Fertility and Family Planning Among Navajo Indian of Public Welfare Assistance in Southeastern Utah

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FERTILITY AND FAMILY PLANNING AMONG NAVAJO INDIAN RECIPIENTS OF PUBLIC WELFARE ASSISTANCE IN SOUTHEASTERN UTAH

by

Gary Morris Shaffer

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

in

Sociology

UTAH STATE UNIVERSITY
Logan, Utah

1969
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Appreciation is also expressed for long hours of correcting and typing given by a loving and patient wife, Alannah.

Gary M. Shaffer
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ABSTRACT
Fertility and Family Planning Among Navajo Indian Recipients of Public Welfare Assistance in Southeastern Utah

by
Gary Morris Shaffer, Master of Science
Utah State University, 1969

Major Professor: Dr. Yun Kim
Department: Sociology

A fertility and family planning survey was conducted among the recipients of public welfare assistance in San Juan County, Utah. Two hundred twenty-five recipient families out of some 536 families on the list were interviewed during May and June of 1968 by nine graduate and undergraduate students in Sociology and Social Work with the help of Social Welfare workers and Navajo interpreters.

The study was primarily concerned with the following objectives: (1) to study the level and age patterns of fertility of a group of selected Navajo Indians, (2) to investigate the factors which might affect the fertility, desired family size, and ideal family size, (3) to study the knowledge of and the extent of the use of birth control methods among the selected group, (4) to compare the findings of previous fertility studies dealing with other groups to those found among the selected group of Navajos.

The data indicate that the fertility of Navajo women was very high, reaching the completed fertility rate of 9.2 children for
women aged 45-49 years as compared with that of 2.4 children and 2.8 children for white and non-white women in the United States in 1960 respectively. The number of children ever born among the total ever married women was 6.6 children. The number of children the Navajo women considered ideal for a couple in general and for the Navajo family in particular was 7.1 children and 7.7 children respectively.

A strong inverse relationship was observed among Navajo women between fertility level and several social variables. The fertility of women who knew English was as much as 3.9 percent below that of women who did not. Fertility was also lower among those who had more frequent contact with white people. Although the proportion of women who knew any methods of birth control was very low (only 50 percent of the total women), the fertility of these women was considerably lower than that of those who did not know anything about birth control.
CHAPTER I
INTRODUCTION

General

The Navajo, the largest Indian tribe in the United States, numbered in the neighborhood of 109,000 in 1966, or approximately one-fifth of the total Indian population.\(^1\) According to most indices of acculturation, such as measures of literacy and degree of social involvement with whites, the Navajo have remained one of the least acculturated groups in the United States.\(^2\) Because of their adherence to traditional values and modes of livelihood, the Navajo still express many values which are common to most preliterate peoples in other parts of the world. One of the most significant manifestations of these traditional values is the high rate of fertility.

A combination of high fertility, lowering of the death rate, and a young age structure has caused tremendous growth in the Navajo population in recent years. Despite many studies conducted concerning Navajo culture, the dynamics of their rapid growth have remained


a matter of approximation or speculation.\(^3\)

Many studies have reported that crude birth rate among selected Navajo Indians was as high as 50 per 1000 population in 1955-1960 while the reported crude death rate was around 6-8 per 1000.\(^4\) This has resulted in a very high rate of increase, the amount of which is high enough to indicate that population of the Navajo will double every fifteen years. This high growth rate of the Navajo population indicates the possible social and economic changes intrinsic in such a rate of growth.

The reason for so little knowledge regarding the actual fertility of the Navajo is attributable to inadequate registration of births and deaths and also to a high illiteracy rate, lack of adequate transportation, and lack of community organization. The registration of births has been limited because of lack of hospital facilities until the very recent past. Navajo's fear of death, which is grounded in religious beliefs, discourages handling or even discussing deceased persons and thereby limits the registration of deaths.\(^5\)

In addition, as Denis Johnston points out, a problem in data

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\(^5\) Johnston, p. 149.
collection is founded in the uncoordinated efforts of those who are investigating. Many agencies will investigate only these data which are applicable to their office. The result is a vast accumulation of data, none of which give an adequate description of the whole Navajo population.6 Despite the diversity of studies done among the Navajo, the dynamics of their population growth have not been clearly understood. It is because of the lack of data concerning their high fertility and the lack of knowledge pertaining to it that the Navajo are said to typify other underdeveloped countries of the world.7

Objectives

This study attempts to secure information directly from the Navajo concerning their number of children, their use of birth control and family size preference. Therefore, it is the specific purpose of this study to:

1. Estimate the level and age patterns of fertility among Navajo Indians.

2. Study preferences in family size among Navajo Indians.

3. Investigate the factors associated with fertility and family planning.

4. Study the knowledge of and the extent of the use of birth control methods.

5. Compare the findings of previous studies dealing with other populations to those found among the Navajo Indians.

6 Ibid., p. 45.

7 Ibid., p. 1-2.
The nature of the present study is a pilot study. The study is confined to the Utah section of the Navajo Reservation, but it will give some insight into future methodological approaches dealing with field studies among the Navajo.

This study will be helpful for several reasons. (1) It will demonstrate the possibility of securing primary data from the Navajo population through face to face interviewing. (2) It will be helpful in predicting possible future trends and growth of the Navajo population. (3) It will give insight into factors which affect Navajo fertility and family planning. (4) It will demonstrate the degree of contact with western society and its effect on Navajo family size. (5) It will be helpful in formulating a demographic theory with regard to Navajo fertility and family planning.

Justification

Many populations of the world are increasing at rates which are termed explosive. In these areas people are becoming so numerous that the existing technologies of the countries cannot keep up with the pace. The population explosion, however, is not actually a world problem, and all countries or nations do not exhibit growth rates which could be viewed as explosive. The United States and many other western nations are not experiencing serious population problems. This does not, however, eliminate the fact that there exist individual groups of people living within the boundaries of

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these countries who are experiencing a high rate of population increase. Because of such high rates of growth among specific groups, the economic, social, and political systems of the countries can be affected. There exist in the United States many of these groups.

The rural, poor, and non-white classifications include the majority of the groups in the United States whose growth rates are extremely high. This relationship of high fertility with low income, rural, and non-white groups seems to be relatively consistent. One such group is the Navajo Indian.

The Navajo have a fertility rate of fifty per one thousand population, which is acknowledged for underdeveloped countries of the world, and this, taken in light of the six to eight reported deaths per one thousand population in 1955-60, gives a clear indication of the extent of their growth.

Of course, such figures as those given above are only speculative due to a lack of research and the poor registration of births and deaths among the people. Therefore, it is important to make a systematic investigation on the level and trend of fertility and mortality and the factors affecting the fertility and mortality.

Another factor which should be examined with regard to the level of fertility is preference toward the size of family. Past studies have indicated that fertility is indirectly a function of family size preference. In cases where a large family was preferred, the fertility was found to be higher than if a small family had been

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9 Loughlin and Dennison, p. 116.
preferred. 10 This is obviously a vital relationship to be considered when attempting to come to an understanding of the population problems of a specific group.

This study attempted to elicit the information concerning the fertility of the Navajo, their preferences in desired and ideal family size, and also their knowledge and practice of family planning.

CHAPTER II
THEORETICAL FRAMEWORK

Folk societies

To understand the meaning of fertility and family planning among rural and urban peoples, one must understand the conditions which produce such a phenomenon. The rural-urban dichotomy is a very old one. Miller Lee Taylor indicates that according to Sorokin, a division of the population into two areas of residency is a worldwide tradition. Most researchers have found that the people living in rural and urban areas have differing values. As people move from a rural life to an urban one, those values change with the environment. 11

Leonard Reissman has termed this dichotomy of residence the theories of contrast and has compared one phenomenon with its opposite. The comparison is broken down by Reissman into two areas, those which belong on a continuum and those representing a dichotomy. 12 A dichotomy would suggest that there are distinct types of populations characterized by obvious factors. The continuum suggests that the populations are movable and can fluctuate along the continuum. Their capacity to move is based on the new factors which they acquire.


In connection with the theories of contrast mentioned before and the comparison of one phenomenon with its opposite, Reissman offers the following summary:  

<table>
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Durkheim set up a complete dichotomy with mechanical solidarity (primitive or folk) on one end and organic solidarity (urban) on the other. Shared values, ideas, attitudes, and sentiments produce mechanical solidarity in primitive society because of residence being in close proximity. Organic solidarity in an urban society is derived from the social system or a network of roles.  

Redfield indicates that the folk-urban theory is an ideal type and can fit any society—anywhere along the continuum. The continuum theory, as presented by Redfield, would provide a more precise method for identifying societies. However, there is a problem of measuring where the society should be placed along the continuum.

Navajo society can be classified as a folk society in transition, as it resembles the characteristics of a folk society as outlined by Redfield:

... small, isolated, non-literate, exhibiting local cultures. They are homogeneous with regard to distribution of knowledge, attitudes and functions among the population. Also the individual does not figure as a conspicuous unit.  

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13 Ibid., p. 75.
15 Ibid., p. 297.
Redfield's continuum theory states that folk societies can move along the continuum away from the rural and toward more urban characteristics. As folk societies begin to accept many of the values which are characteristic of the urban group, they become more urban.\textsuperscript{16} According to Reissman, folk religion no longer holds the person to traditional ties or to traditional ideas and values. As the population moves toward an urban environment, they are dependent mainly on themselves and can deviate from the norm to a greater degree.\textsuperscript{17}

Tonnies also describes the two polar types of societies. He states that Gemeinschaft society is characterized by primary relationships, close family and community ties. This would be a similar description of the folk society. He also states that eventually this society may become a society with secondary relationships and impersonal contacts with individuals, or a Gesellschaft society. There is, according to Tonnies, an irreversible trend from a Gemeinschaft to a Gesellschaft type society.\textsuperscript{18}

Because of the changes from mechanical to organic, from folk to urban, or from Gemeinschaft to Gesellschaft type societies, several phenomena appear. One such phenomena is decline of fertility and values attached to it. Statistical evidence points out that fertility is found to be higher in the rural areas than in the urban

\textsuperscript{16}Ibid., p. 298.
\textsuperscript{17}Reissman, p. 117-118.
areas as far back as 1760 in Sweden.\textsuperscript{19} As society advances along the continuum, fertility decreases. Also, the greater contact of rural with urban society, the greater will be the acceptance of urban values.

The Navajo, as a group, are in transition. They are affected by the invasion of western society and are moving from the folk to the urban or the Gemeinschaft to the Gesellschaft type society. However, the degree to which the Navajo people have accepted the new value system is a matter of speculation.

The theoretical framework of this thesis will rely on the above mentioned ideal type characteristics describing the folk society and the stated changes which occur as a society moves away from the folk and approaches the urban. The demographic transition theory will also be used as a basis for the theoretical framework.

**Demographic transition theory**

The demographic transition theory\textsuperscript{20} will provide a demographic framework for this thesis because it offers a reasonably accurate model for changing populations. This theory describes the demographic trends associated with a transition from the folk society to a more urban, industrial society.

