N.S.
Church Attendance	- .041	N.S.	N.S.	N.S.
Number of Children	+ .001	+ .003	+ .001	+ .011
Education	- .004	- .038	N.S.	+ .001
Methods of Birth Control	- .001	N.S.	+ .026	+ .001

The discussion of results that follows is based upon the significant findings shown in Table 1.

Birth Control Attitudes

Seven variables were found to exert a significant influence on a person's attitudes toward birth control. On this scale the possible range of scores was from 20 to 60, with the higher scores indicating attitudes opposing birth control. The mean score for this sample was 25.76, which indicated a favorable attitude toward birth control.

Age. Total scores on the birth control attitude scale increased as age increased, indicating that younger people's attitudes toward birth control are more favorable than those of older people, as one would normally expect to find. When the older people were in their childbearing years many were living on farms and children were regarded as an economic asset. Many hands were needed for the chores and farm work. Overpopulation then was not a concern, for land and resources were available in abundance to all in the rural areas of Montana.

Widowed and times widowed. Widowhood exerted an influence on birth control attitudes. As one might expect, widowed persons held attitudes less favorable toward birth control. This is no doubt partly a function of age, since widowhood occurs much more among the older segment of the population, who do have more negative views on birth control.

Church attendance. It is quite startling to note that unfavorable attitudes toward birth control were related to non-attendance at church. With the well-known opposition to birth control by certain religious groups, one would expect to find more liberal attitudes on the part of those outside the church. The finding is difficult to explain. One reason might be that the spirit of conservatism is strong enough in the population sampled that it over-rides the influence of religion.

Number of children. Attitudes toward birth control were significantly influenced by the number of children in the family. As the size of family increased, scores went up on the birth control attitude scale. This would seem to indicate that people had larger families because they wanted them, and they did not favor the idea of birth control.

Education. The more education an individual had the more favorable were his attitudes toward birth control. People with less education saw no need for birth control and thought it should be prohibited; they did not think it was a legitimate health measure; they thought that it was injurious physically, mentally, and morally; they felt that it was equivalent to murder; they thought that people should not be free to choose the number of children they have or when they have them; and that birth control was an expression of individual selfishness.

The less education one has, the less reading one does, and thus the less awareness the individual has about current problems. The

investigator doubts that the less educated do any extensive traveling to large cities or underdeveloped countries where they could see the tragedy of overpopulation.

The less educated felt that birth control was an expression of individual selfishness. The evidence suggests the opposite is true.

Finally, the income for less educated people is normally minimal. Today it costs a great deal to raise a child and provide for its many years of education and other needs. These are serious considerations that need to be faced by all people.

Methods of birth control. Individuals unable to name the methods of contraception presently available had an unfavorable attitude toward birth control. Their attitudes opposing birth control could explain their lack of knowledge of contraceptive methods. Possibly if they had a greater awareness of the current methods of contraception their attitudes toward birth control would be more favorable or vice versa.

Marital Role Attitudes

Four variables were found to exert a significant influence on a person's attitudes toward marital roles. The range of scores on this scale was 20 to 60, with higher scores indicating traditional, authoritarian attitudes. The mean score for this attitude scale was 29.99. This sample of rural Montanans had traditional attitudes toward marital roles.

Age. As age went up, total scores on the marital role attitude scale went up. This indicated the older people had a traditional attitude about marital roles--women had their roles, men had theirs. Women were brought up to believe that their place was in the home, to be responsible for housework and the care of the children. Men were expected to provide for the family and to make the major decisions affecting the family as a whole; for example, where they would live, or how the money would be spent.

Married. Those who were married had a more traditional attitude toward marital roles than those not married; for example, the married believed that women belong at home rather than in a career, that men should be boss, that men should not have to help with the housework, that the husband and wife should not have an equal voice in making decisions.

Number of children. As the number of children increased, the score on the attitude scale of marital roles increased, indicating that couples with a larger number of children had more traditional attitudes about marital roles. This finding would be expected. Couples with traditional attitudes toward marital roles believe the woman's place is in the home and it is her duty to bear and take care of their children.

Education. The less education a couple had the more traditional were their attitudes toward marital roles. This could be due to a lack of exposure to new ideas regarding the changing attitudes toward

marital roles. Today the more educated couples are discovering a more equalitarian approach to male-female roles in marriage. More women working outside the home could be responsible for this in part.

Marital Communication Attitudes

Six of the personal variables influenced the attitudes individuals had toward marital communication. A mean score of 46.01 on a range of 20-60 showed that this sample's marital communication was well above mid-range.

Age. Marital communication increased as age increased. This may be due to the fact that most older people have been married longer and communication may become easier the longer a couple is married. It may mean that as one's age goes up, one's willingness to listen and communicate ideas, feelings, and needs is improved. Perhaps communication is confused with familiarity; the longer a couple has been married the better they know each other and know what to expect. Or possibly our yesterday's marriages were better than today's.

Occupation. People in the more professional occupations had better marital communication.

Times married. As times married increased, marital communication increased. Perhaps individuals learn from previous marriages what is necessary in the area of communication to make a marriage successful; for example, how to work out their disagreements constructively.

Income. As a husband's income went down, marital communication between spouses went up. Men in higher income positions often must spend more time at their work and less time with their spouse; this could lead to poorer communication unless both are in agreement over the hours spent at one's occupation. The man that made less might have less pressure and more free time, possibly making for a better relationship with his spouse. This finding appears to be contradictory to the significant relationship between occupation and marital communication which said that as one's occupation became more professional marital communication became better. Normally the more professional occupations receive the highest income, thus it would seem that the higher the income the better the marital communication. Apparently there is some over-riding third factor. This third factor could possibly be the amount of time a couple spends together.

Number of children. The more children a couple had the better their marital communication was. A possible explanation for this finding is that with more children better communication is a necessity to coordinate the family and its activities, and this can be done most effectively if the couple discussed the manner in which the family income should be spent, if work, interests, feelings, and attitudes are shared, and if spouses offer cooperation, encouragement, and emotional support. Another explanation could be that the two families with nine children and the four families with eight children were

responsible for this unexpected finding. The small number of eight and nine child families could distort the finding, and such a small number has questionable statistical validity.

Methods of birth control. As knowledge of contraceptive methods increased, marital communication increased. One reason for marital communication to be high if knowledge of contraceptive methods was high is because one of the most important contributing factors to good marital communication is agreement on the type of contraceptive method to be used by the couple. This agreement can be achieved best if the couple is aware of all the possible types of contraception available to them and the advantages and disadvantages of each method.

