THE FORMATION OF DESIRED AND IDEAL FAMILY SIZE AMONG
UTAH HIGH SCHOOL SENIOR FEMALES AND MALES, 1974

by

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Linda R. Hagen
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The purpose of this study is to measure the direct and indirect relationships between socio-economic and demographic variables and ideal and desired family size preferences among male and female high school seniors in Utah in 1974. Furthermore, the analysis will be carried out separately for males and females in order to see if male and female ideal and desired family size preferences are influenced differently by the socio-economic and demographic variables. A model will be developed and tested of the process by which ideal and desired family size preferences are formulated.

The model used in the analysis is based upon Westoff and Potvin's "theory of ideal family size formation." Westoff and Potvin's "theory of ideal family size formation" states family size of female's is a result of early socialization. The socialization can be influenced by four categories
of processes. The four categories are family size in environment variables, social context variables, consistency and continuity in life experiences, and interaction between beliefs and behavior. The socio-economic and demographic variables selected to test this model were size of family of orientation, place of residence, social class, religion, religiosity, desired age at marriage, ideal age at marriage, the number of circumstances females or males would consider acceptable for the use of birth control, and education difference.

The application of Westoff and Potvin's "theory of ideal family size formation" was a better fit for desired family size of females or males than ideal family size of females or males.

Desired family size of females was influenced by religion, religiosity, size of family of orientation, and the number of circumstances females/males find acceptable for the use of birth control. Desired family size of females was also influenced by social class.

Ideal family size of females is different from ideal family size of males. Both ideal family size of females and males was influenced by religion. Ideal family size of males was also influenced by religiosity and social class.
The given socio-economic and demographic variables explained 39 percent of the variation for female desired family size and 29.5 percent of the variation for male desired family size. The given socio-economic and demographic variables explain 4 percent of the variation for female ideal family size and 17 percent of the variation for male ideal family size.
CHAPTER I
INTRODUCTION

Statement of the Problem

The purpose of this study is to measure the direct and indirect relationships between socio-economic and demographic variables and ideal and desired family size preferences among male and female high school seniors in Utah in 1974. Furthermore, the analysis will be carried out separately for males and females in order to see if male and female ideal and desired family size preferences are influenced differently by the socio-economic and demographic variables. A model will be developed and tested of the process by which ideal and desired family size preferences are formulated.

In earlier studies, Clark Davis¹ and Brenda Hurst Ralls² examined the relationships between socio-economic and demographic variables and ideal and desired family size preferences among Utah female high school seniors. Both Davis


and Ralls studied differentials in ideal and desired family size preferences by various socio-economic and demographic variables. Also, Davis and Ralls compared socio-economic and demographic variables to ideal and desired family size preferences to find out which socio-economic and demographic variables were influential in predicting ideal and desired family size preferences. They did not allow, however, for the implications of a causal structure among the socio-economic and demographic variables and ideal and desired family size preference. Also, only female high school seniors in the state of Utah were analyzed. The proposed study will go further by proposing and measuring the causal structure of interrelationships of the socio-economic and demographic variables on ideal and desired family size preferences among female and male students. This study is based on the data collected from one-third of the Utah public high school seniors during the 1973-74 academic year.

Justification of the Study

With the increasing advances in technology and a society oriented toward rationality in decision-making, family size preferences should correspond fairly closely to behavior. This is further enhanced by more reliable means of contraceptive techniques becoming available, which increases the likelihood that family size preferences can become a
reality for couples who have access to contraceptive means. Thus, questions about family size desires become practical issues.¹

Since family size preferences can now be realized in actual fertility, the time of when family size preferences are developed become important. Kiser and Whelpton suggest that family size preferences are developed at an early age.² Hendershot hypothesizes that this occurs through various patterns of family interaction and roles which the daughter or son attempt to reproduce in their own family.³ Also, Kanter and Potter state that the daughter and son learn different coping techniques from their parents as they are growing up. These coping techniques will be used by the daughter or son within their own family.⁴ Thus, many of the characteristics of a family that the daughters and sons were raised with will be reproduced in their own family.


²Kiser and Whelpton.


An explanation of how family size norms are formed is developed by Westoff and Potvin in their "theory of ideal family size formation." The theory hypothesizes that the decision-making process begins with early environment (family size of orientation, friends' family size and neighbors' family size) and early socialization during late childhood and early adolescence. Once socialization has occurred, "stability of family size norms over time is influenced by "continuity and consistency of the individual's reference group"¹ and by what is considered in general to be acceptable family size norms.²

In Gustavus and Nam's study of two southern counties in Florida, among sixth, ninth, and twelfth graders, family size preferences were already formed. The average ideal family size was 3.16 children and desired family size was 3.02 children. At the twelfth grade level a sex difference appeared in family size preferences. Female's family size preferences were greater than male family size preferences. Desired family size of twelfth graders were 3.34 children for females and 3.09 children for males. Ideal family size of twelfth graders were 3.29 children for females and 3.17 children for males.

²Ibid., pp. 120-126.
children for males.¹ For the twelfth graders desired family size preferences were found to be fairly stable over a three year period of time.²

In 1970, Paterson's study of Louisiana high school seniors showed there was a sex difference in desired family size preference. Females desired a larger family size than males. Female desired family size was 3.21 children and male desired family size was 2.80 children.³

Studies relating to family size preferences and fertility have been done among Mormon students in Utah by Christenson⁴ and Johnson.⁵

Christenson's study of Mormon students enrolled in courtship and marriage classes at Brigham Young University found that ideal family size preferences were 4.5 children. Ideal family size preferences were influenced by religious

¹Gustavus and Nam, pp. 43-51.


⁵Ronald Johnson, "Ideal Size of Family Among Unmarried Females in Northern Utah" (MS thesis, Utah State University, 1970).
and social pressures. Johnson's study dealing with high school senior females in three northern Utah counties indicated that ideal family size preferences were 4.51 children for Mormon students. Ideal family size preferences were related to education of respondent's mother and father, income, religion, residence, occupation of father, and family size of orientation.

Davis studied a representative sample of Utah high school senior females which had an ideal family size of 3.85 children and a desired family size of 4.27 children. Ideal family size preferences were related to religion, attitude toward the seriousness of world population growth, attitude toward the use of birth control methods to limit one's family size, family size of orientation and residential background. Desired family size preferences were related to religion, religiosity, attitude toward the seriousness of world population growth, attitude toward the use of birth control methods to limit one's family, and the family size of orientation.¹

Ralls did a replication of the 1970 study of Utah high school senior females during the 1973-74 academic year. Ideal family size preferences were 4.09 children and desired family size preferences were 4.68 children. Ideal family size preferences were related to religion, religiosity, 

¹Clark Davis.
attitude towards the use of birth control, and attitude toward the seriousness of world population growth. Desired family size preferences were related to attitudes toward the use of birth control, attitude toward the seriousness of world population growth, and size of family of orientation.¹

Both the 1970 study of Davis and 1974 study of Ralls of Utah high school senior females did not take into consideration the implication of a causal structure among the socio-economic and demographic variables and ideal or desired family size preferences. Also, both the 1970 and 1974 studies only analyzed a sample of female high school seniors.

The proposed study will attempt to add to the studies of Davis and Ralls by proposing and measuring the causal structure of the socio-economic and demographic variables and ideal or desired family size preferences. In addition, the present study will make an attempt to make comparisons between the causal structures for male and female high school seniors in 1974. It is hoped that the understanding of the formation of family size norms will be enhanced with the findings from this study.

Objectives

The general objective of this study is to create a causal structure which relates given socio-economic and

¹Ralls.
demographic variables to ideal and desired family size preferences. The given socio-economic and demographic variables will be place of residence, social class, family size of orientation, religion, religiosity, education difference, ideal or desired age at marriage, and attitude toward the use of birth control. This will be done with the use of a path model.