The demographic revolution or transition is characterized by

\textsuperscript{19} A. J. Jaffe, "Urbanization and Fertility," \textit{American Journal of Sociology}, XLVIII (July, 1942), p. 58.

three stages, the first being described as having a high birth rate and a high death rate, which is commonly found in rural folk societies. The high death rate will check the high birth rate, thereby rendering very little population increase. This stage is also characterized by a lack of urbanization and industrialization.

The second stage of this theory can be characterized by a high fertility rate and a declining death rate. It is at this point that population growth begins. Because the birth rate remains high and more lives are saved due to control of famine and disease, the result is a large increase in number.

Around 1700 in Europe, one could expect to live only to the age of thirty-three, but by 1950 the life expectancy had increased to sixty-nine years of age. This increase in longevity since 1700 in Europe was propagated by four factors: (1) discovery of new continents, (2) expansion of commerce, (3) technological changes, and (4) the increased control of disease. These factors forced an upset in the balance between fertility and mortality, causing a surge in population growth. Additional reasons given for this imbalance between fertility and mortality are such developments as (1) better farming methods, (2) improvements in transportation for better distribution of agricultural products, (3) introduction of the factory system and industry which increased the availability of goods and services, (4) discovery and knowledge of bacteria and preventive

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21 Ibid.
22 Ibid., p. 9.
medicine, and (5) the improvements in environmental sanitation and personal hygiene. 23

The third stage, or the completion of the demographic revolution, involves the decline in fertility restoring a small balance between fertility and mortality. This shift to a relatively low rate of increase was brought about by voluntary control of fertility. 24

At present many populations of the world have only moved to the second stage of the demographic transition theory (high fertility and low mortality). As Harold F. Dorn pointed out, less than one-third of the world's population has completed this revolution. 25 The Navajo Indians are among the two-thirds of the population who have not yet completed the cycle. They have undergone only the first phase of the demographic revolution which is a decline of mortality, according to available evidence. Thus, there has been a great increase in their numbers because there has been no changes in fertility.

Various suggestions have been advanced in connection with the attempt to curb high birth rates among people in less developed areas. An advance in the age at marriage has been mentioned as a possible factor controlling conception among the married population. 26

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23 Ibid., p. 21.
24 Ibid., p. 11.
25 Ibid., p. 9.
However, among Navajos, it has been observed that they consider a person to be fully responsible only after he has been married and has children. The Navajo, they suggest, considers marriage a very normal state of affairs, and children are desired and welcomed. Thus the young Navajo adults are encouraged to marry soon after puberty.\(^{27}\)

A very young age distribution is another factor contributing to high fertility.\(^{28}\) In less developed countries, about 40 to 45 percent of their population are under the age of 15 years as compared with 25 to 30 percent in developed areas. If this 40 to 45 percent of the population in less developed areas marries soon after puberty and begins its fertility at this young age, the population will increase rapidly.

Various fertility studies conducted have examined not only the levels of fertility, but also the factors which affect high or low fertility rates. The data have defined certain characteristics which are associated with a high or a low fertility in developed and underdeveloped countries.

As mentioned before, one factor which affects fertility has been recognized as the family size preference. If a person prefers a large ideal or desired family size, a large family will be

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\(^{27}\) Given from personal communication with Navajo individuals other than structured interviews.

achieved. Preferences in family size are reported to be smaller in developed nations than in less developed areas.

If high fertility is found to be associated with less developed areas of the world, it would be helpful to find out what values are attached to fertility and the ideal size family among the Navajo. This would help determine to what degree the Navajo have rejected or accepted the values of western society, and the degree at which the Navajo society is being transferred from folk to urban.

Through personal contact with the Navajo by this writer, there has been found an indication that the Navajo in general traditionally feel a Navajo should have from ten to twelve children in his family. But this information has never been documented, and this is one area with which the present study will deal.

Another characteristic exhibited by less developed peoples which seems to coincide with high fertility is low income. According to Kluckhohn, only about 1 percent of the Navajo families in 1945 had incomes over $2,000 and about 16 percent had incomes over $1,000 per year. Half of the families receive less than $400 per year. Data from the Department of Commerce in 1957 placed the Navajo average at $2,335 per family per year, which is still lower than the national average of $6,130 for the same year. In spite of the increases, the Navajo remain among the least privileged groups in the nation.

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29 Freedman and Sharp, p. 36-37.

Studies on Navajo fertility

There have been very few studies on Navajo fertility. One of the most important studies concerning the Navajo population was done by Denis Johnston.\textsuperscript{31} His study was a survey and analysis of existing data gathered by various agencies who were working with the Navajo. The purpose of Johnston's study was not to carry out an exhaustive investigation of the factors affecting Navajo population changes, such as fertility and mortality, but simply to evaluate demographic source materials on the Navajo.

Regarding Navajo fertility, very little is actually known because of inadequate registration of births. However, records are presently being somewhat improved due to the greater use of hospital facilities by the traditional Navajo in recent years.\textsuperscript{32}

As Johnston pointed out, much of the data found are very incomplete, and the sources are not entirely accurate and reliable. Discrepancies in reported number of Navajo population are great. Everyone who visited the reservation during the eighteenth and nineteenth centuries made some estimate of Navajo population. Several population estimates of this period vary from a low of 5,000 reported in 1847 to a high of 15,000 reported in 1860. Most of the estimates differ in the range of 8,000 to 10,000.\textsuperscript{33}

Many authors have indicated that the Navajo population is

\textsuperscript{31} Johnston, p. 149.
\textsuperscript{32} Ibid., p. 150.
\textsuperscript{33} Ibid., p. 132.
growing at an extremely high rate. This is borne out by the fact that since 1868, when the Navajo reservation was established, the Navajo tribe has more than tripled in size. In 1940 the people numbered around 50,000, and by 1958 they numbered approximately 85,000. Figures for 1942-1944 show that the percentage increase of the Navajo was greater than the United States as a whole. This increase was at a rate of 2 percent per year, as compared with 1.1 percent for all the Indians of the United States, 1.4 percent for the entire population of Arizona, and 0.9 percent for the entire United States. 34

A study by Bernice W. Loughlin and Matthew Dennison indicates that the crude birth rate for the selected group of Navajos was said to be 50 per 1,000 population in 1955-1960, 35 which is comparable to the level found in most underdeveloped countries of the world, that being 40 per 1,000 population or above. In most less developed countries women had at least five children at the end of their reproductive period. This fertility rate is in great contrast to developed western nations which show a birth rate of below 20 per 1,000 population, and an average of two or three children at the end of their reproductive period. 36

Fertility studies in other areas

An important study dealing with fertility in less developed

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34 Kluckhohn and Leighton, p. 51.
35 Loughlin and Dennison, p. 116.
36 Coale, p. 46-47.
areas was conducted in Puerto Rico by Ruben Hill, J. Mayone Stycos, and Kurt W. Back. Facile explanations for Puerto Rico's high birth rate such as the desire for large families, religious beliefs, ignorance of contraceptive methods, or unavailability of materials were investigated. The birth rate in Puerto Rico is declining at a very slow rate and remains higher than that of many other countries.

The main focus of the Puerto Rican study was the treatment of population control as a part of family planning in action. The key to the understanding of fertility seems to lie in the understanding of decisions made by husbands and wives concerning problems of family size and the methods by which they recognize and solve these problems.

Some popular explanations of high fertility in Puerto Rico have to do with the idea that the lower classes are indifferent toward or favor a large family. Statements such as "Where one eats, so can many," "For every mouth God provides a pair of hands," "One must accept whatever number of children God sends," and "Children are the capital of the poor," are presumed to affect lower class thinking on family size and preference. The above explanations can be applicable to the Navajo; however, the extent of their influence has not as yet been tested.

The study in Puerto Rico also dealt with other explanations.

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38 Ibid.
which are said to produce high fertility. These explanations were:
(1) Puerto Ricans have the large family values of an agricultural
people; (2) Puerto Rican males need to prove their masculinity by
having many children; (3) lower class people are largely ignorant of
birth control methods; and (4) the influence of the Catholic faith
makes the people not willing to utilize modern birth control
methods. 39

The interesting outcome of the testing in these four areas is
that the data from three survey samples enabled the researchers to
perform discerning analyses and conclusively disprove all four of
the popular explanations or hypotheses. These popular explanations
of high fertility among the Puerto Ricans suggested a possibility of
testing similar popular explanations among a selected group of
Navajo Indians.

A study dealing with the social and psychological factors
affecting fertility was done by P. K. Whelpton and Clyde V. Kiser,
and the findings are presented in the Milbank Memorial Fund Quar-
terly. The suggestions on schedule construction and interviewing
procedures in the collection of data on fertility by Whelpton and
Kiser 40 were taken into consideration for the present Navajo
fertility study, as will be discussed in the section on methodology.

The Whelpton and Kiser study was directed toward achievement of

40 Pascal K. Whelpton and Clyde V. Kiser, "Social and Psycho-
logical Factors Affecting Fertility," Milbank Memorial Fund
Quarterly, XXIII (1945), p. 386.
three main objectives: (1) to ascertain the extent to which the actual number of children that couples have is larger or smaller than the number they desire, (2) to determine how couples are influenced by various socio-economic and psychological factors in deciding upon the number of children they desire, and (3) to discover how the size of families would be affected by various measures which might be included in national population programs aimed at checking the rise in birth rates and improving the quality of the population. In interpreting these findings, however, it is necessary to remember that the conclusions should certainly not be expected to hold outside of a native white, Protestant, urban group such as the one studied. It is also important to note that the analysis was based on the attitudes of wife and husband and can be expected to change with time.

Another point which has been suggested as a factor encouraging high fertility is that of high mortality. It has been thought by some that in less developed countries people maintain high birth rates because death rates are very high. The reasoning behind the hypothesis is that if death rates are high, people will desire more children to adjust for the deaths within their families. The conclusion drawn involves the idea that if the death rate decreases and the parents see their children not dying at early ages, they will then decrease their birth rate. However, most statistics show that while death rates have been declining for years among less developed

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countries, the birth rates have maintained high of around 40 per
1,000 population.

A study done in 1952 by Freedman and Sharp established the
ideal family size for a couple of the Detroit area population. They
asked the question, "As things are now, what do you think the ideal
number of children for the average American family should be?" The
data presented gave a mean of 3.15 as being the ideal size family.
A following study in 1954 presented a mean of 2.94 as the ideal
family size which is a significant decrease. Change in age and
income affected this decrease. Another study concerning ideal
family size which was conducted by Judith Blake indicates a con-
sensus among white Americans which was 3.6 children at the high and
2.7 as the low.

Desired family size is also examined by Ronald Freedman, and in
one of his studies he establishes the desired family size for white
Americans to be from two to four children. Here education and in-
come became important factors which would affect their desired
family size. In another study by Freedman, he suggests that as a
person's years of schooling increase, the number of desired and
ideal children will decrease.