Sex Knowledge Inventory

Eight variables were found to significantly influence a person's knowledge of sex. A score of nine was mid-range for this inventory. This sample answered more than half of the questions on the sex inventory correctly.

Age. Knowledge on the sex inventory scale was greater for younger people than for older people. The younger participants were more accurate in their replies to the questions on sex and physiology. There could be many reasons for this: today sex education is taught in some schools, more written literature in the area exists, and television programs and movies deal more liberally with sex.

Occupation. It was shown that the less professional one's occupation the greater was his sex knowledge. It would seem that the opposite should be true. The more professional one's occupation, the more education one normally has and the higher his sex knowledge. The disproportionate number of nonprofessionals may have caused this curious result. Of the 332 participants only 14 were professionals.

Married and times married. Those who were married scored higher on the sex knowledge inventory than those who were single. This is probably due to the fact that there is a greater motivation to obtain knowledge about human reproduction and family planning when one is married, than when one is single and not sexually active.

In addition, as the number of times one was married increased so was sex knowledge increased. Sexual involvement is an important aspect of a marital relationship and it often happens that it is most intense during the early part of the new relationship. Because of this interest there may be a need or desire to read and learn all one can in the area to accommodate oneself and one's spouse in the marriage.

Times widowed. The fewer times a person was widowed, the more sex knowledge this person possessed. In widowhood there is a decline or cessation of sex and therefore a decline of sex knowledge, assuming knowledge is related to use.

Number of children. Couples who had more children gained more knowledge about the male and the female reproductive systems, intercourse,

menstruation, and pregnancy either by chance, by interest, or out of necessity.

Education. As education increased, sex knowledge increased. Some contributing factors to this relationship might be an individual's interest in books, including those in the area of human reproduction and human sexuality, and a curious mind that seeks answers to questions unknown to the person in the area of sex.

Methods of birth control. Learning about the different methods of birth control is an important part of sex knowledge and as sex knowledge increases, through books, sex education classes, or other sources, it seems correct that one's knowledge of contraceptive methods should also increase.

Examination of Data by Correlation Matrix

A correlation matrix was done with the total scores on the three attitude scales and the sex knowledge inventory.

Three significant relationships occurred. There was a positive relationship at the .01 level of significance between the total scores on the marital roles attitude scale and the birth control attitude scale. This meant that the more traditional a couple's view of marital roles, the more unfavorable were their attitudes toward birth control. People with traditional marital attitudes believed that women should have as many children as they are able to have and that it is the

women's duty to care for them; with this in mind an antibirth control attitude would be expected.

TABLE 2

Correlation Matrix

	Birth Control	Marital Roles	Marital Communication	Sex Knowledge
Birth Control	-			
Marital Roles	+.01	-		
Marital Communication	N.S.	+.05	-	
Sex Knowledge	N.S.	N.S.	+.01	-

The second significant relationship occurred between the total scores on the marital communication attitude scale and the marital roles attitude scale. This positive relationship showed that the better a couple's marital communication was the more traditional were their attitudes toward marital roles. A reason for this high quality of communication could be that traditional roles are familiar, something that most people have been brought up with. Parents and society

have done a thorough job in differentiating what a man's roles are and what a woman's roles are in a marriage. To have a marriage where equalitarianism is stressed is new and no guidelines have been established, thus controversy and poor communication could result over the unknown.

The third positive relationship was between the total scores on the sex knowledge inventory and the marital communication attitude scale. This meant that as sex knowledge increased, marital communication increased. The sexual relationship one has with his spouse is a very important aspect of marriage. The better this relationship is the better the communication will be. However, both are dependent on the amount of sexual knowledge one has; the greater a couple's understanding of the reproductive systems, and the emotional and psychological aspects of sexuality, the better their communication will be.

Examination of Data by Duncan Multiple Range Test

The Duncan multiple range test is particularly useful as an adjunct to the analysis of variance test. An analysis of variance may yield a significant F value, indicating that a significant difference of means exists among the means being compared. However, it requires the Duncan multiple range test to indicate which mean or means in a group causes the significant difference. Appendix E contains a series of tables showing the results of the Duncan multiple range tests.

In general it can be said that differences in scores on the birth control attitude scale were caused by the negative attitudes of the oldest segment of the sample, which naturally contained the retired, disabled, and widowed. Also affecting birth control scores were those with less than eighth grade education, and those with families of seven or more children.

Marital communication scores were influenced adversely by the group having no children, and positively by those who were most knowledgeable about birth control methods.

Scores on the sex knowledge inventory were significantly lower for those who had no more than an eighth grade education, and for those who could name no more than two methods of contraception. Scoring significantly higher on sex knowledge were those who were married, and those who held doctoral degrees.

Summary

Sex, divorced, and times divorced were not significant variables on any of the scores. Age and number of children were the only two variables that significantly affected all four of the scales. Occupation was a significant variable on the marital communication attitude scale and the sex knowledge inventory. Marriage influenced attitudes toward marital roles and sex knowledge; times married influenced marital communication and sex knowledge. Widowhood significantly

influenced the attitudes one had on birth control and general sex knowledge. Income was a significant variable on only one attitude scale, the marital communication scale. Church attendance had an influence on only the birth control attitude scale. Education was a variable that affected one's attitudes toward birth control and marital roles and affected one's amount of knowledge in the area of sex. Finally, methods of birth control known was a significant variable on attitudes toward birth control and marital communication and on the sex knowledge inventory.

Three inter-relationships were found to exist between the scores on the three attitude scales and the one inventory scale: a positive relationship between the marital roles attitude scale and the birth control attitude scale, a positive relationship between the marital communication attitude scale and the marital roles attitude scale, and a positive relationship between the sex knowledge inventory and the marital communication attitude scale.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

The purpose of this study was to learn the attitudes rural Montanans have toward birth control and to correlate this finding with their attitudes toward marital roles, marital communication and their knowledge of sex and methods of birth control. The random sample included a total of 332 men and women 18 years or older, who lived in cities, towns, or on farms in 12 randomly selected counties in Montana.

The data were collected during the summer of 1973 by a survey booklet sent through the mail. Five instruments were used to elicit information for this study: an instrument that collected personal background information, a scale developed by Wang and Thurstone to obtain attitudes toward birth control, an inventory designed by the investigator to gather family planning and sex knowledge, the Marriage Role Expectation Inventory developed by Marie S. Dunn, and an attitude scale of marital communication created by Millard J. Bienvenu, Sr. After the data were gathered the survey booklets were coded for transfer to electronic data processing equipment at the Montana State University Computer Center.