Specifically it is intended:

1. To measure and analyze the causal relationships between the given socio-economic and demographic variables and desired family size preferences of female high school seniors in the state of Utah, 1974.

2. To measure and analyze the causal relationships between the given socio-economic and demographic variables and ideal family size preferences of female high school seniors in the state of Utah, 1974.

3. To measure and analyze the causal relationships between the given socio-economic and demographic variables and desired family size preferences of male high school seniors in the state of Utah, 1974.

4. To measure and analyze the causal relationships between the given socio-economic and demographic variables and ideal family size preferences of male high school seniors in the state of Utah, 1974.
5. To compare and contrast the causal relationships between the given socio-economic and demographic variables and desired family size of female Utah high school seniors and desired family size of male Utah high school seniors.

6. To compare and contrast the causal relationships between the given socio-economic and demographic variables and ideal family size of female Utah high school seniors and ideal family size of male Utah high school seniors.

**Limitations**

There are some theoretical and methodological limitations of this study. The theoretical limitations are largely due to the fact that a secondary analysis is being undertaken on the data that was already collected in a previous study. Thus, some variables that are considered to have an influence on the formation of family size preferences cannot be included since they were not measured in the survey. Some of the variables not measured are peer group pressures, definition of sex roles, and familial satisfaction.

The methodological limitations consist of a low response rate of 23 percent for males and 35 percent for females. This response rate was calculated on student enrollment lists which are not always accurate. There are some students that may be on the enrollment lists who are not attending classes and some students who will not graduate.
Furthermore, most of the lists were compiled by the high school administrations at the beginning of the 1973-74 academic year. This does not allow for the deletion of students who may have moved from the school district. Also, many of the key variables are controlled for by selection of the sample. All of the respondents are of the same general age, educational level, marital status, occupation, actual family size, etc. Plus, even with a low response rate the sample size is still quite large: 779 males and 1,014 females.

The following two chapters will consist of a review of literature relevant to the formation of family size preferences and a description of the methodology and data to be used in this study.
Family size preferences have gained importance as an indicator of future fertility. With increasing advances in technology and a society oriented to rationality in decision-making, family size preferences should correspond fairly closely to behavior. The increases in technology have resulted in improvement in contraceptive techniques. These improved contraceptive techniques make it even more realistic that family size preferences can become a reality for couples who have access to contraceptive methods.¹

Since family size preferences can now be realized in actual fertility, the time of when family size preferences are developed become important. Kiser and Whelpton suggest that family size preferences are developed at an early age.²

The development of family size preferences at an early age is reinforced by Hendershot who hypothesized that family size preferences may result from direct communication from the mother. According to Hendershot, the mother's family size ideals are either directly transmitted to the daughter

¹Gustavus and Nam, p. 43.
²Kiser and Whelpton.
or through the transmission of various patterns of family interaction and role that the daughter will attempt to duplicate in her own family.¹

Kanter and Potter expand upon the way family size preferences are formulated by including the possibility that young people learn various ways to cope with problems from their parents. These coping techniques can influence the number of children preferred by young people.²

The theoretical framework that the present study builds upon is Westoff and Potvin's "theory of ideal family size formation." The "theory of ideal family size formation" is based on the assumption that "... the number of children a young woman feels she would like to have is an ideal probably unconsciously formulated during late childhood and early adolescence."³

There are basically four premises to the "theory of ideal family size formation." The premises consist of:

1. "The number of children in the family environment in which the child has grown up seems especially pertinent."⁴

This consists not only of the size of family of orientation, but also the size of families of friends, neighbors, and

¹ Hendershot, pp. 27-33.
² Kanter and Potter, pp. 294-311.
³ Westoff and Potvin, p. 122.
⁴ Ibid.
other salient reference groups. So family size preferences becomes a norm an individual is socialized to.

2. "Religious, ethnic, and class memberships can be viewed here as determinants of the early social context in which socialization to the norms of family size occurs, varying in the extent to which they have direct substantive significance for these norms." ¹ The more cohesive and homogeneous the setting of distinctive subcultures, the greater the influence of these determinants. The less distinctive a subculture that an individual belongs to the more elastic the effect of these determinants and the more reflective of the dominant culture.

3. "The extent of continuity, of consistency of the individual's reference groups in late adolescence and early adulthood with those of the earlier years also appear relevant." ² Following any major inconsistence, major change, or critical decision points in an individual's life cycle, there may be modifications in the individual's values about family size preferences.

4. Changes in the culture's attitudes toward family size norms will slightly affect changes in individual's attitudes toward family size norms. This is not as flexible or vulnerable to change as styles or fashions. There are

¹Ibid., p. 123.
²Ibid.
definite status overtones in society with regards to large families, small families, or childless families and they vary with time.¹

The basic underlying assumptions of the "theory of ideal family size formation" consists of the theory of cognitive consistency and cognitive dissonance and the relationship between beliefs and behavior. The first assumption regarding the theory of cognitive consistency and cognitive dissonance postulates "an individual's psychological structure tends to be composed of organized conditions, preferences and actions."² The cognitive process attempts the integration of attitudes with behavior. Yet, there are many factors which can and do prevent cognitive consistency from occurring, thus resulting in cognitive dissonance—implying that the more homogeneous the life experiences of an individual, the more that individual's beliefs will be reflected in her/his family size preferences. The relationship between beliefs and family size preferences will vary from individual to individual and from group to group.

The relationship between beliefs and behavior is the second underlying assumption of the "theory of ideal family size formation." There is a causal web in which belief affects belief. "In some situations preferences change to

¹Ibid.
²Ibid., p. 124.
become more consistent with beliefs and in others the reverse takes place. And both are influenced by the nature and type of social belonging.\(^1\) Preference is given neither to beliefs nor behavior of the individual.

The above "theory of ideal family size formation" is pictured in Figure 1. The four basic premises of the theory (size of family of environment, social context variables, consistency and continuity in life experiences, and cultural attitudes variables) are modified by the theory of cognitive consistency and cognitive dissonance and the interaction between the beliefs and behavior of the individual.

The rest of this chapter will review the previous work dealing with specific socio-economic and demographic variables relating to family preference norms within the model and the placement of these specific socio-economic and demographic variables within the model. The review of literature will cover not only family size preferences, but also actual fertility since there should be increasing correspondence between family size preferences and actual fertility with more efficient techniques of contraception.

**Family Size in Environment Variables**

**Size of family of orientation**

Westoff and Potvin's "theory of ideal family size formation" hypothesizes that family size preferences are a

\(^1\)Ibid., p. 125.
Figure 1. A general model of Westoff and Potvin's "theory of ideal family size formation."
result of the socialization process which occurs in late childhood and early adolescence. One of the factors which enters into the socialization process is family size of orientation—"the number of children in the family environment in which the child has grown up"—will influence the size of family the respondent will desire. During the early socialization process the respondent learns family building habits. These family building habits entail methods of using resources, solving problems, relationships and roles. Not only does the family size of orientation influence the respondents family size preferences, but the size of neighbors families, size of peer families and size of other salient group families will influence the respondents family size preferences.

There are two interpretations of the concept of family size preferences. First, is the demographic definition in which the family size of orientation is the number of children born to the respondents' mother within that marriage. This concept does not include step-brothers, step-sisters, or adopted brothers or sisters. This would include brothers and sisters who were born to the respondents' mother but were not living at home or did not grow up with the respondent because of being either older or younger than the respondent.