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42 Freedman and Sharp, p. 187.
45 Ronald Freedman, Pascal K. Whelpton, and Arthur A. Campbell, Family Planning, Sterility and Population Growth (New York: McGraw-
Hypotheses

Through the review of fertility studies concerning the Navajo and other general groups, hypotheses which could be tested among the selected group of Navajo Indians have been formulated.

1. The Navajo have a positive attitude toward a large family.
2. An increase in the years of school completed will decrease the desired, ideal, and best Navajo size family.
3. The Navajo have little understanding or knowledge of the modern methods of birth control.
4. Increased contact of the Navajo with western society tends to increase the knowledge of methods of birth control.
5. Increased contact of the Navajo with western society tends to increase the use of birth control.
6. Increased contact of the Navajo with western society tends to lower his fertility rate.
7. Increased contact of the Navajo with western society tends to decrease the desired family size.
CHAPTER III

METHODOLOGY

The sample

The sample for this study consisted of a group of selected Navajo Indians who were on the public assistance roles in San Juan County, Utah. The interviews were conducted among 225 recipient families, or slightly more than 42 percent of the total Navajo welfare cases in San Juan County as of May 1968.

The study was outlined to interview the head of the family. In some cases both male and female respondents were interviewed. Because the Navajo family is in a state of transition at the present time, there were as many females who were the head of the household as there were males. Traditionally the Navajo people have been a matrilineal group; however, this is breaking down to some extent, and many males are stepping into the position of family head. In cases where a male or husband was interviewed, the questions concerning fertility were asked with regard to his wife.

Schedule

The schedule was prepared to secure responses concerning fertility, preferences in family size, and related variables. A portion of the total schedule was used to test the hypotheses which

\[46\] Kluckhohn and Leighton, p. 100.
were presented earlier.\textsuperscript{47}

Much consideration was given to the presentation of the schedule to the respondent because questions on fertility are of a personal nature. The Navajo are an apprehensive people, and in order to interview them on such a personal basis, the Navajo respondent had to be fully informed as to the extent of and the reason for such a study.

The majority of the persons responding to the schedule could not speak English. Interpreters were therefore used to secure many of the interviews. As an aid to the Navajo interpreters, the schedule had been translated into Navajo by the writer to keep them reminded as to the meaning of the questions.\textsuperscript{48} The translation was not a complete interpretation of the schedule, but it did help in keeping the questions and responses uniform. The schedule was pre-tested in March 1968, and several revisions were made before the survey. The Navajos with whom the schedule was tested responded openly and were very cooperative. Introduction to the study and its purpose helped to gain rapport with the group.

Areas covered

Of the 14 trading post areas listed, the survey was conducted in 12, and a number of interviews were secured from each. The 14 area divisions are those which are recognized as case areas by the

\textsuperscript{47}The schedule can be found in its entirety in the Appendix.

\textsuperscript{48}Translation of parts of the schedule can be found in the Appendix.
San Juan County Welfare Department and are as follows: Navajo Mountain, Goulding, Oljeto, Mexican Water, Mexican Hat, Bluff, Tes-nos-pos, Montezuma Creek, Hatch, Ismay, Aneth, Blanding, Monticello, and "other areas." The areas not worked with were Tes-nos-pos and Monticello. The areas were covered systematically on two different occasions. The first interviews were done in May of 1968 and the second took place in June of 1968.

Field survey

In most cases interviews were conducted in the Navajo language. The survey was conducted by 10 persons, 9 of whom were majors or graduate students in the Department of Sociology, Social Work and Anthropology at Utah State University, Logan, Utah; the other was a staff member. Two students were bilingual and carried major responsibilities in interviewing. Welfare recipients and welfare workers employed by San Juan County also helped with interpreting and with locating the welfare recipients.

The research team and two Navajo interpreters camped in each area for a time while interviewing as many people as possible before moving on to another area. Interviewers were also placed at the trading posts, welfare office, and other places where the respondents might be found conducting their normal daily duties. A great deal of time was devoted to the instruction of interviewers with regard to Navajo beliefs and traditions so there would be no embarrassment

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Mention is made of each individual who participated in the study in the Acknowledgments.
stemming from the team misunderstanding Navajo customs and values.

In the interview a canvass method was used, and the interviews generally proceeded very smoothly, particularly due to the efficient interpreting done by those who assisted.

It was impossible to cover completely all welfare recipients as had been planned. Some recipients were away working as farm laborers in parts of Utah, Idaho and Colorado. Others were enroute to their places of summer residence to herd sheep. During the time in which the field survey was under way, many Navajo activities and ceremonies were being planned and carried out. Some people were attending these affairs and were not available for interviews. Another factor which reduced the number of respondents was that some persons who were listed on the welfare role were not, in fact, on welfare at the time of the interviews.

After completion of the schedules, the data were checked for completeness. Precoding of the schedules greatly reduced the chance of error in recording the respondent's answers. (The coding instruction can be found in the Appendix.) The data were cross tabulated by the 360/44 computer. Because of the nature of the sample and the nature of the study, means and percents were used for the analysis.

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50 The program was provided by Dr. Rex Hurst, Chairman of the Department of Applied Statistics and Computer Science, Utah State University.
CHAPTER IV
ANALYSIS OF DATA

Family size

As mentioned before, the Navajo population was growing at a faster rate than the United States population as a whole. The rate of population growth for the Navajo was estimated to be about 2 percent per year (one of the lowest rates estimated) as compared with a 1.1 percent increase for the total Indian population and a mean of 0.9 percent per year for the total population of the United States. \(^{51}\)

To estimate the present level of fertility of the sample population, the question "How many children have ever been born?" was asked. This would include every birth, including those children who died. As Table 1 indicates, the Navajos studied had a very high total fertility rate or number of children ever born. The greatest percent of the respondents indicated that the number of children ever born were six, eight, and ten children. Only 4.2 percent of the respondents had five or less children ever born to them.

The desired number of children are those children which the respondents would like to have. The point of reference here would be the respondents themselves. It is their feeling that such a number would be the desired number of children for them under their own personal situations. The data on the number of children desired

\(^{51}\)Kluckhohn and Leighton, p. 57.
Table 1. Number of children ever born, number of children desired, ideal size of family and ideal size of family for Navajo recipients of public welfare assistance in San Juan County, Utah. 1968

<table>
<thead>
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<th>3</th>
<th>4</th>
<th>5</th>
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<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>16+</th>
<th>NA</th>
<th>DK</th>
<th>Total</th>
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</thead>
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<td>13</td>
<td>15</td>
<td>19</td>
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<td>19</td>
<td>17</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>Percent</td>
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<td>7.1</td>
<td>5.8</td>
<td>6.7</td>
<td>8.5</td>
<td>9.8</td>
<td>9.8</td>
<td>3.6</td>
<td>8.5</td>
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<td>.4</td>
<td>.8</td>
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<td>.4</td>
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<th>16+</th>
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<td>4</td>
<td>5</td>
<td>12</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>14</td>
<td>23</td>
<td>225</td>
<td></td>
</tr>
<tr>
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<td>1.8</td>
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<td>12.0</td>
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<td>6.2</td>
<td>10.2</td>
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<th>10</th>
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<th>13</th>
<th>14</th>
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<th>16</th>
<th>16+</th>
<th>NA</th>
<th>DK</th>
<th>Total</th>
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<tbody>
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<td></td>
<td></td>
</tr>
<tr>
<td>Percent</td>
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<td>.4</td>
<td>.9</td>
<td>5.8</td>
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<td>10.2</td>
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<td>8.9</td>
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<td>.4</td>
<td>6.7</td>
<td>99.9%</td>
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<table>
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<th>Number of children in ideal size family for Navajos</th>
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<th>3</th>
<th>4</th>
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<th>16+</th>
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<th>DK</th>
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<td>Count (N)</td>
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<td>11</td>
<td>11</td>
<td>27</td>
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<td>1</td>
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<td>19</td>
<td>225</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>.4</td>
<td>2.7</td>
<td>5.3</td>
<td>4.9</td>
<td>4.9</td>
<td>12.0</td>
<td>4.0</td>
<td>28.9</td>
<td>5.3</td>
<td>13.3</td>
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<td>1.3</td>
<td>.4</td>
<td>7.6</td>
<td>8.5</td>
<td>99.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a* No answer  
*b* Don't know
by the selected group of Navajo are indicated in Table 1. As can be seen from the table, about 12.0 percent of the respondents desired six children; 10.7 percent desired seven children; 13.3 percent desired eight children, and 10.2 percent desired ten children as their desired family size. Only 20.4 percent of the respondents indicated that they desired less than five children. About two-thirds of the respondents desired the family size of five to ten children.

The ideal size family is that number which the respondents arrive at independently of their own present situation. Such a question would force the individual to think about how many children he would have if he had to do it all over again under ideal conditions. According to the data presented in Table 1, the greatest number of respondents suggested that six, eight, and ten children would be the most ideal. Of the total Navajo group surveyed, 16.0 percent reported ten children as the ideal size. This was the largest percent indicated in any of these groups. Only 17.6 percent of the respondents gave five or fewer children as being most ideal, while more than 82 percent gave six or more children as the ideal size of family.

This study has asked one additional question concerning family size. Past studies have only dealt with children ever born, children desired, and the ideal family size. Because of the nature of the group chosen for this study, and because the Navajo people are

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52 Hill, Stycos, and Back, p. 71.
in many ways living by standards other than their white neighbors, the following question was asked: "What is the best size family for the Navajo people to have?" In other words, what number of children would be best for the Navajo people? The idea here is to see if there was a difference between the number of children desired by the respondent and the number best for a Navajo couple. A difference between the desired and the best for Navajo would indicate the degree of acceptance or rejection of a traditionally defined goal. Table 1 gives the responses to this inquiry. The data indicate a family of eight, ten, and twelve children to be the best Navajo family size. A total of only 8.4 percent said that a Navajo should have five or fewer children. The majority of the respondents gave six or more children as the number that a Navajo should have. Of those who responded, 28.9 percent gave ten children as being best for a Navajo. If this concept of the best family size for Navajo is accepted by the majority of the Navajos, it may be one important consideration in explaining the high rate of increase for the Navajo and the attitude toward a large family.

Based on the data presented, it is possible to examine systematically several of the hypotheses presented earlier in this study.