Conclusions

Several significant relationships were found to exist. Some of the findings were: as age went up, attitudes toward birth control were less favorable; older people believed in more traditional marital roles; marital communication increased as the age of the couple increased; the younger population possessed more sex knowledge than the older participants; members of the more professional occupations had better marital communication; those who were married had more sex knowledge and more traditional attitudes toward marital roles; the more times a person had been married the greater was his sex knowledge and the better was his marital communication; as income went down, marital communication went up; the less one attended church, the less favorable were his attitudes toward birth control; as the number of children a family had increased, attitudes toward birth control became less favorable, but sex knowledge increased; the less education one had, the less favorable were his attitudes toward birth control; as education increased, sex knowledge increased; people with less knowledge about contraception had less favorable attitudes toward birth control; marital communication increased as knowledge of birth control increased; and as general sex knowledge increased, so did the knowledge of birth control.

Based on these findings and others it is possible to conclude that this rural Montana sample was: an older population, in nonprofessional

occupations, with the greatest number of participants having a high school education, and an average income of \$10,000-14,999, with an average of three children. The following conclusions can be made about this sample's attitudes: their attitudes were quite favorable toward birth control, their attitudes toward marital roles were traditional, their level of marital communication was relatively high, and they answered more than half of the questions on the sex inventory correctly.

Recommendations

Recommendations for the future use of this study are: (1) to make the findings available to the State Department of Health and family planning agencies in the state of Montana; (2) to do the same study in the larger cities of Montana, for example, Great Falls and Billings, and compare the attitudes of people living in larger urban areas of Montana with those of the rural population; and (3) to take any one of the significant findings and study the relationship more thoroughly.

Items of interest that were not studied, but could provide valuable information if they were, are the more personal aspects of family planning--if the participants were successful in planning both the number of children wanted and when they were wanted, if the couple agreed on the number of children they wanted, and the availability of family planning services in rural Montana.

The findings of this study would have been more reliable if a personal interview approach was used. Although the sample was considered random it was sent only to people who agreed to participate and it is possible that only a certain type of people was attracted making the sample not truly random.

Finally, a statistician should have been consulted much earlier while the instrument was being designed, so that the coding and analysis could have been made simpler.

CONFIDENTIAL

REFERENCES

REFERENCES

- Bienvenu, Millard J., Sr. A Marital Communication Inventory. Durham, North Carolina: Family Life Publications, Inc., 1969.
- Bogue, Donald J. (Ed.) Further Sociological Contributions To Family Planning Research. Chicago: Community and Family Study Center, University of Chicago, 1970.
- Brown, Mary Ingalls. A Survey of Knowledge and Use of Family Planning Methods In A Selected Group Of Mothers. Unpublished Master's Thesis, The Montana State University, 1967.
- Clarkson, F. E., S. R. Vogel, I. K. and D. M. Broverman, and P. S. Rosenkrantz. Family Size and Sex Role Stereotypes. In Skolnick, Arlene and Jerome H. Skolnick, Family In Transition. Boston: Little, Brown, and Company, 1971.
- Dunn, Marie S. Marriage Role Expectation Inventory. Saluda, North Carolina: Family Life Publications, Inc., 1963.
- Finch, B. E. and Hugh Green. In Westoff and Westoff, From Now To Zero. Boston: Little, Brown and Company, 1971.
- Jones, Kenneth L., Louis W. Shainberg, and Curtis O. Byer. Sex. New York: Harper and Row, Publishers, 1969.
- Kiser, Clyde V. Research In Family Planning. New Jersey: Princeton University Press, 1962.
- Lincoln, Richard. Population and the American Future: The Commission's Final Report. Family Planning Perspectives, April 1972, No. 2.
- Lorraine, John A. Sex and the Population Crisis. Saint Louis: The C. V. Mosby Company, 1970.
- Planned Parenthood of Missoula, Inc. Missoula, Montana: Room 213 Courthouse Annex, 1971.
- Schlater, Jean Davis. National Goals and Guidelines for Research in Home Economics. Michigan: Michigan State University, 1970.
- Shaw, Marvin E. and Jack M. Wright. Scales for the Measurement of Attitudes. New York: McGraw-Hill Book Company, 1967.

U. S. Department of Health, Education and Welfare. Report of the Secretary of Health, Education and Welfare Submitting Five-Year Plan For Family Planning Services and Population Research Programs. Washington, D. C.: U. S. Government Printing Office, 1971.

Van Vleck, David B. The Crucial Generation (Your Challenges and Your Choices). Vermont: Optimum Population Inc., 1971.

Westoff, Leslie Aldridge and Charles F. Westoff. From Now to Zero. Boston: Little, Brown and Company, 1971.

Whelpton, Pascal K., Arthur A. Campbell, and John E. Patterson. Fertility and Family Planning in the United States. Princeton, New Jersey: Princeton University Press, 1966.

Wood, H. Curtis. Sex Without Babies. New York: Lancer Books, 1971.

Yahraes, Herbert. Planning Your Family. Washington, D. C.: Public Affairs Pamphlet No. 136, 1948.

APPENDICES

APPENDIX A

INITIAL
COVER LETTER*Montana State University*
*College of Agriculture**Agricultural Experiment Station*
Bozeman, Montana 59715

Tel. 406-587-3121

Home Economics Research

June 22, 1973

In recent months you may have seen an article in your newspaper about our study "Rural Family Life Styles in Montana." The study is being sponsored by the Montana State Agricultural Experiment Station, and it is unique in that it is one of the few Experiment Station studies being conducted anywhere that deals with people - our most valuable resource - rather than crops and livestock.

You are one of 720 families randomly selected to participate in the study. Twelve counties were randomly chosen, and locations within the twelve counties were then randomly chosen. Finally names of 60 residents of those localities were randomly chosen, resulting in this letter being sent to you. Your participation in this study will require between one and two hours, depending upon reading speed and time for thought. You will probably find it quite interesting to complete the survey forms. Moreover, your participation is important because of our random sampling technique. To obtain an accurate measure of how rural Montanans think and feel on certain important matters, your participation is essential to us.

Some of the things on which we wish to gather information include your reasons for being a rural Montanan; what you think of marriage; your attitudes about child-rearing, education and social life; your knowledge of sex and family planning matters; your nutritional practices; consumer choices in housing; and food production. You may be totally assured that all information we gather will be confidential; at no time will the names of any participants in the study be divulged to anyone.

What we would like from you now is your agreement to participate in this study as an official representative of the people of Montana. All you need to do is sign your name on the enclosed sheet, put it in the postage-free envelope and mail it. Be sure to indicate who from your household will be participating. Whenever it is possible, we would like to have both the husband and wife complete the forms. Regardless of your age or marital status, we do want and need your participation. Any other adults living in your household are also eligible to take part. We shall be hoping to receive your reply soon, saying you will be one of the participants in this study.