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1 Ibid., p. 122.
2 Ibid., pp. 122-123.
The second concept is the sociological definition of family size of orientation. This concept considers the children in the household that the respondent was raised with. This concept can include step-brothers, step-sisters, adopted brothers or sisters, or any child in the household who grew up with the respondent. This would not include brothers or sisters who were much older and were not living in the household as the respondent was growing up. Nor would it include children much younger who were born shortly before or after the respondent left home.

The concept that will be used in this study will be the demographic definition of family size of orientation. That is, the number of children born to the respondent's mother within that marriage.

As family size of orientation of the respondent increases, the family size preferences of the respondent increases. Thus, if a respondent comes from a small family the respondent will desire a small family. If the respondent comes from a large family, the respondent will desire a large family.

Gustavus and Nam found among sixth and ninth graders in two southern counties in Florida that as the size of family of orientation increased the ideal and desired family size preferences increased. Ideal family size varied from 2.85 children to 3.29 children and desired family size varied from 2.67 children to 2.97 children. Among twelfth
grade respondents ideal and desired family size preferences were fairly constant from small to large family size of orientation.¹

In 1947, Christenson found among unmarried Mormons in marriage and counseling classes at Brigham Young University that family size preferences were smaller than size of family of orientation.²

A direct relationship between family size of orientation (number of live births to the mother) and ideal and desired family size preferences was found by Davis among Utah high school seniors females in 1970. Respondents from families of one or two children desired 3.71 children and considered 3.36 children ideal. While respondents from families of nine to seventeen children desired 4.97 children and considered 4.58 children ideal.³

The positive relationship between size of family of orientation and family size preferences was also found by Ralls among Utah high school senior females four years later. Respondents from families of one to two children desired 3.83 children and considered 4.29 children ideal. Respondents from large families, nine to seventeen children, desired 5.56 children and considered 4.39 children ideal.⁴

¹Gustavus and Nam, p. 49.
²Christenson, pp. 273-74.
³Clark Davis, p. 79.
⁴Ralls, p. 100.
When the relationship between family size preferences and family size of orientation is broken down by sex there is still a positive relationship. Paterson found that among seniors in Louisiana high schools that the relationship between family size of orientation and family size preferences continued to exist when separated for males and females. There was a clear relationship among size of family of orientation and desired, ideal, and expected family size among males. Females had a U-shaped relationship between desired and expected family size preferences and family size of orientation. Ideal family size was similar for males and females, where the larger the size of family of orientation the larger the ideal family size.¹

Christenson found among unmarried Mormons in marriage and counseling classes that the relationship between family size of orientation and family size preferences were greater for females than for males. Males wanted smaller families than their families of orientation.²

The relationship between family size of orientation and family size preferences can be modified by other factors. Some of the factors that influence the relationship between family size of orientation and family size preferences are efficiency of family planning, familial satisfaction, and birth order of respondent.

¹Paterson, p. 233.
²Christenson, pp. 273-74.
One of the factors that influences the relationship between family size of orientation and family size preferences is the ability of the respondent to plan one's family or efficiently use contraceptives. Duncan et al., found among fecund planners the size of family of orientation was directly related to expected family size.\(^1\) The fecund planners may be recreating a familial setting that resembles the familial setting they were raised in and learned problem solving solutions (which enabled them to plan their families). This allows them to mobilize familial resources, relationships and roles in a similar way to which they saw their parents do. Respondents who were not efficient family planners did not result in a relationship between size of family of orientation and family size preferences or fertility. Inefficient planners do not have control over the number of children they will eventually have even though the number they want may be the same as the number of children they were raised with.\(^2\)

Another factor found to influence family size preferences through family size of orientation is the respondent's familial satisfaction. This is whether the respondent had satisfying or unsatisfying childhood experiences within the


\(^2\)Ibid., p. 515.
family of orientation. According to Duncan et al., if the childhood experiences were satisfying the respondent would have a tendency when formulating the family to recreate the same number of children as they grew up with, thus recreating one's own satisfying family experiences.¹

Johnson and Stokes also found a relationship between family size of orientation and family size of procreation in a twenty-four year longitudinal study of women in Pennsylvania. If the respondent was satisfied with the family size of orientation the respondent would tend to duplicate within the family size of procreation the family size of orientation. If the respondent was dissatisfied with family size of orientation there was no observed effect of family size of orientation upon family size of procreation.²

The last factor to be considered that may influence the relationship between size of family of orientation and family size preferences is birth order. Schacter found that the birth order of the respondent has had an influence on the relationship between family size of orientation and family size of procreation. If the respondent is first born according to Schacter there is more of a tendency for the respondent to recapitulate the demographic characteristics of the

¹Ibid.

family of orientation within the family size of procreation. Johnson and Stokes also found among first born females that the relationship was twice as large between family size of orientation and family size of procreation as among later-born females.

Even through efficiency in family planning, familial satisfaction, and birth order were found in the above studies to influence the relationship between family size of orientation and family size preferences or family size of procreation, they will not be taken into consideration in the present study since this information is not available.

Social Context Variables

Place of residence

Westoff and Potvin's "theory of ideal family size formation" hypothesizes that the homogeneity or heterogeneity of the social context in which an individual is raised will have an effect on family size preferences. The more homogeneous the environment the greater the carry over of fertility norms to family size preferences. The more heterogeneous the environment the less carry over of fertility norms to family size preferences. Place of residence would be more homogeneous an environment among rural residence

2 Johnson and Stokes, p. 181.
3 Westoff and Potvin, College Women, p. 123.
and more heterogeneous an environment among metropolitan residence. Traditionally the size of the place of residence of the respondent was inversely related to the size of family of the respondent. The more rural and isolated the environment of the respondent the larger the family size.

The inverse relationship between size of family and size of place of residence has been accounted for by various means. Goldscheider was hypothesized that the life style in the cities were different from the life style in rural areas. The cities were the areas where most innovation first occurred and the center point for the distribution of information. The rural areas and small communities were often isolated, thus being more conservative than the larger cities in adopting new life styles. Thus, when better means of birth control became available these means were adopted first in the metropolitan areas. The family sizes of rural areas began to change through rural-urban migration and cultural diffusion from urban-to-rural areas.¹

Another explanation of the reasons for the differences in rural-urban family sizes is not related to cities being the transmitters of culture. It is generally accepted among economists that children can be either assets or liabilities to parents. If as the children grow up, they are able to help their parents make a living, they are considered assets.

An example would be farm children. In the past farm children have helped their parents with the growing and harvesting of crops and the raising of animals. They were considered necessary, for in this way the farm did not need to hire more help. They contributed to the families well being. Children can be considered a liability if they do not contribute to the family's well being. Instead the parents have to provide for the child's needs and education without the child contributing to the family's income or upkeep. This occurs within cities where children must be provided for until a given age and the children do not in return contribute economically to the family. Children were considered liabilities earlier in cities than they were in rural areas or farms. As the children became liabilities, couples began to restrict or limit the number of children they had. As children were shifting from assets to liabilities in cities, they were still considered assets in rural areas and on farms--there was a time lag between cities and rural areas regarding the value of children as assets or liabilities. Thus, the difference in family sizes between rural and urban areas.

The hypothesis that there is an inverse relationship between size of place of residence and expected family is supported by Whelpton, Campbell and Paterson in the 1960s.

national fertility survey of females 18 to 39 years of age. Women from cities of 100,000 or more expected 3.0 children, with women from other urban areas and rural nonfarm areas expected 3.2 children and farm women expected 3.4 children. The difference from largest to smallest family size is only .4 of a child.\(^1\) Of interest is the women living in cities of 50,000 to 149,000 who "thought they would have somewhat more births than the wives in the larger central cities."\(^2\) Yet, there is no difference between the women living in the twelve largest central cities of 150,000 or more people. Also, there was little variation in family size expectations among the central cities.\(^3\)

Duncan found among couples who have completed their fertility the hypothesis that the size of place of residence varies inversely with family size is supported by a national survey of married couples, spouse present, with wife 42 to 61 years of age. Duncan found that couples in which both the husband and wife were living on a farm had the largest family size of 3.34 children. If the wife and husband both had a farm background and were presently living in a nonfarm area, they had the next largest family size of 2.83 children.