The first hypothesis was that the Navajo have a positive attitude toward a large family. According to Table 1, the data support this hypothesis. The larger percent of the respondents reported that over five children would be the desired family size and the ideal. The best Navajo family consists of from eight to twelve
children. Table 2 further substantiates the hypothesis. The mean number of children ever born to the group is 6.61. The desired family size has a mean of 6.14, the ideal is 7.06, and the mean number for the best Navajo family is 7.73. A study by Ansley Coale has pointed out that most underdeveloped countries have a mean number of children ever born at the end of the fertile period (45 to 49 years) of 5.0 for total women. This shows the Navajo group to be about four children above the mean for those in less developed areas. Total fertility rate or the number of children ever born of the respondents aged 45 to 49 years was 9.16 children. It should be pointed out here that many of the ever married respondents from whom the 6.61 total mean was derived have not yet completed their childbearing years. Consideration of the mean number of children ever born to the Navajo group and the mean presented by Coale reveals a strong preference toward a very large family by the Navajo. Those respondents who indicated a desire for more than five children were asked, "Why do you want more than five children?" Of the entire group interviewed, 43.1 percent said that children are a good thing to have, and 33.8 percent said that the reason for wanting more than five is that children will help parents when parents are old. Only 20.4 percent of the respondents desired fewer than five children.

By examining age with regard to children ever born, it can be seen from the data presented in Table 2 that as age increases so does the number of children. This trend indicates that for Navajo

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53 Coale, p. 46.
Table 2. Mean number of children ever-born, number of children desired, the ideal family size, and the ideal size of family for Navajo by age of Navajo women who are recipients of public welfare assistance in San Juan County, Utah, 1968

<table>
<thead>
<tr>
<th>Present age of respondent</th>
<th>Children ever-born</th>
<th>Children desired</th>
<th>Children in ideal family</th>
<th>Children in best Navajo family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>15-19</td>
<td>6</td>
<td>1.00</td>
<td>6</td>
<td>4.00</td>
</tr>
<tr>
<td>20-24</td>
<td>29</td>
<td>2.62</td>
<td>29</td>
<td>4.34</td>
</tr>
<tr>
<td>25-29</td>
<td>21</td>
<td>4.00</td>
<td>21</td>
<td>6.42</td>
</tr>
<tr>
<td>30-34</td>
<td>22</td>
<td>6.54</td>
<td>22</td>
<td>6.45</td>
</tr>
<tr>
<td>35-39</td>
<td>35</td>
<td>7.37</td>
<td>35</td>
<td>5.82</td>
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<tr>
<td>40-44</td>
<td>32</td>
<td>7.93</td>
<td>32</td>
<td>7.25</td>
</tr>
<tr>
<td>45-49</td>
<td>31</td>
<td>9.16</td>
<td>31</td>
<td>7.50</td>
</tr>
<tr>
<td>50+</td>
<td>49</td>
<td>7.97</td>
<td>49</td>
<td>6.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>225</td>
<td>6.61</td>
<td>225</td>
<td>6.14</td>
</tr>
</tbody>
</table>
women, child bearing is only terminated by natural processes rather than by voluntary procedures. Those Navajo women age 45 to 49, the period for completing fertility, have a mean of 9.16 children ever born to them.

Concerning the number of children desired, the group studied had a mean of 6.14 children. Fertility studies conducted among white Americans have indicated their desired mean number of children to be two to four. Comparing the mean of 6.14 children desired by the Navajos with that of white Americans, it can be seen that the desired family size by the Navajos was larger than that of white Americans by about two to three children.

Table 2 also indicates that those respondents under the age of 25 desired about four children while those over 40 years of age consider seven children to be most desirable. Persons between the ages of 25 years and 40 years gave a desired family size of about six children. It is clear that with the increase in age, the desired number of children in Navajo families increases also. Perhaps those younger respondents have had greater contact with western society and have accepted some values concerning family size which caused a lower preference to be given.

The response to the question concerning ideal family size also lends information about the Navajo's positive attitude toward a large family. Table 2 gives the mean number of children in the respondents' ideal size family as being 7.06 children. Here again

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54 Freedman, p. 39.
it is shown that those persons above 35 years of age gave the ideal family size a larger number of children than did those below age 35 years. The mean of 7.06 children is ideal among the Navajo is very high compared with a study conducted by Judith Blake in 1966. Her study points out that the mean number of children in the ideal size family of white Americans was from 3.6 children at the high to 2.7 as the low. 55

The family size considered best by Navajos for Navajos was 7.73 children. This mean is at least 1.5 children above any of the other four categories measured. This difference in best family size for Navajos and the desired family size could indicate that the members of the group studied are drifting away from the traditional norm. The respondents in this study indicated that fewer children are desired than what is traditionally suggested as best for Navajos as a whole. The mean number of children best for Navajos was never below 6.33 regardless of the age of the respondent. However, the older respondents reported seven, eight, and nine children as the best for the Navajo, while the younger ones reported six and seven as being best. The ideal family and the best Navajo family had similar means in all age groups; they differed by only about one child, indicating little drifting from the traditional norm.

Education

Hypothesis number two stated that the amount of education or years of school completed by the group may have some bearing on

55 Blake, p. 157.
their fertility. It was hypothesized that with increasing education, the desired, ideal and best Navajo family would decrease in size. Our data given in Table 3 supported this hypothesis. Those Navajos who have had no schooling desired 1.5 more children than those who have completed high school. In other words, those who have completed high school desired 26 percent fewer children than did those who have had no schooling.

In connection with education and the ideal size family, an inverse relationship was found in our data. Those who had completed high school reported 17 percent fewer children as the ideal size as compared to those who had no schooling. A study by Freedman, Whelpton, and Campbell also reported the same trend of a higher level of schooling and a smaller desired and ideal family size.56 It should be noted that 60.4 percent of the Navajo group selected had no schooling.

More children were ever born to those persons who had no schooling as compared to those who had completed high school. Those respondents who had completed high school had 42 percent fewer children than those who have never been to school. A suggested reason might be that those who have attended high school through completion have postponed marriage and have, therefore, not started their families as early. Those who have completed high school have 17 percent fewer children as the ideal family size than do those who have had no schooling.

<table>
<thead>
<tr>
<th>Years of schooling completed</th>
<th>Children ever-born N</th>
<th>Mean</th>
<th>Children desired N</th>
<th>Mean</th>
<th>Children in ideal family N</th>
<th>Mean</th>
<th>Children in best Navajo family N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>136</td>
<td>7.16</td>
<td>136</td>
<td>6.46</td>
<td>136</td>
<td>7.34</td>
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<td>1-7</td>
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<td>2</td>
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<td>3.00</td>
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<td>6.14</td>
<td>225</td>
<td>7.06</td>
<td>225</td>
<td>7.74</td>
</tr>
</tbody>
</table>

The values attached to the size of family best for the Navajo were not altered greatly by schooling. The difference between those with high school education and those without was only about one child. This seems to suggest some consensus as to what the best Navajo family size should be. Those persons who had completed high school indicated 13 percent fewer children in the best family size for Navajos when compared with those who had no schooling.

**Birth control--knowledge and use**

The third hypothesis was formulated with regard to birth control among the Navajo group selected and is stated as follows: The Navajo have little understanding or knowledge of modern chemical birth
control methods. If this hypothesis is affirmative, it may have some bearing on the large number of children among Navajo families. In connection with birth control methods, this study has investigated a form of oral contraception which is prepared by the Navajo people to prevent fertility. This method of contraception will be referred to as the traditional method and is to be discussed further in a subsequent paragraph.

Analysis of the data presented in Table 4 substantiates the hypothesis but is not entirely conclusive. There were 16.9 percent of the respondents who had knowledge of any modern means of birth control; 14.6 percent indicated that they knew of the traditional method; however, 40.0 percent said they had heard of no method of birth control whether it be modern or traditional. The percent who reported that they had knowledge of both methods was 18.2. By adding the 18.2 percent who knew both methods to the percentages given for knowledge of traditional and modern, a more accurate account is presented. There were 35.1 percent who had knowledge of modern methods of birth control and 32.9 percent who knew of the traditional method.

The traditional method involves an oral medication administered in liquid form by the local medicine man or shaman. This liquid is given only to those females who should not have children for reasons of health or if the female's life would be endangered by a future childbirth. The preparation is said to prevent ovulation, and this practice of birth control is used only in rare and extreme cases due to the potency of the preparation. There is some fear that this method can terminate fertility altogether, making any future
Table 4. Number and percent having knowledge of birth control methods among selected Navajo women who are recipients of public welfare assistance in San Juan County, Utah, 1968

<table>
<thead>
<tr>
<th>Knowledge of contraception</th>
<th>Traditional only</th>
<th>Modern only</th>
<th>Both</th>
<th>None</th>
<th>No answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count (N)</td>
<td>33</td>
<td>38</td>
<td>41</td>
<td>90</td>
<td>23</td>
<td>225</td>
</tr>
<tr>
<td>Percent</td>
<td>14.6</td>
<td>16.9</td>
<td>18.2</td>
<td>40.0</td>
<td>10.2</td>
<td>99.9</td>
</tr>
</tbody>
</table>

\(^{a}\) The number who had knowledge of both methods has been added.

\(^{b}\) The percent who had knowledge of both methods has been added.

conception impossible.\(^{57}\)

From the percentages given above, it can be concluded that the Navajo group studied had some understanding of modern mechanical and chemical methods of birth control. It is also shown that the selected group knew of the traditional method to the same degree that they knew of the modern. However, a greater percent of the respondents reported no knowledge of either method.

Data dealing with the use of contraception are given in Table 5. The data indicate that 12.4 percent of the respondents had actually tried modern methods of birth control, 3.1 percent of them had used the traditional preparation, and only one person, less than 1 percent, had tried both methods. Adding the 0.4 percent for those who had used both methods would not alter the above result significantly. The significant item is that 71.6 percent indicated that

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\(^{57}\) Given from personal communication with Navajo individuals other than in structured interviews.
Table 5. Number and percent having tried birth control methods among selected Navajo women who are recipients of public welfare assistance in San Juan County, Utah, 1968

<table>
<thead>
<tr>
<th>Tried contraception</th>
<th>Traditional only</th>
<th>Modern only</th>
<th>Both</th>
<th>None</th>
<th>No answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count (N)</td>
<td>7</td>
<td>8&lt;sup&gt;a&lt;/sup&gt;</td>
<td>28</td>
<td>29&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1</td>
<td>161</td>
</tr>
<tr>
<td>Percent</td>
<td>3.1</td>
<td>3.6&lt;sup&gt;b&lt;/sup&gt;</td>
<td>12.4</td>
<td>.4</td>
<td>71.4</td>
<td>12.4</td>
</tr>
</tbody>
</table>

<sup>a</sup>The number who had tried both methods of birth control has been added.
<sup>b</sup>The percent who had tried both methods of birth control has been added.

they had tried no method of birth control.

In comparing the 35.1 percent who knew of modern methods and the 12.9 percent who have tried modern methods, we find that only 36.7 percent of the respondents who have knowledge of modern birth control have elected to use it. An even greater variance exists when comparing the 32.9 percent who have knowledge of the traditional method; only 10.8 percent had chosen to use it. This low percentage may be explained by the fear that the Navajo people have of the possible result of using the traditional preparation.<sup>58</sup>

As has been previously pointed out, a large percentage of the group (71.6 percent) have not used contraception. One very probable reason may be that with the desired and ideal family sizes being so

<sup>58</sup>The percents in this paragraph were taken from Tables 4 and 5 where the percent indicated for those respondents knowing both methods and trying both methods was added to those percents indicated for those just knowing the traditional or modern method.
high, they will not curb fertility by contraceptive means until their aspirations for family size are met. Also, many Navajo people will take all of the children that might come, with no consideration for preventing birth because of too many children.  