Sincerely yours,

Robert W. Lind, Ph. D.
Leader, Project No. 260enclosures: acceptance sheet and map
postage-free envelopeMrs. Paula Johnson
Graduate Research Assistant

Dear Dr. Lind:

The names of the adults from this household who will be able to participate in the study of Rural Family Life Style in Montana are given below.

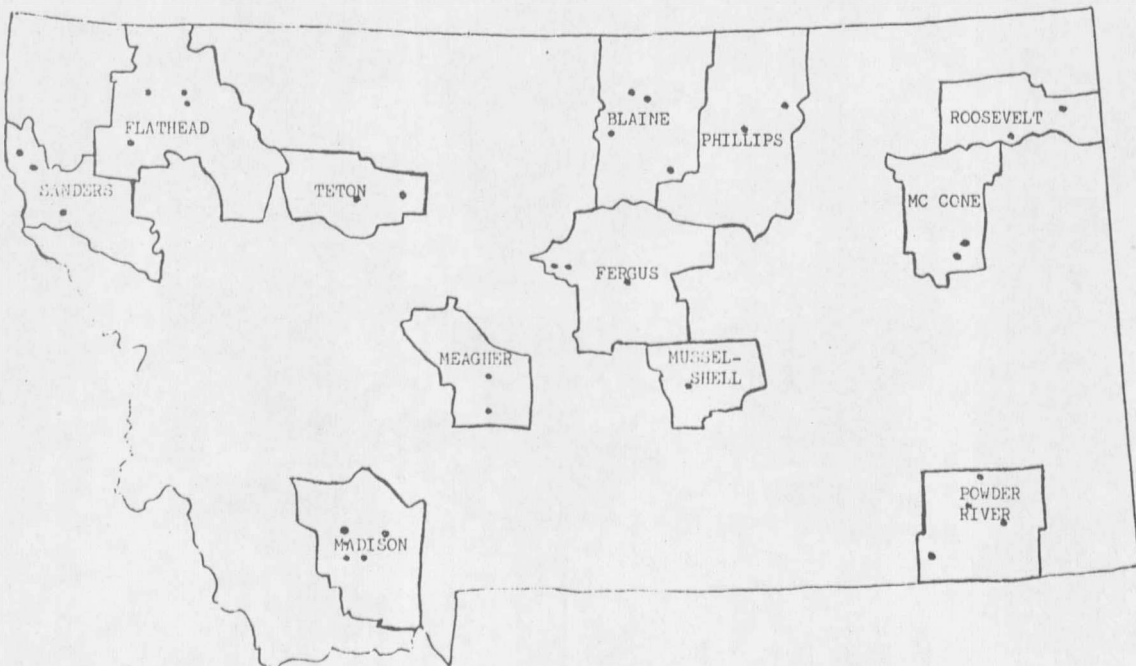
_____	_____
_____	_____
_____	_____

Our mailing address is: _____
_____, Montana _____ zip code

Our telephone number is: _____
Signed _____
Date _____

cut off here

THE STATE OF MONTANA - SHOWING COUNTIES AND COMMUNITIES FROM WHICH STUDY SAMPLE COMES



APPENDIX B

FOLLOW-UP LETTER

Montana State University

College of Agriculture

Home Economics Research

Agricultural Experiment Station
Bozeman, Montana 59715 Tel. 406-994-4478

July 27, 1973

A few weeks ago you received a letter from us seeking your participation in a study of rural family life styles in Montana. From all around the state responses have been quite good. However we still need responses from 45 more families.

It occurs to us that many of you have probably felt that you would be willing to participate, but have not found the time to send us a notification of your acceptance. Would you please do so today? We are so close to meeting our goal! Your response may be the one that makes the magic number we are looking for.

Regardless of your occupation, whether you live in town or on a farm, marital status, or age (if you are 18 or older) you are eligible to participate in the study if you now live in (or have recently moved from) one of the localities in our selected counties.

Participation will only require about two hours of your time, and the information we obtain will be useful to agencies in Montana in many ways. Remember, too, our promise of confidentiality: at no time will the names of any participants be divulged to anyone.

We shall be eagerly watching the mail for word from you.

Sincerely yours,

Robert W. Lind

Dr. Robert W. Lind, Ph.D.
Leader, Project No. 260

Paula Johnson

Mrs. Paula Johnson
Graduate Research Assistant

enclosures: acceptance sheet
postage-free envelope

FOLLOW-UP LETTER

Montana State University

College of Agriculture

Agricultural Experiment Station
Bozeman, Montana 59715 Tel. 406-994-4478

Home Economics Research

October 31, 1973

Dear

About sixty percent of the survey booklets for the study "Rural Family Life Styles in Montana" have been completed and returned to us from citizens throughout the state. If you have not already returned your completed questionnaire, we would appreciate receiving it very soon. Your participation in this study will require between one and two hours, depending upon reading speed and time for thought.

The purpose of the study is to learn the attitudes, practices, and degree of knowledge of rural Montanans in various areas pertaining to family life styles, so that it will be possible to design programs of activity, education, and information which will meet the real needs and enhance the lives of rural Montanans. In the absence of such information, state and local agencies are obliged to operate on a hit-or-miss basis. Knowledge derived from this study will be a valuable tool in the program planning for extension home economists, family life specialists, public health organizations, schools, churches, youth leaders, and numerous community organizations whose programs are designed for rural Montanans.

Your participation is extremely important. You can provide the information to make the above possible.

You may be totally assured that all information we gather will be confidential; at no time will the names of any participants in the study be divulged to anyone.

Thank you.

Sincerely,

*Robert W. Lind*Robert W. Lind, Ph.D.
Leader, Project No. 260*Paula Johnson*(Mrs.) Paula Johnson
Graduate Research Assistant

RWL:js

APPENDIX C

INSTRUMENT

RURAL FAMILY LIFE STYLES IN MONTANA

To all participants in the study:

First, let us express our sincere thanks for your willingness to take part in this unique study. Through your interest and investment of time to complete this questionnaire you will enable us to arrive at an accurate measurement of the attitudes and knowledge of rural Montanans in a number of ways.

Please do not be alarmed or dismayed at the size of this test booklet! We have subjected it to pretests which indicate that all of the pages can be completed in around an hour by an average reader. Even if you work slowly, you will surely be able to complete it in less than two hours.

Each of the sub-tests has its own instructions. They are very simple and forthright, and you will have no difficulty understanding how to mark your forms. Please answer every item that you possibly can. There are a few items that pertain particularly to one sex, which the other sex will, of course, omit. And there are certain items pertaining to marriage which those of you who are single will omit.