\(^2\)Ibid., pp. 116-117.

\(^3\)Ibid.
The smallest family size of 2.21 children was among couples in which the husband and wife both had nonfarm backgrounds and were not residing presently on a farm. If the husband had a farm background and the wife a nonfarm background (present nonfarm residence) the family size was larger, 2.49 children, than if the wife had a farm background and the husband nonfarm background (present nonfarm residence) of 2.40 children.¹

Johnson compared the family size preferences of high school senior females in the state of Utah and size of residence for three Northern Utah counties. No consistent relationship was found between ideal or desired family size and size of place of residence. Part of this may be due to the homogeneity of the population with the place of residence varying from 1,500 to 2,500 or greater. Ideal family size varied from 4.28 children to 4.54 children and desired family size varied from 4.32 children to 4.44 children with respondents living in communities of 1,500 to 2,499 having the smallest ideal or desired family size.²

No consistent relationship was found between size of place spent the longest and ideal or desired family size


²Ronald Johnson, p. 34.
preferences by Davis among Utah high school senior females in 1970. Females from areas of 2,499 or less had the largest family size preferences of 4.06 children as ideal family size. Females from communities of 2,500 or 9,999 had the largest desired family size of 4.40 children. The smallest ideal and desired family size was among females from communities of 60,000 or more.¹

Ralls also found Utah high school senior females in 1974 to have no consistent relationship between place of longest residence and family size preferences. Respondents who lived the longest in cities of 30,000 to 49,999 had the largest desired family size of 4.90 children and respondents who lived in cities of 50,000 or more the longest had the smallest desired family size of 4.44 children. Whereas respondents who lived in cities of 2,499 or less the longest had the largest ideal family size preferences of 4.24 children and respondents who lived the longest in cities of 20,000 to 29,999 had the smallest ideal family size preferences of 3.80 children.²

The findings of Ralls and Davis are supported by Freedman and Sharp. Freedman and Sharp found that prior to the age of eighteen the place of residence did not influence family size preferences. In Freedman and Sharp's study of

¹ Clark Davis, p. 92.

² Ralls, p. 119.
Detroit metropolitan population over the age of 21, respondents spending nine or less years in a rural environment had similar family size ideals as respondents living in a rural environment for nine to eighteen years.1

Since place of residence before the age of eighteen was found by Feedman and Sharp not to influence family size preferences and Davis and Ralls did not find any relationship between place of longest residence and family size preferences, the place of where the high school is located will be used in this study instead of place of longest residence. Size of place of present residence for respondents is not available and can only be inferred from size of place of high school.

The relationship between place of residence and family size preferences can be modified by different factors. Some of the factors that influence the relationship between family size preferences and place of residence are age of the respondent, education, religion, and age at marriage.

The first factor to be considered in influencing the relationship between family size preferences and place of residence is age of the respondent. Freedman and Sharp found that when the age of the respondent is taken into consideration the relationship between rural, nonrural background and family size still exists. Among the Detroit metropolitan population under the age of forty there are

1 Freedman and Sharp, pp. 34, 45.
smaller family size ideals than for respondents over the age of forty within given residential categories. Respondents under the age of forty with only urban background consider an ideal family size to be 3.08 children as compared to 3.14 children considered ideal by respondents forty years of age or more from only urban background. Respondents with rural background under forty years of age considered 3.18 children ideal as compared to 3.31 children for respondents forty years old and over. Regardless of residential background the younger age group consistently had smaller family size ideals.\(^1\)

The next factor to be considered that may influence the relationship between family size preferences and place of residence is educational attainment. The rural-urban difference in family size was found to be modified if respondents had twelve or more years of education by Freedman and Sharp in the Detroit metropolitan area. The respondents with twelve or more years of education, some rural background, had an ideal family size of 3.04 children as compared to 3.09 children for respondents from only urban background. The respondents with lesser education maintained the difference in family size of rural-urban background. Respondents with less than nine years of education, some rural background, had an ideal family size of 3.36 children as

\(^1\)Ibid., p. 41.
compared to 3.28 children for only urban respondents. The middle educational level of nine to eleven years of school (some high school) from rural background had an ideal family size of 3.31 children as compared 3.07 children for rural background only respondents. The inverse relationship between education and fertility still holds, except between urban only respondents at twelve or more years of education having an ideal family size (3.09) slightly higher than respondents with some high school education (3.07). As the educational level of rural and urban respondents increase the differences in family size should decrease between the two groups.¹

Yet, Duncan found with women forty-two to sixty-one years of age the relationship between family size and place of residence did hold for all educational levels and types of farm background. The relationship was strongest for couples with no farm background residing in a nonfarm residence.² Plus, the educational level of the wife had a greater influence on family size than the educational level of her husband, controlling for farm background.³

Religion is the third factor to be considered which may influence the relationship between family size preferences

¹Ibid., p. 40.
²Duncan, p. 243.
³Ibid.
and place of residence. Freedman and Sharp found among Detroit metropolitan women, Catholics consistently had larger ideal family size preferences than Protestants whether in rural or nonrural residence. Respondents with some rural background, that were Catholics considered 3.56 children an ideal family size as compared to 3.17 children for Protestants. Respondents with only urban background, that were Catholics, considered 3.56 children an ideal family size as compared to 3.17 children for Protestants. Respondents with only urban background, that were Catholics, considered 3.34 children ideal compared to 2.96 children for Protestants. As can be seen, religion has a greater influence than residential background on family size preferences. With Catholics of only urban background desiring more children (3.34) than Protestants with rural background (3.17).¹

The last factor to be considered influencing the relationship between size of place of residence and fertility, is age at marriage. In general, an inverse relationship was found between earlier age at marriage and fertility for all different combinations of farm--nonfarm background. Duncan found that the younger the age at marriage, the larger the family size. If she has a farm residence, her family will also be larger than if she had nonfarm residence. The inverse relationship between age at marriage and

¹Freedman and Sharp, p. 40.
fertility holds for different residential backgrounds. The inverse relationship between size of place of residence and fertility holds, even for different ages at marriage.¹

Social class

Westoff and Potvin's "theory of ideal family size formation" hypothesizes that socioeconomic status is another variable which reflects homogeneity or heterogeneity within the respondent's environment. A socioeconomic status can be viewed as a subculture to which an individual belongs. The more cohesive this subculture is the higher the probability that the norms of the subculture will be reflected in family size preferences.²

Socioeconomic status is generally measured through either education, income, occupation, or a combination of two or more of the foregoing. Generally, in developed countries, such as the United States, there is an inverse relationship between socioeconomic status and fertility. That is, as socioeconomic status increases the family size preferences or fertility decreases.

The inverse relationship between fertility and socioeconomic status has been justified on different grounds. Nam and Gustavus hypothesize that educational level of the respondent may affect the inverse relationship between family

¹Duncan, p. 246.
²Westoff and Potvin, College Women, p. 123.
size preferences and socio-economic class. That is, the lower socio-economic classes do not have the level of education to be able to control their fertility if they desired to do so. If they know of means with which to control their fertility, they are usually ineffective in using it. This results in a higher proportion of unwanted births among the lower socio-economic classes.¹

With an increasing level of educational attainment among the female population in the United States, this may lead to a wider effective use of contraceptives and thus fewer unwanted births. Thus, a leveling out of the relationship between fertility and family size expectations.²

This supported by Westoff and Westoff where they found respondents with some high school education or above wanted approximately the same number of children (.1 of a child difference). But the lower their education the more children they expected to have. With an increase in education and contraceptive knowledge Westoff and Westoff hypothesize there will be an alignment of the number of children wanted and the number of children expected.³

¹Charles B. Nam and Susan O. Gustavus, The Dynamics of Population Change (Boston: Houghton Mifflin Company, 1976), p. 120.