Consideration of age with regard to knowledge of contraception is shown in Table 6 which indicates that, in general, persons 35 to 49 years of age knew less about modern methods than did those below 35 years of age. Of those under 35, 47.4 percent had knowledge of modern methods. Of those 35 to 49 years of age, 34.2 percent knew of modern methods, and only 18.4 percent of the group above age 50 had such knowledge. When considering the traditional method, an opposite trend is observed. Of those under 35 years of age, 15.1 percent knew of the traditional method compared to 45.4 percent of those aged 35 to 49 years who knew of the method. About 40 percent of those above 50 years of age had knowledge of the traditional method.

**Contact with western society**

It was postulated in the fourth hypothesis that increased contact with western society will increase the knowledge of modern birth control methods. The data presented in Table 7 support this hypothesis. Of those respondents who had high contact with western society, 24.6 percent had knowledge of modern methods of birth control. Of the low contact respondents, only 9.2 percent had knowledge

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59 Given from personal communication with Navajo individuals other than in structured interviews.
Table 6. Knowledge of contraception by age among selected Navajo women who are recipients of public welfare assistance in San Juan County, Utah, 1968

<table>
<thead>
<tr>
<th>Present age of respondent</th>
<th>Traditional only</th>
<th>Modern only</th>
<th>Both</th>
<th>None</th>
<th>No answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>-34</td>
<td>15.1</td>
<td>5</td>
<td>47.4</td>
<td>18</td>
<td>24.4</td>
<td>10</td>
</tr>
<tr>
<td>35-39</td>
<td>45.4</td>
<td>15</td>
<td>34.3</td>
<td>13</td>
<td>58.5</td>
<td>24</td>
</tr>
<tr>
<td>50+</td>
<td>39.4</td>
<td>13</td>
<td>18.4</td>
<td>7</td>
<td>17.1</td>
<td>7</td>
</tr>
<tr>
<td>Don't know</td>
<td>4.3</td>
<td>1</td>
<td>.4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>99.9</td>
<td>33</td>
<td>100.0</td>
<td>38</td>
<td>100.0</td>
<td>41</td>
</tr>
</tbody>
</table>
Table 7. Knowledge of contraception by degree of contact with western society among selected Navajo women who are recipients of public welfare assistance in San Juan County, Utah, 1968

<table>
<thead>
<tr>
<th>Knowledge of contraception</th>
<th>Contact with western society&lt;sup&gt;a&lt;/sup&gt;</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>None</td>
<td>Total</td>
</tr>
<tr>
<td>Traditional only</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>7</td>
<td>10.7</td>
<td>4</td>
<td>11.7</td>
<td>3</td>
<td>27.3</td>
</tr>
<tr>
<td>Modern only</td>
<td>16</td>
<td>24.6</td>
<td>7</td>
<td>20.5</td>
<td>1</td>
</tr>
<tr>
<td>Both</td>
<td>12</td>
<td>18.5</td>
<td>9</td>
<td>26.5</td>
<td>2</td>
</tr>
<tr>
<td>None</td>
<td>23</td>
<td>35.4</td>
<td>9</td>
<td>26.5</td>
<td>4</td>
</tr>
<tr>
<td>No answer</td>
<td>7</td>
<td>10.7</td>
<td>5</td>
<td>14.7</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>65</td>
<td>99.9</td>
<td>34</td>
<td>99.9</td>
<td>11</td>
</tr>
</tbody>
</table>

<sup>a</sup> Contact with western society was derived from the question, "Do you know any person who is not Navajo?" If yes, "How often do you visit them?" High contact people were those who visited once a week to several times a week. Medium contact respondents were those who visited once every month to a few times a month. Low contact respondents were those who visited once every two months to less than once a year. None represents those persons who do not know anyone who is not Navajo and who do not visit people other than Navajo.
of such birth control methods. Again, the opposite is found when considering the traditional method. Those having high contact with western society had less knowledge of the traditional method than did those having low contact with western society. Of those with high contact, 10.7 percent knew of the traditional method while 27.3 percent of the low contact respondents knew of that method. The range from 9 percent for low contact people to 24.6 percent for high contact people regarding knowledge of modern birth control is a strong indication that the greater the contact with western society the greater the knowledge of modern birth control methods.

The fifth hypothesis also deals with increased contact with western society. This hypothesis stated that increased contact will increase the use of modern methods of birth control. Table 8 indicates that a greater percent of those who had high contact had used modern methods of birth control than have those with low contact. Of the respondents with high contact, 15.4 percent tried the modern methods compared to 9 percent of the low contact respondents who had tried it. Although the data support the hypothesis, fewer people are actually electing to try contraception than express knowledge of it.

When the number of respondents who had used traditional methods and had also had high contact with western society is calculated, a percent of 3.1 is found. Of the low contact respondents, 27.3 percent had tried the traditional method. Of those respondents who have had no contact, 1.7 percent used the traditional method, and 9.6 percent had tried the modern. The group of persons who had no contact and who had never tried contraception of any kind numbered
Table 8. Use of contraception by degree of contact with western society among selected Navajo women who are recipients of public welfare assistance in San Juan County, Utah, 1968

<table>
<thead>
<tr>
<th>Use of contraception</th>
<th>Contact with western society&lt;sup&gt;a&lt;/sup&gt;</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>None</td>
<td>Total</td>
</tr>
<tr>
<td>Traditional only</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>2</td>
<td>3.7</td>
<td></td>
<td>3</td>
<td>27.3</td>
<td>2</td>
</tr>
<tr>
<td>Modern only</td>
<td>10</td>
<td>15.4</td>
<td>6</td>
<td>17.6</td>
<td>1</td>
</tr>
<tr>
<td>Both</td>
<td>1</td>
<td>.9</td>
<td></td>
<td>.4</td>
<td>1</td>
</tr>
<tr>
<td>None</td>
<td>43</td>
<td>66.1</td>
<td>22</td>
<td>64.7</td>
<td>7</td>
</tr>
<tr>
<td>No answer</td>
<td>10</td>
<td>15.4</td>
<td>6</td>
<td>17.6</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>65</td>
<td>100.0</td>
<td>34</td>
<td>99.9</td>
<td>11</td>
</tr>
</tbody>
</table>

<sup>a</sup>Contact with western society was derived from the question, "Do you know any person who is not Navajo?" If yes, "How often do you visit them?" The high contact people were those who visited once a week to several times a week. Medium contact respondents were those who visited once every month to a few times a month. Low contact respondents were those who visited once every two months to less than once a year. None represents those persons who do not know anyone who is not Navajo and who do not visit people other than Navajo.
77.3 percent of the total respondents. (See tables for explanation of categories concerning contact with western society.)

Hypothesis six stated that increased contact of the Navajo with western society tends to lower the fertility rate. The data presented in Table 9 support this hypothesis. The respondents who had high contact with western society showed a lower mean for children ever born (fertility) than did those with low contact. The mean children ever born for those with high contact was 5.03; for those with low contact the mean was 7.36. For those persons with no contact at all, the mean was 7.41, about the same as for those with low contact.

Years of schooling is also a measure of contact with western society. The education which the Navajo is receiving is in keeping with western middle class society values. From Table 2, one can see a lower mean fertility for those with 12 years of schooling than for those with no schooling; the difference is about three children. This indicates that those who had completed high school had 42 percent fewer children ever born than did those who had no schooling. One contributing factor might be that those who remain in school marry later and start their families later than who do not attend.

The information in Table 9 indicates that as the respondents have greater contact with western society, the mean number of children desired is slightly decreased. This helps to substantiate hypothesis number seven which suggests that increased contact with western society tends to decrease the desired family size. This is, however, not conclusive because the desired family size among high
Table 9. Mean number of children ever-born and number of children desired according to the degree of contact with western society among selected Navajo women who are recipients of public welfare assistance in San Juan County, Utah, 1968

<table>
<thead>
<tr>
<th>Contact with western society</th>
<th>Number of children ever-born</th>
<th>Number of children desired</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>High</td>
<td>65</td>
<td>5.03</td>
</tr>
<tr>
<td>Medium</td>
<td>34</td>
<td>6.73</td>
</tr>
<tr>
<td>Low</td>
<td>11</td>
<td>7.36</td>
</tr>
<tr>
<td>None</td>
<td>115</td>
<td>7.41</td>
</tr>
<tr>
<td>TOTAL</td>
<td>225</td>
<td>6.62</td>
</tr>
</tbody>
</table>

a Contact with western society was derived from the question, "Do you know any person who is not Navajo?" If yes, "How often do you visit them?" High contact people were those who visited once a week to several times a week. Medium contact respondents were those who visited once every month to a few times a month. Low contact respondents were those who visited once every two months, to less than once a year. None represents those persons who do not know anyone who is not Navajo and do not visit people other than Navajo.
contact respondents was only one child smaller compared with respondents with low contact. The difference between high and low contact means is not a great one; however, the desired family size was lower among those with greater contact with western society. Those persons with high contact had 15 percent fewer desired children than did those with low contact.

Knowledge of English is an additional determinant of the degree to which Navajos have had contact with western society. Table 10 indicates that for those respondents who could read, write, speak, and understand English, the mean number of children ever born (fertility) was 4.51. Comparing this mean to the mean of 7.39 among those respondents who did not know English at all shows an additional support for the sixth hypothesis. It may also be pointed out that those persons who could read, write, speak, and understand English had 39 percent fewer children ever born than those who could not speak English at all. A probable reason for this lowering of fertility due to contact with western society could be the fact that as one completes school and learns English, he has been introduced to the thinking and values of western society. About 20 percent of the total respondents indicated ability to read, write, speak, and understand the English language, compared to 52.5 percent who expressed no such knowledge.

Knowledge of English also has bearing on the desired family size. The data presented in Table 10 show that those respondents who could read, write, speak, and understand English desired 7 percent fewer children than did those who had no knowledge of English.
Table 10. Mean number of children ever-born and number of children desired according to knowledge of English among selected Navajo women who are recipients of public welfare assistance in San Juan County, Utah, 1968

<table>
<thead>
<tr>
<th>Knowledge of English</th>
<th>Number of children ever-born</th>
<th>Number of children desired</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>Read, write, speak, and understand</td>
<td>45</td>
<td>4.15</td>
</tr>
<tr>
<td>Read, speak and understand</td>
<td>7</td>
<td>5.00</td>
</tr>
<tr>
<td>Speak and understand</td>
<td>18</td>
<td>6.67</td>
</tr>
<tr>
<td>Some understanding</td>
<td>36</td>
<td>6.97</td>
</tr>
<tr>
<td>No knowledge of English</td>
<td>119</td>
<td>7.39</td>
</tr>
<tr>
<td>TOTAL</td>
<td>225</td>
<td>6.62</td>
</tr>
</tbody>
</table>
The mean number of children for those knowing English was 5.93 children as compared to 6.34 children for those not knowing English at all. As can be seen, the difference is only about one-half child.