Almost the entire instrument consists either of personal information or personal attitudes; therefore, each person will complete his or her own questionnaire form without consulting any other member of the family who may be present. There are two sub-tests, the ones on nutrition and sex knowledge, in which you may be tempted to collaborate with someone on your answers. We implore you not to do so! Please let the completed questionnaire form represent only your own knowledge and your own attitudes on these important matters. Collaborated answers would seriously impair the validity of the survey in these two areas.

On the pages that follow you will find survey instruments dealing with general information, housing and homemaking, marital roles, marital communication, family planning and sex knowledge, child rearing, nutrition knowledge, consumer knowledge, education and social life and recreation.

For marking your questionnaire form, please use some kind of pen that will make firm and legible impressions, so we won't have to strain our eyes to tell which response you have checked.

Thanks again. We hope that you find it interesting and enjoyable to work on this questionnaire. Please try to schedule a time very soon for getting it completed and sent back to us. We are anxious to get to work on tabulating the data we receive.

GENERAL INFORMATION

Regardless of your age or sex, and whether married or single, answer all of the items on the following pages as they apply to you. If certain items do not at all apply to your situation, omit them and go on to the next item that does apply to you. If we have not included enough possible answers to certain items, please write in the answer you feel would be the best one for you.

It is important to remember that there is no such thing as a right or wrong answer to any question in this survey. We simply are seeking the opinions of rural Montana people, so the only possible "right" answer is your honest opinion.

1. Your sex: ☐ Male ☐ Female
2. Age: ☐ Under 21 ☐ 21-28 ☐ 29-35 ☐ 36-50
- ☐ 51-65 ☐ over 65

3. Have you ever been:

Engaged

Married

Divorced

Widowed

No	Yes	If yes, how many times?

4. Check which roles presently apply to you: (Each person will check several, probably)

☐ Husband

☐ Wife

☐ Father

☐ Mother

☐ Chief wage-earner

☐ Secondary wage-earner

☐ Head of household

☐ Housekeeper

☐ Handyman (home repairs)

☐ Manage family finances

5. Occupation of chief family wage-earner: _____

6. Occupation of secondary family wage-earner: _____

7. Check the category that represents the income you reported for your 1972 tax returns. (This will include earnings of both man and wife.)

____ over \$25,000

____ \$7,000 - 9,999

____ \$20,000 - 24,999

____ \$5,000 - 6,999

____ \$15,000 - 19,999

____ \$3,000 - 4,999

____ \$10,000 - 14,999

____ Under \$3,000

8. Check which organizations you belong to, and whose meetings you usually attend:

____ PTA

____ Grange

____ Natl. Farm Org.

____ Farmers Union

____ Craft Union

____ Masonic Lodge

____ Eastern Star

____ Knights of Columbus

____ Other Lodge

____ Lions, Kiwanis, etc.

____ Political party

____ School Board

9. List below any other organizations you belong to, including your civic & governmental involvements, and community service groups.

10. Religion: ____ Roman Catholic ____ Protestant (____) Denomination

____ Other religion (____) specify

____ No religion

11. Frequency of church attendance:

☐ Once or twice per month ☐ Three or more times per month
☐ Never attend church ☐ A few times per year

12. Total number of children you have ever had: Sons Daughters13. Number of children now living: Sons Daughters

14. Number of children now living in your home:

Age 0 - 17

 Boy Girl

Age 18 or older

 Boy Girl

15. In numbers 8 and 9 you listed activities and organizations in which you are active. If you could do only one thing besides your income-producing work, what would it be?

16. Did you select the activity above because

☐ you feel it is the most important Other reason:
☐ you feel it is the most enjoyable
☐ you feel it is both important and enjoyable

17. Check the highest level of education you have attained:

☐ Completed less than eighth grade ☐ Completed eighth grade
☐ Attended high school ☐ Completed high school
☐ Attended college ☐ Completed bachelor degree
☐ College beyond bachelor degree ☐ Masters degree
☐ Have doctors degree ☐ Finished business college
☐ Finished a trade school

18. With respect to all your children who are now grown up and on their own, what has been their educational attainment? Write in the number of your children who have

 Completed high school

 Attended college

Completed four years of college _____ Earned masters degrees _____

 Earned masters degrees

 Earned doctors degrees

Finished business college

 Finished a trade school course

19. What are your feelings about education beyond high school for the youths of today?

 Business college or trade school is enough

 No education beyond high school is necessary

 Going to college is helpful but not necessary

 Going to college is essential for success today

20. If you could do anything in the world to earn a living, and be assured to being successful at it, what would you choose to do?

Exactly what I am now doing

Other work ()
specify

21. If you could live anywhere in the world, without any limitations because of money or responsibility, where would you live?

 Right where I live now

A different place in this same area

____ Another place in Montana (____ specify _____)

specify

_____ Some place outside Montana (_____)
specify

specify

22. You are one of a select few who can be classified as a rural Montanan. How did you come to be one?

☐ I was born here and chose not to leave

☐ I purposely left a city to live in a rural setting

☐ I married someone who had roots here

☐ This was the only place I could find work

☐ Other reason (_____)

23. What do you feel is the one greatest advantage of living where you now live?

☐ Good environment to raise children

☐ Escape from the crowds of people

☐ Remoteness from ghettos and racial problems

☐ Escape from noise and pollution of cities

☐ Other (_____)

24. What do you feel is the one greatest disadvantage to living where you now live?

☐ Isolation from people

☐ Isolation from the best medical facilities

☐ Isolation from the best shopping facilities

☐ Isolation from art, music, the theatre, etc.

☐ Other (_____)

25. What are your feelings about the schools of your community?

☐ They are better than the schools in large cities

☐ They are as good as the schools in large cities

☐ They are not as good as the schools in large cities

☐ They are much inferior to the schools in large cities

26. What are your feelings about the teachers in the schools of your community?

☐ They are better than teachers in the schools of large cities

☐ They are good as the teachers in the schools of large cities

☐ They are not as good as the teachers in the schools or large cities

☐ They probably would not be hired by a school system of a large city

27. Are you having to make some sacrifices in order to be a rural Montanan?

☐ Yes, I could make more money elsewhere

☐ Yes, in terms of deprivation of facilities, culture, etc.