²Ibid.

An alternative explanation of the inverse relationship between fertility and socio-economic status hypothesized by Nam and Gustavus states that females learn different methods of problem solving and acceptance as they are growing up. Among the lower socio-economic classes the females may learn to accept their "fate," that their mothers were unable to control their family so they, like their mothers, will be unable to control the number of children that they have. They lack the motivation to try to effectively control their fertility even though they may have the knowledge with which to do so. The lower socio-economic status women greet the birth of new children with the same fatalistic view they do with the rest of life.¹

Rainwater and Weinstein found that the lower-lower class females did not believe that they had any control over the size of family they had. When questioned about means of birth prevention, they either had heard about it, but were afraid to try or thought their husbands would not approve. It was their lot in life to bear whatever happened.²

The last explanation of the inverse relationship between fertility and socio-economic class hypothesized by Nam and Gustavus is mainly for developed countries. At each

¹Nam and Gustavus, p. 120.

²Lee Rainwater and Karol Kane Weinstein, And the Poor Get Children (Chicago: Quadrangle Books, 1960).
socio-economic status level there is associated a different life style. Thus, the different levels of education, income, and occupation are associated with different ways of allocating one's time. The higher the socio-economic status the better the means with which to engage in more varied activities. The more children, the less mobile and more competition with other activities. Within this explanation also fits in the factor of tastes of parents. At the different socio-economic levels the tastes for children may vary. This considers not only quantity but also quality of children wanted. This entails greater expenditures per child on housing, food, clothing, education, etc. There may be a trade-off between the number of children or quantity and the amount spent per child or quality of child. The lower socio-economic classes may be concerned with only the ability to feed and clothe their children as compared to the upper socio-economic classes being concerned with the type of education and exposure to experiences of their children. The number of children desired becomes a factor of differing allocating of resources for differing tastes.¹

Within the third alternative explanation of the relationship between fertility and socio-economic class Bean has developed two theories, the first is the alternative opportunities hypothesis. The alternative opportunities

¹Nam and Gustavus, p. 121.
hypothesis states the more alternative opportunities or activities the couple has competing with children, the fewer children the couple will have. The second theory is the economic hypothesis. Here the application of the economic theory of consumer durables is applied to children. If tastes (desire for children relative to other goods) and prices (of children) were held constant then there would be a positive relationship between fertility and the availability of resources that are to be spent on children. In other words, holding all other things equal there would be a positive relationship between fertility and socio-economic status.¹

There has been in recent years a convergence between different socio-economic classes and fertility. The differences in fertility from the lowest socio-economic classes to the highest socio-economic classes is lessening. Goldscheider has contributed this to the decline in fertility in the lower socio-economic classes due to more extensive and successful use of contraceptives and the rise of fertility among the higher socio-economic classes with them desiring larger family sizes. He states this may also be due to diffusion of information about contraception from the upper social classes to the lower social classes. Plus, the opportunities for social mobility may influence the

fertility of couples changing socio-economic classes. That is couples improving their socio-economic status may restrict their fertility while couples lowering their socio-economic status may find themselves having larger families.¹

Looking separately at the three socio-economic variables may further clarify the relationship between socio-economic status and fertility.

The first area to be looked at is occupational level. Nam and Gustavus feel that this area is the hardest to find a clear relationship between socio-economic class and fertility because it is hard to classify some occupations according to status and over time some occupations change their positions within the status hierarchy. Generally, white collar occupations have lower fertility than blue collar and farm occupations.²

Freedman looked at the wife's occupation and fertility and found that wives who worked for five or more years after marriage had 1.10 of a child less than wives who worked less than that period of time and 1.37 of a child less than wives who never worked. This is found to be more important in child spacing than to total family size.³

¹Goldscheider, p. 279.
²Nam and Gustavus, p. 120.
When Westoff and Westoff compared the average number of children by occupation of husbands for white women forty-five to forty-nine years of age from 1910 to 1960 they found the difference in family size to decrease from a range of 3.1 children for professional to 5.5 children for farmers in 1910 to a low of 1.9 children for clerical and sales or 2.0 children for profession to a high of 4.1 children for farm laborers. In all years, farmers and farm laborers had the largest family sizes--professional, managerial, and clerical and sales had the smallest family size with skilled to unskilled workers falling between the two groups. All occupational groups had a decrease in family size from 1910 to 1960. Yet, the range from largest to smallest family is still approximately two children.  

The difference in fertility of couples from farm occupations and couples with nonfarm occupations were again found by Whelpton, Campbell, and Paterson in the 1960 national fertility survey. Wives whose husbands were in farm occupations expected more births than wives whose husbands were in nonfarm occupations. The least number of births were expected among the wives whose husbands had white-collar occupations. Wives who had husbands with blue-collar occupations expected the number of births between the farm occupation group and the white-collar occupation group.

1 Westoff and Westoff, p. 233.
Separately, within the blue-collar occupations and within the white collar occupational groups there is virtually no difference in the number of births expected. There was a flattening of the family size expectations by the different occupational groups found in the 1960 national fertility survey.¹

No significant relationship between the occupational class of the father and the fertility values of college women (freshmen and seniors) by Westoff and Potvin.²

Nam and Gustavus found a narrowing of the number of children born to white women age thirty-five to forty-four between 1965 and 1972 by occupation, with profession, managerial and sales having the smallest families (2.9 children) and farm and farm laborers having the largest families (3.6 children). There was virtually no change in family sizes from 1965 to 1972 for any of the occupational groups. Also, within each occupational group (white-collar, blue-collar, and farm and farm laborers) there is very little variation in the number of children born.³

The indicator of occupation with fertility is decreasing in importance. In the future occupation may not be as reliable an indicator as it has been in the past with the

¹Whelpton, Campbell and Paterson, pp. 112-114.
²Westoff and Potvin, College Women, p. 144.
³Nam and Gustavus, p. 119.
narrowing of the relationships between fertility and occupation.

Another component of socio-economic class is income. Generally, in the past there has been an inverse relationship between income and fertility. When the measure of current income is used the inverse relationship between fertility and income holds, with lower income groups, family size preferences are larger than with higher income groups.

The inverse relationship of income to fertility was supported by Westoff and Westoff among women thirty-five to forty-four years of age in 1969. Women from families of income less than $3,000 had 3.7 children as compared to women from families with incomes of $15,000 or more having on the average 2.8 children—a difference of almost one child. The income levels between $3,000 and $15,000 or more gradually decreased in the number of children born.1

Nam and Gustavus found the average number of children born to white females thirty-five to forty-four years of age in 1965 to 1972 to be negatively related to income levels. Women with family income less than $3,000 had 3.5 children, and women with family income of $15,000 or more had 2.9 children.2

When relative income is used as a measure of income instead of current income Freedman has found the relationship

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1 Westoff and Westoff, p. 225.
2 Nam and Gustavus, p. 119.
between income and fertility very clear and positive. If the wife perceives herself as having lower relative income than others within the occupation group of her husband, her expected and actual family size will be lower than if the wife perceives her relative income is higher than others within the occupational group. This held for all occupational groups and relative incomes.\(^1\) Within occupational groups there is a positive relationship between fertility and income. Only if the income received is greater than the amount needed, beyond the normal status demands, will the fertility increase. Yet, this increase in fertility is not as great as the fertility level for the income level below. There is a positive relationship between perceived relative income and fertility when occupation is controlled.\(^2\)

Various factors may influence the relationship between income and family size preferences. The relationship between income and family size preferences may be influenced by religion and age at marriage.