Contact with western society, years of schooling, and knowledge of English did not affect the respondents' desired family size as much as they did actual fertility. However, the effect is recognizable.

In a study conducted by Ronald B. Johnson, it was suggested that Navajo high school students would want a larger ideal family than their white contemporaries. This was proven to be false. The Navajo students preferred a smaller ideal family size. \(^6^0\) This would seem to lend additional support to the idea that through educational programs the Navajo's traditional feelings concerning family size are becoming parallel to western society values.

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CHAPTER V
SUMMARY AND CONCLUSIONS

This thesis reports some results of a study on fertility and family size conducted in San Juan County, Utah, in May and June of 1968. The respondents were Navajo Indians who were receiving public welfare assistance. Out of 536 individuals who were receiving assistance, 225 or 42 percent were interviewed. The study was a pilot study attempting to secure from the selected group their personal views on fertility and family size. There has been no previous attempt to secure data directly from the Navajo people with regard to their present fertility and their desired and ideal family size.

The objectives of the study were: (1) to study the level and age patterns of fertility of a group of selected Navajo Indians, (2) to investigate the factors which might affect the fertility, desired family size, and ideal family size, (3) to study the knowledge of and the extent of the use of birth control methods among the selected group, (4) to compare the findings of previous fertility studies dealing with other groups to those found among the selected group of Navajos.

According to our data, all seven hypotheses have been supported, although the findings were not conclusive.

Hypothesis one. The Navajo have a positive attitude toward a large family. The data supported this hypothesis. The selected group reported a desired family size of 6.14 and an ideal family
size of 7.06, which is two to three children above the other white and non-white groups with which they were compared. Those respondents who had completed their child-bearing years (45 to 49) had a mean of 9.2 children ever born. The mean number of children ever born was reported to be 5.0 for less developed areas of the world. This places the selected Navajo at four children above the ever born for less developed areas. The mean number of children ever born to the total group was 6.61. In no case did the mean ever born, ideal, desired, or best Navajo family sizes drop below six children.

Hypothesis two. The increase in years of school completed will decrease the desired, ideal, and best Navajo size families. The data support this hypothesis. Those who had completed high school had 26 percent fewer children desired than those who had no schooling; they also had 17 percent fewer children in their ideal family size compared to those who had no schooling. Concerning the best Navajo family size, those who had completed high school indicated 13 percent fewer children than those with no schooling.

Hypothesis three. The Navajo have little knowledge or understanding of modern mechanical and chemical methods of birth control. Analysis of the data presented substantiates the hypothesis but is not entirely conclusive. About 17 percent of the respondents had knowledge of modern means of birth control. Eighteen percent indicated they knew of both modern and traditional methods of birth control. Those who knew both methods were added to those who knew only modern. It was concluded that 35 percent of the Navajo group selected had knowledge of modern methods of birth control.
Hypothesis four. Increased contact with western society will increase the knowledge of modern birth control methods. The data support the hypothesis. Of those respondents who had high contact with western society, 24.6 percent had knowledge of modern birth control methods compared to 9.2 percent of the low contact respondents who had knowledge of the modern method.

Hypothesis five. Increased contact with western society will increase the use of modern methods of birth control. The data indicate that the hypothesis is true. About 16 percent of the respondents with high contact had used modern methods of birth control compared to 9 percent of the low contact people who had used it. Of the 79 who had knowledge of modern birth control methods, 29 had tried the method or about 37 percent.

Hypothesis six. Increased contact with western society tends to lower the fertility. The data presented support the hypothesis. The respondents who had high contact showed a mean for children ever born (fertility) of 5.03; those with low contact showed a mean for children ever born of 7.36. Those having low contact with western society had a higher fertility by about three children than did those with high contact. Considering years of schooling completed as a determinant of the amount of contact with western society, it was found that those respondents who have completed high school had 42 percent fewer children than those with no schooling. This would indicate a lower fertility for those with greater contact with western society.

Hypothesis seven. Increased contact of the Navajo with western
society tends to decrease the desired family size. The data tend to support the hypothesis; however, the trend toward decreasing the desired family size is slight. The difference between high contact (5.55) and low contact (6.55) means is one child. It was found that those persons with high contact desired 15 percent fewer children than those who had low contact.

Because of the size of the sample and the nature of the study itself, the findings are suggestive. The study was a pilot study and as such has demonstrated the possibility of a more extensive study among the total Navajo population.
LITERATURE CITED


APPENDIX
A DEMOGRAPHIC STUDY OF THE NAVAJO RECEPIENTS OF THE PUBLIC WELFARE ASSISTANCE PROGRAM IN SAN JUAN COUNTY, UTAH  
MAY, 1968  

Department of Sociology, Social Work, and Anthropology, Utah State University in cooperation with San Juan County Department of Public Welfare

Date ____________________________
Interviewer_______________________

1) Family Number __________________

2) Name __________________________ Census Number __________________

3) Case Number ____________________

4) Type of Assistance:
   1. AFDC  3. AFDC-FC  5. AD  7. GA
   2. AFDC-U  4. DAA  6. AB  8. MAO
   (If non-resident write NR after code number)

5) Type of Grant: (Living Arrangements):
   1. Renter  7. Children with self-supporting relatives
   2. Homeowner
   3. Recipients with self-supporting relatives with marginal incomes
   8. Step children
   9. Children of unmarried parents
   10. Restaurant meals
   11. Relatives
   12. Housekeeping services
   13. Home health aid
   14. Commodity only cases
   15. Food stamps only cases
   16. Other
   4. Recipients with self-supporting relative within excess of marginal
   5. Also, marginal income relatives and willing to provide help free
   6. Self-supporting relatives provide shelter

6) Status of Case:
   2. Added 5. Transferred In
   3. Closed 6. Transferred Out

7) Dates of Case Opened & Closed: Reasons for case

<table>
<thead>
<tr>
<th>Date of case opened</th>
<th>Date of case closed</th>
<th>being closed (state)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8) Address:
- 1. Navajo Mt. T.P.
- 2. Goulding T.P.
- 3. Oljeto T.P.
- 4. (Ariz.) Mexican Water T.P.
- 5. Mexican Hat T.P.
- 6. Bluff T.P.
- 7. (Ariz.) Tes-Nos-Pos T.P.
- 8. Montezuma T.P.
- 9. Hatch T.P.
- 10. Ismay T.P. (Colorado)
- 11. Aneth T.P.
- 12. Blanding
- 13. Monticello
- 14. Other areas

9) Sex:
- 1. Male
- 2. Female

10) Relationship to the Head of Household:
- 1. Self
- 2. Father
- 3. Mother
- 4. Wife
- 5. Husband
- 6. Grandfather
- 7. Grandmother
- 8. Brother
- 9. Sister
- 10. Other Relatives
- 11. Step-father
- 12. Step-mother
- 13. Son
- 14. Daughter
- 15. Step-son
- 16. Step-daughter
- 17. Grandson
- 18. Granddaughter
- 19. Others
- 20. Not known

11) Age:
- 1. 0
- 2. 1-4
- 3. 5-9
- 4. 10-14
- 5. 15-16
- 6. 17-18
- 7. 19
- 8. 20-21
- 9. 22-24
- 10. 25-29
- 11. 30-34
- 12. 35-39
- 13. 40-44
- 14. 45-49
- 15. 50-54
- 16. 55-59
- 17. 60-64
- 18. 65-69
- 19. 70-74
- 20. 75-79
- 21. 80-84
- 22. 85-89
- 23. 90-94
- 24. 95+
- 25. Not known

12) Religion:
- 1. Mormon
- 2. Catholic
- 3. Presbyterian
- 4. Episcopal
- 5. Lutheran
- 6. Baptist
- 7. Methodist
- 8. 7th Day Adventist
- 9. Navajo
- 10. Other
- 11. No religion
- 12. Not known

13) Race (Mixture):
- 1. Full blood
- 2. Navajo & other Indian
- 3. Navajo & other race
- 4. Don't know
- 5. Don't know

14) Years of Schooling: (ex. kindergarten)
- 1. None
- 2. 1-4
- 3. 5-7
- 4. 8
- 5. 9-11
- 6. 12
- 7. 13
- 8. 14
- 9. 15
- 10. 16
- 11. 16+
- 12. Not known

15) Knowledge of English:
- 1. Read, write, speak, and understand
- 2. Read, speak, and understand
- 3. Speak and understand
- 4. Understand
- 5. Do not know
16) Health problems:

17) Employment status:
   1. Self employed
   2. Family worker
   3. Employed (excluding self employed & family worker)
   4. Unemployed
   5. Not in labor force
   6. Not known

18) What is your occupation: (specify)

19) Do you have any special skills: (specify)

20) What types of employment have you held: (specify)

21) Years of Experience:
   1. One
   2. Two
   3. Three
   4. Four
   5. Five
   6. Six
   7. Seven
   8. Eight
   9. Nine
   10. Ten
   11. Eleven-fifteen
   12. Sixteen-twenty
   13. Twenty plus
   14. None
   15. Less than one
   16. Unknown

22) Income: (exclusive of income from Public Welfare Service)
   1. $0
   2. 1-24
   3. 25-49
   4. 50-74
   5. 75-99
   6. $100-149
   7. 150-199
   8. 200+
   9. Not known

23) Amount of Grant: (Monthly)
   1. $ 0-24
   2. 25-49
   3. 50-74
   4. 75-99
   5. 100-149
   6. 150-199
   7. 200-249
   8. 250-299
   9. 300-349
   10. 350+

24) Marital Status:
   1. Never married
   2. Married
   3. Divorced
   4. Separated
   5. Widowed
   6. Not known

25) Number of Marriages:
   1. One
   2. Two
   3. Three
   4. Four
   5. Five
   6. Not known
   7. Never married
26) Regarding your marriage:

<table>
<thead>
<tr>
<th></th>
<th>1st UNION</th>
<th>2nd UNION</th>
<th>3rd UNION</th>
<th>4th UNION</th>
<th>5th UNION</th>
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<tr>
<td><strong>A. Age when married</strong></td>
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<td>1. Man left her</td>
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<td>2. Woman left him</td>
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<td>3. Both</td>
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<tr>
<td><strong>E. Number of children ever born</strong></td>
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<tr>
<td><strong>F. Number of children surviving</strong></td>
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<td><strong>G. Number of children living with you</strong></td>
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</table>

27) Have you given any births during the year 1967?

1. Yes        2. No        If yes, give his (or her):

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<thead>
<tr>
<th>Name</th>
<th>Sex</th>
<th>Date of birth</th>
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<tr>
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<td>3.</td>
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</table>

28) Has any member of your family passed away during the year 1967?