☐ No, I can make a better living here

☐ No, this is where I choose to be

28. Do you feel that other members of your family share your attitudes about rural life?

☐ Yes, I am sure they agree with me

☐ Yes, I think they agree with me

☐ No, I am sure they disagree with me

☐ No, I think they disagree with me

29. Race:

☐ Caucasian (white)☐ Indian and white mixed☐ Indian, full blooded

Name of Indian tribe: _____

☐ Negro☐ Oriental

MARITAL ROLES

Read each item carefully and then circle the A, D, or U to indicate whether you agree, disagree or are undecided as to how you feel about the statement. Do not spend much time on any one item, and remember there is no right answer except the one that most honestly represents your feelings.

In marriage:

- A D U 1. if there is a difference of opinion, the husband will decide where to live.
- A D U 2. a wife's opinion should carry as much weight as a husband's in money matters.
- A D U 3. it would be undesirable for the wife to be better educated than her husband.
- A D U 4. motherhood and a career could be combined if that proves possible.
- A D U 5. the husband should be the "boss" who says what is to be done and what is not to be done.
- A D U 6. the husband should leave the care of the children entirely up to the wife when they are babies.
- A D U 7. it is more important that the wife be a good cook and housekeeper than an attractive and interesting companion.
- A D U 8. the family "schedule," such as when meals are served and when the television can be turned on, will be determined by the husband's wishes and working hours.
- A D U 9. the husband and wife should share responsibility for housework if both of them work outside the home.
- A D U 10. the yard work, repairs and outside chores will be the responsibility of whoever has the time and wishes to do them.
- A D U 11. if the husband is a good worker, respectable and faithful to his family, other personal characteristics are of considerably less importance.

- A D U 12. both the husband and wife should be allowed to pursue their own interests and activities even if they are different from the others.
- A D U 13. the husband and wife should have equal voice in decisions affecting the family as a whole.
- A D U 14. the wife should love and respect her husband regardless of the kind of work he does.
- A D U 15. the husband and wife should both take an active interest in what's going on in their community.
- A D U 16. having compatible personalities will be considerably less important than such characteristics as being religious, honest and hard working.
- A D U 17. the wife should fit her life to her husband's.
- A D U 18. the wife should take full responsibility for the care and training of their children so that the husband can devote his time to his work.
- A D U 19. since doing things like laundry, cleaning and child care are "woman's work," the husband should feel no responsibility for them.
- A D U 20. the husband should feel equally as responsible for the children after work and on holidays as the wife does.

MARITAL COMMUNICATION

Read each item carefully and then circle the U, S or N to indicate whether you usually, seldom or never communicate the following areas. Do not spend much time on any one item, and remember there is no right answer except the one that most honestly represents your feelings.

- U S N 1. Do you and your spouse discuss the manner in which the family income should be spent?
- U S N 2. Do you discuss your work and interests with each other?
- U S N 3. Do you have a tendency to keep your feelings to yourself?
- U S N 4. Are your mealtime conversations easy and pleasant?
- U S N 5. Does your spouse find it necessary to keep after you about your faults?
- U S N 6. Does your spouse seem to understand your feelings?
- U S N 7. Does your spouse listen to what you have to say?
- U S N 8. Does your spouse pay you compliments and say nice things to you and let you know that you are important?
- U S N 9. Is it hard to understand your spouse's feelings and attitudes?
- U S N 10. Is your spouse affectionate toward you?
- U S N 11. Do you and your husband remain silent for long periods when you are angry with one another?
- U S N 12. Do you let your spouse know when you are displeased with him/her?
- U S N 13. Do you help your spouse understand you by saying how you think, feel and believe?
- U S N 14. Do you and your husband find it hard to disagree with one another without losing your tempers or being afraid of hurting the other's feelings?

- U S N 15. When a problem arises that needs to be solved, are you and your husband able to discuss it together (in a calm manner)?
- U S N 16. Does your spouse offer you cooperation, encouragement and emotional support in your role?
- U S N 17. Is it easier to confide in a friend rather than your spouse?
- U S N 18. Do you discuss personal problems and intimate matters with your spouse?
- U S N 19. Do you pretend you are listening to your spouse when actually you are not really listening?
- U S N 20. Does your spouse insult you when angry with you?

ATTITUDES TOWARD BIRTH CONTROL

Read each item carefully and then circle the A, D, or U to indicate whether you agree, disagree or are undecided as to how you feel about the statement. Do not spend much time on any one item, and remember there is no right answer except the one that most honestly represents your feelings.

- A D U 1. Birth control is a legitimate health measure.
- A D U 2. Birth control is necessary for women who must help earn a living.
- A D U 3. The practice of birth control may be injurious physically, mentally or morally.
- A D U 4. We must have birth control.
- A D U 5. The practice of birth control is equivalent to murder.
- A D U 6. Birth control should be absolutely prohibited.
- A D U 7. Birth control increases the happiness of married life.
- A D U 8. Birth control has both advantages and disadvantages.
- A D U 9. Birth control is the only solution to many of our social problems.
- A D U 10. Birth control reduces the marital relation to the level of vice.
- A D U 11. Birth control information should be available to everybody.
- A D U 12. Birth control is morally wrong in spite of its possible benefits.
- A D U 13. Uncontrolled reproduction leads to overpopulation, social unrest and war.
- A D U 14. Birth control is race suicide.
- A D U 15. People should be free to do whatever they wish about birth control.

- A D U 16. The practice of birth control evades man's duty to propagate the race.
- A D U 17. The slight benefits of birth control hardly justify it.
- A D U 18. Birth control information should be included in every person's education.
- A D U 19. Birth control is an expression of individual selfishness.
- A D U 20. I believe in children of choice and not of chance.

FAMILY PLANNING AND SEX KNOWLEDGE

Place an X in front of the statement that is appropriate for you.

1. Before you started your family, what was your idea of the ideal number of children to have?

☐ none
☐ 1-2
☐ 3-5
☐ 6 or more

2. Do you and your spouse agree to the number of children you should have?

☐ yes
☐ no

If you agree, how many children is this?

☐ none
☐ 1-2
☐ 3-5
☐ 6 or more

If you do not agree, how many children does your spouse think is the ideal number of children for your family?

☐ none
☐ 1-2
☐ 3-5
☐ 6 or more

If you do not agree, how many children do you think is the ideal number of children for your family?

☐ none
☐ 1-2
☐ 3-5
☐ 6 or more

3. During what years of your marriage were each of your children born? (i.e. First child born in second year of marriage, etc.)

4. Were you ever unready for the birth of one of your children in terms of family stability, personal and emotional adjustment, physical health, finances and living conditions?

☐ yes

☐ no

If you checked yes, what was the reason?

5. Were you completely successful in planning both the number of children wanted and when they were wanted?

☐ yes

☐ no

If yes, was contraception used?