Religion was found by Freedman and Coombs to influence the relationship between family size preferences and income. When the preferences and expectations of number of children were controlled for by Catholic and non-Catholic

\(^1\)Deborah S. Freedman, pp. 419-422.

\(^2\)Ibid.
for the different income levels, Catholics were found consistently to have higher family size preferences for every income level. An average of .8 of a child difference was found.\(^1\)

In Freedman and Coombs study, one of the explanatory factors for the larger family size of low income groups is related to the age at marriage. Freedman and Coombs found among women in Detroit, the earlier the age at marriage, the lower the current income level, and the larger the expected family size or actual family size.\(^2\)

Education is the third component of socio-economic status. Generally, there is an inverse relationship between the level of education attained and family size preferences. That is females with grade school education or less usually have larger family size preferences than females with college education.

Janowitz hypothesizes that one of the explanations for the inverse relationship between education and family size preferences is that as the female's educational level increases her horizons broaden. Thus, the more alternatives she can chose from her preferences for children will be affected.\(^3\) Westoff and Potvin agree that education results

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\(^2\) Ibid., pp. 202-203.

in broadening a woman's interests by exposing her to activities that may be nonfamilial activities thus affecting her preferences for children.¹

Secondly, higher educational attainments, Jonowitz hypothesized, may increase the female's productivity of time in the market place relative to her time at home. This may create an incentive for her to prefer spending more time working (higher productivity) than in the home with child care; thus affecting her family size preferences. This adds an additional alternative to nonfamilial activities as opposed to familial activities.²

Finally, Jonowitz hypothesizes that with increasing education the female may find that she is more efficient with birth control. Her knowledge of means and how to use birth control will increase. This will allow her to lessen the divergence between actual family size and desired family size. Hopefully, with knowledge of effective means of birth control and increasing education, also comes the ability to efficiently use this knowledge.³

Blake found from 1943 to 1960 "persons with grade school education almost always favor families one-third a


²Jonowitz, pp. 189-190.

³Ibid.
child larger than persons with either high school or college education.\(^1\) When persons with high school education were compared to persons with a college background, high school educated persons preferred families similar to or smaller than college educated persons. The difference in family size preferences between grade school education and college education has been widening since 1950.\(^2\)

The inverse relationship between education and fertility or expected number of births was supported by the findings of Whelpton, Campbell and Paterson in the 1960 national fertility survey. Less-educated families expected larger families than more educated families. Yet, when wives who had completed high school were compared to wives who had attended college no significant difference was found with regards to expected family size. Exposure to a college education may not be enough to influence the wife's family size expectations.\(^3\)

Again, Westoff and Westoff found the average number of children born to women aged thirty-five to forty-four years old was inversely related to education. Women with a college education had the smallest family size of 2.4 children on the average and women with less than elementary


\(^2\)Ibid.

\(^3\)Whelpton, Campbell and Paterson, p. 93.
education had the largest family size of 3.9 children on the average. A difference of 1.5 children per family. Women with a high school education had the same number of children as women with some college education (2.8 children). As educational level increased for the other levels family size decreased.¹

The inverse relationship between educational level and fertility held for Nam and Gustavus among white women aged thirty-five to forty-four in 1965 and 1972. In 1965, women with less than elementary school education had 4.0 children on the average as compared to women with a college education having 2.8 children on the average, a difference of 1.2 children between the highest educational level and the lowest educational level. In 1965, Nam and Gustavus found there was no difference in family size between high school graduates and women with some college education. In 1972, Nam and Gustavus found that women with less than elementary school education had 3.7 children on the average and college educated women had 2.6 children on the average, a difference of 1.1 children. The difference in the span between the two family sizes was approximately the same in 1965 and 1972. There was virtually no difference between high school graduates and women with some college education.²

¹Westoff and Westoff.
²Nam and Gustavus, p. 118.
When husband's educational attainment is considered instead of the wife's educational attainment, Whelpton, Campbell, and Paterson found there to be no significant relationship between husband's educational attainment and wife's family size expectation as was found between wife's educational attainment and her family size expectations. Husband's educational attainment influences fertility less than wife's educational attainment.¹ Yet, husband's educational attainment indirectly influences fertility by influencing the educational level he conceives necessary for the wife he marries. "The impact of wife's education on fertility is not independent on husband's education or occupation, especially at lower levels of education."²

The relationship between family size preferences and educational attainment are different for males and females. In general, Blake found females have consistently preferred slightly larger families than males at all educational levels from 1943 to 1960. In 1960 grade school females preferred 3.8 children as compared to 3.1 children for grade school males and college females preferred 3.4 children as compared to 3.3 children among college males. Males did not have a consistent relationship between educational attainment and family size preferences as was found among females.

¹Whelpton, Campbell, and Paterson, p. 93.
²Ibid.
Generally, grade school females desired larger families than college educated females.¹

An inverse relationship between mean desired family size, mean ideal family size, and father's education was found by Paterson among white high school senior families in Louisiana. Female seniors whose father had some junior high school education or less desired 3.32 children and senior females whose fathers were high school graduates or more desired 3.17 children. There was only a span of approximately .15 of a child. Female seniors whose father's education was junior high school or less had a mean ideal family size of 3.15 as compared to fathers who were high school graduates or more of 2.86 children. There was no consistent relationship between education of father and mean expected family size.²

Paterson found male white high school seniors in Louisiana in 1970 also had an inverse relationship between mean desired family size preferences and mean ideal family size preferences and father's education. Males whose fathers had a junior high education or less desired 3.08 children as compared to 2.73 children for males whose fathers were high school graduates or more. The mean ideal family size ranged from 2.95 children for males whose fathers had junior high school or less education and 2.60 children for males

¹Blake, pp. 159-174.
²Paterson, p. 235.
whose fathers were college graduates or more. The span in family size preferences was greater for males than for females. There was no consistent relationship for mean expected family size and fathers education. 

The relationship between family size preferences and fertility can be modified by various factors. Two of the factors which can modify the relationship are religion and age at marriage.

The first factor to be considered modifying the relationship between family size preferences and educational attainment is religion. Blake found when religion is controlled for, Catholic and non-Catholic, the inverse relationship between fertility and educational level becomes a positive relationship with higher educated Catholic females having larger families than grade school educated Catholic females. There was also an inverse relationship between family size and educational level for non-Catholics. Catholics had larger family sizes than non-Catholics consistently. 