1. Yes        2. No        If yes, what was his (or her):

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>Relationship to the head of the household</th>
<th>Date of Death</th>
<th>Place of Death</th>
<th>Cause of Death</th>
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<td>A. AGE</td>
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<tr>
<td>B. SEX</td>
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<td>C. OF HOUSEHOLD</td>
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<tr>
<td>J. IN SERVICE</td>
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<td>L. ON WELFARE GRANT</td>
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<td>P. THAN GRANT</td>
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<td>S. OFF RESERVATION</td>
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</tbody>
</table>
29) Where were you born? (Specify)
   1. Trading Post
   2. State

30) Were you born in a:
   1. Hogan
   2. Hospital
   3. Other

31) In your opinion more than what number is too many children:
   1. One
   2. Two
   3. Three
   4. Four
   5. Five
   6. Six
   7. Seven
   8. Eight
   9. Nine
   10. Ten
   11. Eleven
   12. Twelve+
   13. All that might come
   14. Undecided

32) Less than what number is few children:
   1. One
   2. Two
   3. Three
   4. Four
   5. Five
   6. Six
   7. Seven
   8. Eight
   9. Nine
   10. Ten
   11. Eleven
   12. Twelve+
   13. Undecided

33) How many children do you have?

34) How many children would you like to have?

35) How many children do you expect to have?

36) How many births have you had?

37) What do you think the ideal size family is?

38) What family size is considered best by the Navajos?

39) Have you ever heard of birth control methods? (ways to prevent birth)
   1. Yes
   2. No

40) If yes, what methods? (Specify)

41) Have you tried, or attempted to try any method of birth control?
   1. Yes
   2. No

42) Why do you want to have a large number of children? (those who have or want to have more than 5 children)
   1. Children are a good thing to have
   2. They earn money and help parents
   3. If we have more children government agencies and tribal councils pay us more
   4. Other reasons (specify)
   5. No reply
43) How many boys would you like to have?

44) How many girls would you like to have?

45) Why do you want to have more boys or girls?

46) Do you know any person who is not Navajo?
   1. Yes  2. No

47) How often do they visit you or you visit them?
   1. Several times a week  5. Once every two months
   2. Once a week  6. Once every six months
   3. Several times a month  7. Once a year
   4. Once a month  8. Less than once a year

48) Do you want to live on or off the reservation?
   1. On  2. Off
   Why?

49) Do you want your children to live off the reservation or on it?
   1. On  2. Off

50) Why?

51) Do you ever wish you could speak, read, and write English?
   1. Yes  2. No

52) Do you want your children to go to school?
   1. Yes  2. No

53) Do you want your children to learn English?
   1. Yes  2. No

54) If the white people are friendly to you and are willing to give you a job which enables you to enjoy a better life, would you take it?
   1. Yes  2. No  3. Don't know

55) Do you read a newspaper?
   1. Yes  2. No

56) Do you have a radio?
   1. Yes  2. No
57) Do you have a television?
   1. Yes  2. No

58) What is your means of transportation?
   1. Feet  3. Wagon  5. Truck
   2. Horse  4. Car

59) Are you satisfied with the present welfare assistance program?
   1. Yes  2. No

60) Do you have any other suggestions as to how the welfare workers can serve you better?

61) (If the recipient suggested more money) How much more money do you need a month?
A DEMOGRAPHIC STUDY OF THE NAVAJO RECIPIENTS OF THE PUBLIC WELFARE ASSISTANCE PROGRAM IN SAN JUAN COUNTY, UTAH
MAY, 1968

Department of Sociology, Social Work, and Anthropology, Utah State University in cooperation with San Juan County Department of Public Welfare

DATE____________________

INTERVIEWER__________________

1. Family Number____________________

2. Name_____________________________________

   Haash ye nilye____________________

3. Case Number____________________

4. Type of Assistance:____________________

5. Type of Grant: (Living Arrangements):____________________

6. Status of Case:____________________

7. Dates of Case Opened & Closed:____________________

8. Address:____________________

   Ha'dish Naghan____________________

9. Sex:____________________

10. Relationship to the head of household:____________________

    Haishy Nahalya: Sida____________________

11. Age____________________

    Diikwiish Nanahai____________________

12. Religion____________________

    Haat'ish ee neishoodii Nili____________________

13. Race (Mixture):____________________

    T'aiisii Dine Daadsi Nilii____________________

14. Years of Schooling: (ex. kindergarten)____________________

    Diikwiish iiniit'q nt'eeg____________________

15. Knowledge of English:____________________

    Da' Biligaana Bizaadish De'nts'a____________________

16. Health problems:____________________

    Da' Nitah ya' Ahoot'eeh____________________

17. Employment status:____________________

    Da' Nenalnish holo'____________________
18. What is your occupation: (Specify)
   Haat'ish Ninalnish iinisin

19. Do you have any special skills:
    (specify)
   Haat'ish Ninalnish Ayo' Nii Beehozin

20. What types of employment have you held: (specify)
    Haat'iish Ninalnish iinisin Nt'ee

21. Years of Experience:
    Diikwish Nahai nahnish neholo' Nt'ee

22. Income: (exclusive of income from P.W.S.)

23. Amount of Grant: (Monthly)

24. Marital Status:
    Da' Nichonish Hol

25. Number of Marriages:
    Diikwish Nichoni Niholo Nt'ee
31. In your opinion more than what number is many children?  
Diikwiišt Alichíí T’oohaiyoi ninísín

32. Less than what number is few children:  
Diikwiišt Alichíí doo biígha da Ni Ban-Tes-Kees

33. How many children do you now have:  
Diikwiišt Níalíchíí Níhólo K’ad

34. How many children would you like to have:  
Diikwiišt Níalíchíí Ninísín dooleéí

35. How many children do you expect to have:  
Diikwiišt Níalíchíí Haaslií Ninísín dooleéí

36. How many births have you had:  
Diikwiišt Neawéé T’aaltsa Nahaslií Nt’eé

37. What do you think the ideal size family is:  
Diikwiišt Alichíí go Ts’ide Ni’ ya’ at’eéh

38. What family size is considered best by the Navajos:  
Diikwiišt Alichíígii’ Dine bií ya’ at’eéh Ninísín

39. Have you ever heard of birth control methods: (Ways to prevent birth)  

40. If yes, what methods? (specify)  

41. Have you tried, or attempted to try, any method of birth control:  

42. Why do you want to have a large number of children: (those who have or want more than 5 children)  
HaaT’ish beeniiye Alichíí t’oohai yoí Ninísín dooleéí

43. How many boys would you like to have:  
Diikwiišt Ashkiíígii Ninísín Dooleéí
44. How many girls would you like to have: 
Diikwiish At'eedigii Ninisín dooleel

45. Why do you want to have more boys (or girls): 
Haat'íish Beenííye' Ashíiki T'oohai yoi Ninisín dooleel (At'eed) boy

46. Do you know any person who is not Navajo? 
Nik'isish holó doo dine nilíinií

47. How often do they visit you or you visit them?

48. Do you want to live on or off the reservation? 
Haadíish Haghan Ninísín dooleel Diné bikeya ji daadts'i Diné Bekeya Ti'oodi daadts'i

49. Do you want your children to live off or on the reservation? 
Naalchíini Sha Haadísh paghan ninísín dooleel

50. Why? 
Haat'íish Beenííye'

51. Do you ever wish you could speak, read, and write English? 
Da' Biligaana Bizaadish Diitsa's dooleel Ninísín

52. Do you want your children to go to school? 
Da' Naalchíini T'anItso Oltágo dooleel Ninísín ya'

53. Do you want your children to learn English? 
Naalchíini biligaana bizaad Dai Diits'a Dooleel Ninísín

54. If the white people are friendly to you and are willing to give you a job which enables you to enjoy a better life, would you take it? 
Nalnish Hológo Aa Da'Di'diit'Alish ...

55. Do you read a newspaper? 
Da' Naltsoos At'sezei YiniIta'

56. Do you have a radio? 
Da' Nilch'i Nalnee'i Niholo

57. Do you have a television? 
Da' Nilch'i Nalkid'i Holo
58. What is your means of transportation?
   Haisht'i eego Kintahgo nidida

59. Are you satisfied with the present welfare assistance program?
   Da' A' KaA Nal A woo A nish Yaateeh

60. Do you have any other suggestions as to how the welfare workers can serve you better?
A DEMOGRAPHIC STUDY OF THE NAVAJO RECIPIENTS OF THE PUBLIC WELFARE ASSISTANCE PROGRAM IN SAN JUAN COUNTY, UTAH MAY, 1968

Department of Sociology, Social Work, and Anthropology, Utah State University in cooperation with San Juan County Department of Public Welfare

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<td>(4-8) Name - Census Number</td>
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<td>(9-13) Case Number</td>
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<td>4. OAA</td>
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<td>5. 5 times</td>
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<tr>
<td></td>
<td>7. 2 - 3 years</td>
</tr>
<tr>
<td></td>
<td>8. 3 - 4 years</td>
</tr>
<tr>
<td></td>
<td>9. 4 - 5 years</td>
</tr>
<tr>
<td></td>
<td>10. 5 - 10 years</td>
</tr>
<tr>
<td></td>
<td>11. 10 - 15 years</td>
</tr>
<tr>
<td></td>
<td>12. 15 - 20 years</td>
</tr>
<tr>
<td></td>
<td>13. 20+</td>
</tr>
<tr>
<td>21</td>
<td>Use same code as above #3</td>
</tr>
<tr>
<td></td>
<td>1. Navajo Mt., T.P.</td>
</tr>
<tr>
<td></td>
<td>2. Goulding T.P.</td>
</tr>
<tr>
<td></td>
<td>3. Oljeto T.P.</td>
</tr>
<tr>
<td></td>
<td>4. (Ariz.) Mexican Water T.P.</td>
</tr>
<tr>
<td></td>
<td>5. Mexican Hat T.P.</td>
</tr>
<tr>
<td></td>
<td>6. Bluff T.P.</td>
</tr>
<tr>
<td></td>
<td>7. (Ariz.) Tex-Nos-Pos T.P.</td>
</tr>
<tr>
<td></td>
<td>8. Montezuma T.P.</td>
</tr>
<tr>
<td></td>
<td>9. Hatch T.P.</td>
</tr>
<tr>
<td></td>
<td>10. Ismay T.P. (Colorado)</td>
</tr>
<tr>
<td></td>
<td>11. Aneth T.P.</td>
</tr>
<tr>
<td></td>
<td>12. Blanding</td>
</tr>
<tr>
<td></td>
<td>13. Monticello</td>
</tr>
<tr>
<td></td>
<td>14. Other areas</td>
</tr>
<tr>
<td>25</td>
<td>Sex</td>
</tr>
<tr>
<td></td>
<td>1. Male</td>
</tr>
<tr>
<td></td>
<td>2. Female</td>
</tr>
<tr>
<td>26</td>
<td>Relationship to the Head of Household</td>
</tr>
<tr>
<td></td>
<td>1. Self</td>
</tr>
<tr>
<td></td>
<td>2. Father</td>
</tr>
<tr>
<td></td>
<td>3. Mother</td>
</tr>
<tr>
<td></td>
<td>4. Wife</td>
</tr>
<tr>
<td></td>
<td>5. Husband</td>
</tr>
<tr>
<td></td>
<td>6. Grandfather</td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
</tr>
</tbody>
</table>