☐ yes

☐ no

6. If children have been born to you, what effect have they had on your happiness?

☐ added to it

☐ have had no effect

☐ have decreased it

7. Is a family planning clinic available to you in your area?

☐ yes

☐ no

8. If a family planning clinic is available to you, do you use it?

☐ yes

☐ no

9. If a family planning clinic is not available to you, would you use one if it were?

☐ yes

☐ no

If no, why?

10. Do you obtain family planning services from your private physician?
☐ yes
☐ no
11. Was your request for birth control information, advice or contraceptives ever refused by a doctor?
☐ yes
☐ no
12. If you are using a contraceptive, is your method agreeable to both yourself and your spouse?
☐ yes
☐ no
13. Do your religious beliefs keep you from practicing birth control?
☐ yes
☐ no
14. Have you given much thought to the rapid increase in the world population problem and its consequences; i.e. the environmental crisis?
☐ yes
☐ no
15. Have you adopted children to fulfill the number of children you want, even though you and your spouse are able to have children?
☐ yes
☐ no
☐ applied and waiting
☐ applied, but no babies available
☐ applied, but rejected
16. Name as many methods of birth control as you can. Put an X in front of the most effective means of contraception. Put a check mark (✓) in front of the least effective means of contraception.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

17. A birth control method available without a doctor's prescription is
☐ the pill
☐ contraceptive creams, gels and foams
☐ the diaphragm
☐ the IUD
18. A few women have side effects from taking the birth control pill.
All things considered, the pill is
☐ more dangerous than pregnancy
☐ about the same danger as pregnancy
☐ less dangerous than pregnancy
☐ too dangerous for anyone to use
19. Permanent sterilization for men can be performed by a simple operation called
☐ vasectomy
☐ lobotomy
☐ impotency
☐ appendectomy
20. Permanent sterilization for women can be achieved through an operation called
☐ vaginitis
☐ dysmenorrhea
☐ tubal ligation
☐ mastectomy
21. If a couple is unable to have children, one of the many reasons could be
☐ the wife is infertile
☐ the husband is infertile
☐ one of them is infertile
☐ they were not meant to have children
22. Pregnancy may occur when
☐ intercourse is had without contraception
☐ a sperm unites with an egg
☐ sperm are deposited in the vagina
☐ all of the above
23. Menstruation is
☐ the shedding of the uterine lining
☐ the flushing out of the unfertilized egg
☐ nature's way of preventing pregnancy
☐ a curse God sent upon women

24. A woman with monthly menstrual periods is most likely to become pregnant if she has sexual intercourse
___ two days before the menstrual period
___ during menstruation
___ two days after menstruation ends
___ two weeks before menstruation begins
25. During pregnancy, the fetus grows in the
___ ovary
___ womb
___ stomach
___ vagina
26. In order for a woman to get pregnant
___ she must achieve an orgasm
___ she must enjoy having intercourse
___ she must want to get pregnant
___ she must have intercourse at the right time, during her reproductive cycle
27. A woman with monthly menstrual periods is least likely to get pregnant if she has intercourse
___ during menstruation
___ just before menstruation begins
___ just after menstruation ends
___ two weeks before menstruation
28. In the male, sperm are produced by the
___ scrotum
___ vas deferens
___ testes
___ seminal fluid
29. The place in the woman where fertilization normally occurs is the
___ vagina
___ uterus
___ ovary
___ fallopian tube
30. Venereal disease is transmitted, with extremely rare exceptions, only through
___ using infected toilet seats
___ sexual contact with an infected person
___ touching door knobs or cloth roller towels, in public bathrooms
___ personal uncleanness

31. Every month a woman normally releases how many eggs capable of being fertilized
☐ one
☐ two
☐ dozens
☐ thousands
32. During ejaculation, a male releases how many sperm
☐ one
☐ two
☐ thousands
☐ millions
33. When a fertilized egg attaches itself to the wall of the womb, this process is known as
☐ fertilization
☐ ovulation
☐ implantation
☐ copulation
34. After the birth of her baby it is possible for a woman to become pregnant again
☐ immediately, even before menstruation begins
☐ not until after she has menstruated
☐ not until she stops breast feeding her baby
☐ not until she feels sex desire
☐ not until she again is able to achieve orgasm
35. Sex relations are
☐ for physical pleasure
☐ a way to relieve tension
☐ a way to express love
☐ a biological urge
☐ all of the above
36. The main source of your child's sex education is
☐ mother
☐ father
☐ both mother and father
☐ school
☐ church
☐ reading material
☐ friends

37. Which of the following do you feel should be the main source of sex education for your children
- ☐ mother
 - ☐ father
 - ☐ both mother and father
 - ☐ school
 - ☐ church
 - ☐ reading material
 - ☐ friends
38. Sex education should be available to
- ☐ adults only (age 18 or older)
 - ☐ children only with the consent of their parents
 - ☐ persons of any age who want it
39. Contraceptive education, within a sex education program, should begin
- ☐ before 6th grade
 - ☐ in junior high school (grades 7,8)
 - ☐ in high school (grades 9-12)
 - ☐ at the university level
 - ☐ never. It is wrong to have such programs.
40. Contraceptives should be available to
- ☐ adults only (age 18 or older)
 - ☐ minors only with the consent of their parents
 - ☐ persons of any age who want them

APPENDIX D

Description of Sample

SEX:

134 males (40%)
198 females (60%)

AGE:

3 no response (1%)
11 under 21 (3%)
48 22-28 (15%)
48 29-35 (15%)
92 36-50 (28%)
102 51-65 (31%)
28 over 65 (8%)

OCCUPATION:

22 no response (7%)
14 professional (4%)
141 farm and ranch (43%)
41 commercial business (12%)
27 teachers and clergy (8%)
8 social services (2%)
10 white collar (3%)
36 laborers (11%)
33 retired and disabled (10%)

MARITAL STATUS:*

307 married (93%)
27 divorced (8%)
30 widowed (9%)

INCOME:

29 no response (9%)
45 over \$25,000 (14%)
11 \$20,000-\$24,999 (3%)
34 \$15,000-19,999 (10%)
74 \$10,000-14,999 (22%)
59 \$7,000-9,999 (18%)
32 \$5,000-6,999 (10%)
22 \$3,000-4,999 (7%)
26 under \$3,000 (8%)

CHURCH ATTENDANCE:

10 no response (3%)
126 3 or more times per month (38%)
52 once or twice per month (16%)
97 a few times a year (29%)
47 never attend church (14%)

NUMBER OF CHILDREN:

52 no response (16%)
43 1 child (13%)
78 2 children (24%)
68 3 children (21%)
41 4 children (12%)
31 5 children (9%)
12 6 children (4%)
1 7 children (.3%)
4 8 children (1%)
2 9 children (.6%)

EDUCATION:

3 no response (1%)
3 less than 8th grade (1%)
18 completed 8th grade (5%)
45 attended high school (14%)
87 completed high school (26%)
85 attended college (26%)
40 completed bachelors degree (12%)
14 college beyond bachelors degree (4%)
7 masters degree (2%)
3 doctors degree (1%)
10 finished business college (3%)
20 finished trade school (6%)

*This group does not equal 100% because some of the participants designated more than one marital status; for example, even though they were widowed many checked that they had been married.