The second factor to be considered influencing the relationship between family size preferences and educational attainment is age at marriage. When age at marriage is controlled for there is no relationship between education

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1 Ibid.
2 Blake, p. 167.
and fertility as found by Jonowitz.\textsuperscript{1} Jonowitz hypothesizes that "for the latter married women, increased education thus plays a smaller role and it would be expected that the negative relationship between education and fertility would diminish."\textsuperscript{2} Delaying marriage to a later age may be acting as education would to expose the female to nonfamilial roles.\textsuperscript{3}

Last, education and income can be combined to form an indicator of socio-economic status. Davis found among Utah high school senior females a positive relationship between social status (defined as father's education and occupation) and ideal and desired family size, except for upper class respondents whose ideal number of children fell between lower class and upper-lower class. With regards to desired family size, upper class desired slightly fewer children (4.41) than did upper-middle class (4.61). The lower class ideal and desired family size was a low of 3.80 children and 3.85 children, respectively. The upper-middle class ideal and desired family size preferences were the largest with 3.92 children and 4.61 children, respectively.\textsuperscript{4}

Ralls found, four years later, among Utah high school senior females that upper class females desired the largest

\textsuperscript{1}Janowitz, p. 180.
\textsuperscript{2}Ibid., p. 190.
\textsuperscript{3}Ibid., p. 180.
\textsuperscript{4}Clark Davis, p. 72.
family size of 5.14 children and upper-lower class females desired the smallest family size of 4.50 children. Ideal family size preferences for upper class females desired the largest family size of 4.29 children and upper-lower class female ideal family size preferences were the smallest at 3.92 children.¹

Religion

Westoff and Potvin's "theory of ideal family size formation" suggests that religion is another variable which reflects homogeneity or heterogeneity within the respondent's environment. Religion is a subculture to which an individual belongs. The more cohesive this subculture is the higher the probability that the norms of the subculture will be reflected in family size preferences. Thus, the more cohesive the religious environment the greater the probability that family size preference norms within the religion will carry over to the respondents' family size preferences.²

Religion is one of the most pervasive institutions within a society. It influences values, beliefs, norms and life styles.³ It is one of the most common manifestations of value orientations. Nam has described religion:

¹Ralls, p. 85.
²Westoff and Potvin, College Women, p. 123.
³Nam and Gustavus, pp. 121-125.
In its broadest sense, refers to a system of attitudes, beliefs, and practices which individuals share in groups. These attitudes, beliefs and practices usually are concerned with the service and worship of the supernatural, but, in some instances, are associated with devotion to a set of values rather than to some being or aspect of nature. Religion thus implies a particular orientation toward life and death and a particular feeling about how an individual should relate himself to other persons in other societies. Different religious groups vary in their expressions of these views of society and the life hereafter, so that one's religious affiliation is a relevant factor in understanding individual decisions affecting fertility, mortality, and migration.¹

Thus, religion not only influences the individual's or group's normative structure, but also social, political and economic values and life styles.²

One of the factors which have been found to be significantly influenced by religion is family sizes of couples and family size preferences. Westoff, Potter, and Sagi found that religious affiliation has been one of the strongest major social characteristics in influencing fertility.³

The different religions place varying emphasis upon the function of the family. Whelpton, Campbell, and Paterson state that the Catholic Church views the primary purpose of marriage to be the procreation and education of children.


²Goldscheider, p. 271.

That each couple should have as many children as possible and not allow "selfish" reasons to influence their fertility. They go on to say that the Mormon church also encourages a couple to have as many children as possible. They believe the family and raising children is of the utmost importance. From family relationships one will experience the "greatest earthly and heavenly satisfaction." Researchers generally agree that most Protestant denominations emphasis is not placed upon the importance of procreation as being the purpose of marriage. There is no pressure for a couple to have as many children as possible.

Differences in family size was found by religion by Westoff, Campbell and Paterson. Consistently Catholics had the largest family size, Jews had the smallest family size and Protestants fell between the other two groups. This difference in family size by religion was found by Blake:

1 Whelpton, Campbell and Paterson, p. 70; Gustavus and Nam, pp. 121-125.
2 Whelpton, Campbell and Paterson, p. 70.
4 Westoff, Campbell and Paterson, pp. 90-91.
to be the result of differences in preferences and not ability to have children.¹

When actual fertility of the different religions are compared, there is a difference by religion. Westoff and Ryder found in the 1970 national fertility survey that once married women 35 to 44 years of age had different cohort fertility rates for Catholics and non-Catholics. Catholics had higher fertility than non-Catholics. Catholic fertility was the highest rate of 3.64 children. This was closely followed with 3.52 children for Mormons. Protestant fertility was below Catholic and Mormon fertility at 2.92 children and Jewish fertility was the lowest at 2.13 children.²

When family size preferences are compared by religion there continues to be a difference in family size preferences by each religion. Freedman and Sharp's study showed among the adult population in Detroit over the age of 21 during 1952 mean ideal family size was greater for Catholics than Protestants. Catholic mean ideal family size was 3.38 children as compared to 3.04 children for Protestants.³

The relationship between religion and family size preferences was found by Gustavus and Nam to be maintained among sixth, ninth and twelfth graders. Catholic students

²Westoff and Ryder, p. 280.
³Freedman and Sharp, p. 38.
at all grade levels chose larger ideal and desired family size preferences than non-Catholics. There was no consistent relationship among the Protestant denominations (Baptist, Methodist, and other Protestants). The largest ideal family size of 3.75 children was for twelfth grade Catholics. The largest desired family size of 4.00 children was for twelfth grade Catholics. There was no consistent relationship between the increasing grade level and family size preferences for any of the religions.¹

Davis's study of the Utah high school senior females in 1970 had a consistent relationship between family size preferences and religion. Mormons desired and ideal family size was the largest, 4.51 children and 4.03 children respectively, composing approximately 83 percent of the respondents. Catholics had the next largest family size preferences of 3.18 children for ideal family size and 3.02 children for desired family size. Whereas, Protestants, Others, and No religion had the smallest ideal and desired family size preferences. All religious groups desired family size preferences were larger than their ideal family size preferences.²

Four years later in Ralls study of Utah high school senior females the expected relationship of religion--Mormon, Catholic, Protestants and others, and None (from largest to

¹Gustavus and Nam, p. 49.
²Clark Davis, p. 58.
smallest)—to ideal and desired family size preferences did not completely hold. Mormon females still had the largest ideal and desired family size of 4.27 children and 4.96 children, respectively. Surprisingly the next largest family size preferences were among females with no religious affiliation. Their ideal family size was 4.07 children and desired family size was 4.70 children. The difference between Catholics and Protestants and Others still held, with Catholic ideal family size of 4.06 children and desired family size of 4.58 children. Protestant and Other ideal family size was 3.94 children and desired family size was 4.49 children. Consistently, for all religious groups desired family size was greater than ideal family size.\(^1\)

There are various factors that may modify the relationship between religion and family size preferences. Some of the factors that may modify the relationship between religion and family size preferences are race, education, and age of the respondent.

The relationship between religion and family size preferences can be modified by race if one of the religious groups is of predominantly one race and another group is of another race. Gustavus found in the follow-up of the sixth, ninth, and twelfth graders in 1971 that the relationship between religion and desired family size preferences basically

\(^{1}\text{Ralls, p. 70.}\)
That is basically Catholics' family size preferences were larger than non-Catholic family size preferences. "All of the religious groups except the 1968 sixth grade Baptist and Methodist lowered their family size preferences during the three years. The slight rise in the family size preferred by these two groups is probably because a greater proportion of them are black."¹ So, from grade school to high school, the relationship between religion and family size preferences held.

The relationship between family size preferences and religion were influenced by race, was found by Johnson among high school seniors in three northern Utah counties. Mormons' family size preferences were the largest with ideal family size of 4.41 children and desired family size of 4.60 children. Protestants had the next largest family size preferences of 4.20 children as ideal family size and 3.77 children as desired family size. Interesting enough, Catholic had the smallest ideal and desired family size of 4.12 children and 3.73 children respectively. Part of the reason for smaller family size among Catholics may be due to their being Indians and the Indians being able to evaluate their ability to support a large family. The Protestants consisted of Indian and Negro respondents only. Only the Mormon

¹Gustavus, p. 338.
respondents were white. The influence of race may slightly distort the findings.¹

Education is another factor which can modify the relationship between religion and family size preferences. In the study by Freedman and Sharp when educational level is considered Catholic ideal family size is consistently greater than Protestant ideal family size. The inverse relationship between education and family size preference was not maintained for Catholics. Both Catholics with twelve or more years of education and less than nine years of education had similar family size preferences. The inverse relationship between educational level and ideal family size is maintained for Protestants. Protestants with less than nine years of school having an ideal family size of 3.27 children and Protestants with twelve or more years of school having an ideal family size of 2.89 children.² Educational level does not modify the relationship between religion and family size.