### (28-29) Age

<table>
<thead>
<tr>
<th>1. 0</th>
<th>2. 1-4</th>
<th>3. 5-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. 10-14</td>
<td>5. 15-16</td>
<td>6. 17-18</td>
</tr>
<tr>
<td>7. 19</td>
<td>8. 20-21</td>
<td>9. 22-24</td>
</tr>
<tr>
<td>10. 25-29</td>
<td>11. 30-34</td>
<td>12. 35-39</td>
</tr>
<tr>
<td>13. 40-44</td>
<td>14. 45-49</td>
<td>15. 50-54</td>
</tr>
<tr>
<td>16. 55-59</td>
<td>17. 60-64</td>
<td>18. 65-69</td>
</tr>
<tr>
<td>19. 70-74</td>
<td>20. 75-79</td>
<td>21. 80-84</td>
</tr>
<tr>
<td>22. 85-89</td>
<td>23. 90-94</td>
<td>24. 95+</td>
</tr>
<tr>
<td>25. Not known</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### (30-31) Religion

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Methodist</td>
<td>8. 7th Day Adventist</td>
<td></td>
</tr>
</tbody>
</table>
| (32) Race (Mixture) | 1. Full blood  
|                   | 2. Navajo and other Indian  
|                   | 3. Navajo and other race  
|                   | 4. Don't know  
| (33-34) Years of Schooling (ex. kindergarten) | 1. None  
|                   | 2. 1-4  
|                   | 3. 5-7  
|                   | 4. 8  
|                   | 5. 9-11  
|                   | 6. 12  
|                   | 7. 13  
|                   | 8. 14  
|                   | 9. 15  
|                   | 10. 16  
|                   | 11. 16+  
|                   | 12. Not known  
| (35) Knowledge of English | 1. Read, write, speak, and understand  
|                   | 2. Read, speak, and understand  
|                   | 3. Speak and understand  
|                   | 4. Understand  
|                   | 5. Do not know  
| (36) Health problems | (1-9)  
|                   | This will be open ended  
| (37) Employment status | (1-8)  
|                   | 1. Self employed  
|                   | 2. Family worker  
|                   | Employed (excluding self employed & family worker)  
|                   | 3. Welfare project  
|                   | 4. Tribal project  
|                   | 5. Other employment  
|                   | 6. Unemployed  
|                   | 7. Not in labor force  
|                   | 8. Not known  
| (38-39) What is your occupation (specify) | (01-99)  
|                   | Open ended  
| (40-41) Do you have any special skills (specify) | (01-99) Open ended  
|                   | 1. None  
|                   | 2. Common labor - factory work  
|                   | 3. Mechanic and tech.  

4. Construction
5. Operatives
6. Farm labors
7. Domestic work
8. Clerical
9. Fine arts (music)
10. Arts and crafts
11. Service work
12. Professional work
13. Medical assistant

(42-43) What types of employment have you held (specify) Code as #19

(01-99) Open ended

(44-45) Years of Experience

1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine
10. Ten
11. Eleven-fifteen
12. Sixteen-twenty
13. Twenty plus
14. None
15. Less than one
16. Unknown

(46) Income

1. $0
2. 1-24
3. 25-49
4. 50-74
5. 75-99
6. $100-149
7. 150-190
8. 200+
9. Not known

(47-48) Amount of Grant (Monthly)

1. $0-24
2. 25-49
3. 50-74
4. 75-99
5. 100-149
6. 150-199
7. 200-249
8. 250-299
<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(49) Marital Status</td>
<td>(1-6)</td>
</tr>
<tr>
<td>1.</td>
<td>Never married</td>
</tr>
<tr>
<td>2.</td>
<td>Married</td>
</tr>
<tr>
<td>3.</td>
<td>Divorced</td>
</tr>
<tr>
<td>4.</td>
<td>Separated</td>
</tr>
<tr>
<td>5.</td>
<td>Widowed</td>
</tr>
<tr>
<td>6.</td>
<td>Not known</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(50) How many times have you been married</td>
<td>(1-7)</td>
</tr>
<tr>
<td>1.</td>
<td>One</td>
</tr>
<tr>
<td>2.</td>
<td>Two</td>
</tr>
<tr>
<td>3.</td>
<td>Three</td>
</tr>
<tr>
<td>4.</td>
<td>Four</td>
</tr>
<tr>
<td>5.</td>
<td>Five</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(51-58) Regarding your marriage</td>
<td>(1-14)</td>
</tr>
<tr>
<td>1 &amp; 2.</td>
<td>Age when married</td>
</tr>
<tr>
<td>3 &amp; 4.</td>
<td>Age when marriage ended</td>
</tr>
<tr>
<td>5 &amp; 6.</td>
<td>How ended</td>
</tr>
<tr>
<td>7 &amp; 8.</td>
<td>Who left whom</td>
</tr>
<tr>
<td>9 &amp; 10.</td>
<td>Number of children ever born</td>
</tr>
<tr>
<td>11 &amp; 12.</td>
<td>Number of children ever surviving</td>
</tr>
<tr>
<td>13 &amp; 14.</td>
<td>Number of children living with you</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(59) Have you given any births during the year 1967?</td>
<td></td>
</tr>
<tr>
<td>If yes, give his (or her) census number</td>
<td>1. Yes</td>
</tr>
<tr>
<td>2. No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(60) List name of all births</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(61) Has any member of your family passed away during the year 1967?</td>
<td></td>
</tr>
<tr>
<td>If yes, what was his (or her) name</td>
<td>1. Yes</td>
</tr>
<tr>
<td>2. No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(62) Information of deceased</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Name</td>
</tr>
<tr>
<td>2.</td>
<td>Census number</td>
</tr>
<tr>
<td>3.</td>
<td>Age</td>
</tr>
<tr>
<td>4.</td>
<td>Sex</td>
</tr>
<tr>
<td>5.</td>
<td>Relationship to the head of the household</td>
</tr>
<tr>
<td>6.</td>
<td>Date of death</td>
</tr>
<tr>
<td>7.</td>
<td>Place of death</td>
</tr>
<tr>
<td>8.</td>
<td>Causes of death</td>
</tr>
</tbody>
</table>
Regarding your household members, please give the following information:

1. Name
2. Place of birth (place and state)
3. Age
4. Sex
5. Place of birth (a. hogan b. hospital c. other)
6. Years of schooling
7. Marital status
8. Living off reservation
9. In service
10. Away at school
11. On welfare grant
12. Type of assistance
13. Health problems
14. Special skills
15. Income
16. Knowledge of English
17. Relation to head of household
18. Work off reservation
19. Occupation
20. Work on reservation
21. Relocation

Where were you born?

1. Navajo Mt. T.P.
2. Goulding T.P.
3. Oljeto T.P.
4. (Ariz.) Mexican Water T.P.
5. Mexican Hat T.P.
6. Bluff T.P.
7. (Ariz.) Tes-Nos-Pos T.P.
8. Montezuma T.P.
9. Hatch T.P.
10. Ismay T.P. (Colorado)
11. Aneth T.P.
12. Blanding
13. Monticello
14. Other areas

State

1. Utah
2. Arizona
3. New Mexico
4. Colorado
5. Other

Were you born in a

1. Hogan
2. Hospital
3. Other
(69-70) In your opinion more than what number is many children

1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine
10. Ten
11. Eleven
12. Twelve
13. Thirteen+
14. All that might come
15. Undecided

(71-72) Less than what number is few children

1. One
2. Two
3. Three
4. Four
5. Five
6. Six
7. Seven
8. Eight
9. Nine
10. Ten
11. Eleven
12. Twelve
13. Thirteen+
14. Undecided

(73-74) How many children do you now have

Open end

(75-76) How many children would you like to have

Open end

(77-78) How many children do you expect to have

Open end

(79-80) How many births have you had

Open end

(81-82) What do you think the ideal family size is

Open end

(83-84) What family size is considered best by the Navajos

Open end
Have you ever heard of birth control methods: (ways to prevent birth) (1-2)
1. Yes
2. No

If yes, what methods (specify) (1-9)

Have you tried, or attempted to try, any methods of birth control? (1-3)
1. Yes
2. No
3. No reply

If yes, state what method.

Why do you want to have a large number of children? *(those who have or want to have more than 5 children) (1-5)
1. Children are a good thing to have
2. They earn money and help parents
3. If we have more children, government agencies and tribal councils pay us more
4. Other reasons (specify)
5. No reply

How many boys would you like to have Open end

How many girls would you like to have Open end

Why do you want to have more boys (or girls) Open end

Do you know any person who is not Navajo (1-2)
1. Yes
2. No

How often do they visit you or you visit them (1-8)
1. Several times a week
2. Once a week
3. Several times a month
4. Once a month
5. Once every two months
6. Once every six months
7. Once a year
8. Less than once a year

Do you want to live on or off the reservation (1-2)
1. On
2. Off
Why

Do you want your children to live on or off the reservation
1. On
2. Off

Why

Do you ever wish you could speak, read, and write English
1. Yes
2. No

Do you want your children to go to school
1. Yes
2. No

Do you want your children to learn English
1. Yes
2. No

If the white people are friendly and are willing to give you a job which enables you to enjoy a better life, would you take it
1. Yes
2. No
3. Don't know

Do you read a newspaper
1. Yes
2. No

Do you have a radio
1. Yes
2. No

Do you have a television
1. Yes
2. No

What is your means of transportation
1. Feet
2. Horse
3. Wagon
4. Car
5. Truck

Are you satisfied with the present welfare assistance program
1. Yes
2. No

Do you have any other suggestions as to how the welfare workers can serve you better?
Open ended
VITA

Gary Morris Shaffer

Candidate for the Degree of

Master of Science

Thesis: Fertility and Family Planning Among Navajo Indian Recipients of Public Welfare Assistance in Southeastern Utah

Major Field: Sociology

Biographical Information:

Personal Data: Born at Logan, Utah, October 19, 1940, son of Ellis and Vonona Morris Shaffer; married Alannah G. Sharer September 4, 1964; no children.

Education: Attended elementary school in Millville, Utah; graduated from South Cache High School in 1958; received the Bachelor of Science degree from Utah State University, with a major in sociology.

Professional Experience: Missionary, Southwest Indian Mission, L.D.S. Church, among the Navajo, 1960-63; consultant and interpreter of the Navajo language for the N.D.E.A. Institute held in Blanding, Utah, 1965; served as research assistant in Sociology from 1967 to present; Instructor, USU Department of Sociology, Fall Quarter 1968; presented two papers to the Utah Academy of Sciences, Arts and Letters, Fall 1968 and Spring 1969.