APPENDIX E

Duncan Multiple Range Test Results

TABLE 3

Significant Differences Between Age
And Level Of Sex Knowledge

Age	Mean Score For Sex Knowledge	Differs at the .05 Level From Age Group No.
1. under 21 years	11.36	2,3,4,6
2. 22-28 years	13.56	1,5,6
3. 29-35 years	14.19	1,4,5,6
4. 36-50 years	12.95	1,3,5,6
5. 51-65 years	10.77	2,3,4,6
6. over 65 years	7.43	All

TABLE 4

Significant Differences Between Occupation
And Attitudes Toward Birth Control

Occupation	Mean Score of Birth Control Attitude Scale	Differs at the .05 Level from Occu- pation Group No.
1. Professional	14.29	7,8
2. Farm and Ranch	12.33	8
3. Commercial Business	13.10	8
4. Teacher and Clergy	13.22	8
5. Social Services	13.37	8
6. White Collar	13.10	8
7. Laborer	11.53	1,8
8. Retired and Disabled	8.45	All

TABLE 5

Significant Differences Between
Marriage And Sex Knowledge

Married	Mean Score On Sex Knowledge	Differs at the .05 Level From Married No.
1. Not Married	10.44	None
2. Married	12.22	1

TABLE 6

Significant Differences Between Times
Married And Sex Knowledge

Times Married	Mean Score Of Sex Knowledge Inventory	Differs at the .05 Level From Times Married No.
0. Not Married	9.03	All
1. 1 time	12.37	All
2. 2 times	11.76	All
3. 3 times	10.80	All

TABLE 7

Significant Differences Between
Times Widowed And Attitudes
Toward Birth Control

Times Widowed	Mean Scores of Birth Control Attitude Scale	Differs At The .05 Level From Times Widowed No.
0. Not Widowed	25.49	All
1. 1 time	29.44	All
2. 2 times	20.50	All

TABLE 8

Significant Differences Between Number
Of Children And Attitudes Toward
Birth Control

Number of Children	Mean Scores On Birth Control Attitude Scale	Differs At .05 Level From Number Of Children Group
0. no children	24.40	8,9
1. 1 child	25.58	7,8,9
2. 2 children	25.14	7,8,9
3. 3 children	26.16	7,8,9
4. 4 children	25.20	7,8,9
5. 5 children	26.65	7,8,9
6. 6 children	27.00	7,8,9
7. 7 children	21.00	1,2,3,4,5,6,8,9
8. 8 children	38.00	All
9. 9 children	43.50	All

TABLE 9

Significant Differences Between Number
Of Children And Attitudes Toward
Marital Communication

Number of Children	Mean Score For Marital Communi- cation Attitude Scale	Differs At The .05 Level From Number Of Children Group
0. no children	31.44	All
1. 1 child	49.35	0
2. 2 children	47.36	0
3. 3 children	50.22	0
4. 4 children	48.59	0
5. 5 children	47.97	0
6. 6 children	47.83	0
7. 7 children	48.00	0
8. 8 children	50.25	0
9. 9 children	54.00	0

TABLE 10

Significant Differences Between
Education And Attitudes
Toward Birth Control

Education	Mean Score On Birth Control Attitude Scale	Differs At The .05 Level From Education Group No.
1. less than 8th grade	40.67	All
2. completed 8th grade	26.56	1
3. attended high school	28.56	1,7,10,11
4. completed high school	25.43	1
5. attended college	25.34	1
6. completed bachelors degree	24.38	1
7. college beyond bachelors degree	24.36	1,3
8. masters degree	27.43	1,10
9. doctors degree	27.67	1,10
10. finished business college	23.60	1,3,8,9
11. finished trade school	23.70	1,3

TABLE 11

Significant Differences Between
Education And Sex Knowledge

Education	Mean Score On Sex Knowledge Inventory	Differs At The .05 Level From Education Group No.
1. less than 8th grade	9.00	4,5,6,7,8,9,11
2. completed 8th grade	8.33	3,4,5,6,7,8,9,10,11
3. attended high school	10.62	2,5,7,9,11
4. completed high school	11.79	1,2,9
5. attended college	12.96	1,2,3,9
6. completed bachelors degree	12.80	1,2,9
7. college beyond bachelors degree	13.14	1,2,3,9
8. masters degree	11.86	1,2,9
9. doctors degree	15.67	1,2,3,4,5,6,7,8,10
10. finished business college	11.10	2,9,11
11. finished trade school	13.40	1,2,3,10

TABLE 12

Significant Differences Between Known
Methods Of Birth Control And Atti-
tudes On Marital Communication

Known Methods Of Birth Control	Mean Score On Marital Communi- cation Attitude Scale	Differs At The .05 Level From Methods of Birth Control Group No.
0. named no methods	41.31	2,4,8
1. 1 method named	45.45	10
2. 2 methods named	50.87	0,10
3. 3 methods named	47.48	10
4. 4 methods named	52.39	0,10
5. 5 methods named	46.24	10
6. 6 methods named	47.07	10
7. 7 methods named	45.20	10
8. 8 methods named	50.19	0,10
9. 9 methods named	46.87	10
10. 10 methods named	35.40	1,2,3,4,5,6,7,8,9

TABLE 13

Significant Differences Between Known
Methods Of Birth Control And
Sex Knowledge

Known Methods Of Birth Control	Mean Score On Sex Knowledge	Differs At The .05 Level From Methods Of Birth Control Known
0. named no methods	8.36	3,4,5,6,7,8,9,10
1. 1 method named	9.46	3,4,5,6,7,8,9,10
2. 2 methods named	10.00	3,4,5,6,7,8,9,10
3. 3 methods named	12.07	0,1,2,6,7,8,9
4. 4 methods named	13.34	0,1,2,9
5. 5 methods named	13.35	0,1,2
6. 6 methods named	14.36	0,1,2,3
7. 7 methods named	14.44	0,1,2,3
8. 8 methods named	15.19	0,1,2,3
9. 9 methods named	15.53	0,1,2,3,4,5
10. 10 methods named	13.80	0,1,2

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 cop.2 Rural Montanans' attitude
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