Last, the age of the respondent may influence the relationship between family size preferences and religion. Freedman and Sharp found when the religious groups are subdivided by age--adults under forty years old and adults over forty years old--the relationship between family size preferences and religion is maintained. The adults under forty

¹Johnson, pp. 34, 42.
²Freedman and Sharp, p. 38.
years of age who were Catholics had an ideal family size of 3.34 children as compared to 3.14 children for Protestants. The relationship between religion and family size preferences is not modified by the age of the respondent.

Religiosity

Westoff and Potvin's "theory of ideal family size formation" suggests that religiosity is another variable which reflects the cohesiveness of the environment for an individual. Religiosity works through religion—the higher the religiosity level of the individual the higher the probability of the religion's norms about family size preferences being carried over into the individual's family size preferences.¹

Religiosity is the level of commitment an individual has to a given religion. This level of commitment may be measured by the amount of activity within the religion which the individual is involved as has been done by Freedman and Whelpton; Paterson; Westoff and Potvin; Westoff and Ryder; Davis; Ralls; and others.² Activity can consist of frequency of church attendance, frequency of taking the sacraments,

¹Westoff and Potvin, *College Women*, p. 123.

number of committees one belongs to, etc. This level of commitment will vary from religion to religion due to the amount of participation expected from the individual.¹

Another measure of commitment to a religion is the amount of acceptance of sacred principles over secular principles as measured by DeJong, Westoff and Ryder, Davis, Ralls, and others.² The more importance the individual places on sacred principles the more likely the individual will follow the teachings of the church. This is referred to here as the individual level of fundamentalism. Fundamentalism can be measured through such questions as "If the church and scientist were in conflict the church would always be right" or "An individual is accountable not only to himself, but to God for his behavior." The more the individual accepts the above and similar statements, the more fundamentalist or religious an individual can be considered.³

Why are there different levels of religiosity? Freedman and Whelpton have hypothesized three explanations for the difference in religiosity levels. The first explanation hypothesized by Freedman and Whelpton considers religiosity

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¹Ibid.


³Ibid.
to be a continuum from rationalism to traditionalism. Toward the rational end the individual becomes more critical of alternative routes of actions with the view to choosing among the alternative actions. Toward the traditionalist end the individual becomes more locked into one acceptable mode of action and does not view alternative modes of action. The closer an individual approaches the traditional end of the continuum the more the individual depends upon "faith" in past actions. Thus, the more traditionally oriented the individual, the more his actions depend upon faith and the less he intervenes with timing or regulating his family size.¹

The second alternative explanation by Freedman and Whelpton of the differences in religiosity level consists of a continuum from individualism to adherence to socially defined norms. The socially defined norms are those of the given religious group for which the individual belongs. As the individual accepts the socially defined norms of the religious group he tends away from individual action and views his action within the group framework. As the individual tends toward the individualism end of the continuum he begins to place self before the needs of the group. Thus, there would be a greater tendency to limit and plan one's family.²

¹Freedman and Whelpton, p. 295.
²Ibid., p. 296.
Last, Freedman and Whelpton hypothesize that the effect of different levels of religiosity on an individual does not need to refer to rationalism or emancipation of the individual. Each individual belongs to a multiple of reference groups in which the individual to varying degrees conforms to the groups social norms. Some of the reference groups are religious and some of the reference groups are nonreligious. Thus, some individuals will conform to the social group norms of religious groups and others will conform to the social group norms of nonreligious groups. If an individual accepts the social group norms of a nonreligious group there may be more emphasis on nonfamilial activities and family planning and limitation of children than with a religious group identity. Thus, the individual does conform to some social group norms, he just does not conform to a religious groups social norms.\(^1\)

First, the individual's religiosity level measured by amount of participation will be considered. Westoff and Potvin's study of college women (freshmen and seniors) found that as the frequency of such activities as attending church services, consulting clergy about personal problems or frequency of attending religious sponsored meetings or activities increased the magnitude of difference in family size preferences for Mormons and Catholics the greatest.\(^2\)

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\(^1\)Ibid.

\(^2\)Westoff and Potvin, p. 132.
Paterson's study of Louisiana high school seniors showed that for Catholics as level of church attendance increased ideal, desired and expected family size preferences increased. Protestant seniors did not have the same strong relationship as Catholic.¹

As the level of church attendance increased, family size ideals and desires increased was also found by Davis among Utah high school senior females.²

Four years later, Ralls found Utah high school senior females who attended most of the meetings had the largest ideal and desired family size preferences of 4.23 children and 4.95 children, respectively. The smallest ideal and desired family size preferences were for females who attended no church meetings with ideal family size of 3.97 children and desired family size of 4.41 children. Females who attended a number of meetings between these two categories had no consistent relationship.³

Secondly, the fundamental definition of religiosity will be considered with regards to its influence on family size preferences. Fundamentalism is defined by Westoff and Ryder as the level of importance an individual places upon religion within one's life.⁴

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¹Paterson, p. 237.
²Clark Davis, p. 64.
³Ralls, p. 76.
⁴Westoff and Ryder, p. 284.
resulted in the findings of individuals with higher fundamentalism had larger family size preferences than individuals with low fundamentalism. Both Catholic and non-Catholic college women had a strong relationship between importance of religion in one's life and fertility. The relationship between fundamental religiosity and fertility was stronger than the relationship between religious affiliation and fertility as found by Alvarez among Mexican-Americans. 

Attitudes and values regarding fertility were positively related to fundamentalism among Southern Appalachians studied by DeJong. This relationship between fundamental religiosity and fertility existed for all Protestant religions.

Davis found a direct relationship between fundamental religiosity and family size preferences among Utah high school senior females.

Four years later, Ralls found females with high fundamental religiosity had the largest desired family size preferences of 5.20 children among Utah high school senior females. Where females of medium-low religiosity had the smallest desired family size preference of 4.46 children. Both low and medium-high religiosity levels had the same

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1 Ibid.
2 Alvarez.
3 DeJong, p. 235.
4 Clark Davis, p. 67.
desired family size preferences of 4.53 children. When Ralls studied ideal family size preferences, females who had medium-high religiosity had the largest ideal family size preferences of 4.22 children. The smallest ideal family size preferences existed for females of medium-low religiosity (3.97 children).¹

Age at marriage

Westoff and Potvin's "theory of ideal family size formation" suggests that age at marriage is another variable which reflects the cohesiveness and homogeneity of the environment.² Age at marriage is an attitudinal variable that is influenced by place of residence, social class, or religion and religiosity. If the subculture associated with place of residence, social class, religion, or religiosity is homogeneous and cohesive than the normative age at marriage should be reflected in the desired age at marriage. If the subculture associated with place of residence, social class, religion, or religiosity is heterogeneous or noncohesive, then the normative age at marriage may not be reflected in the desired age at marriage.

Basically, age at marriage has been found to fall into three age categories by Bumpass and Mburugu, and

¹Ralls, p. 80.
²Westoff and Potvin, p. 123.
Westoff and Ryder. The first age category is females who marry at a young age—-in their early teens (18 and under). The second category is females who marry between nineteen and twenty-four years of age. The last category is females who marry at the age of twenty-five years of age or older. Bumpass and Mburugu found that females who had completed their fertility had 3.90 children in 1965 and 3.54 children in 1970. The smallest family size existed among females who had married at the age of 25 or older—-2.38 children in 1965 and 2.55 children in 1970. Females who married between the ages of nineteen and twenty-four had a number of children that fell between the other two age groups.

Westoff and Ryder found in the 1970 national fertility survey that females who married at a young age (eighteen and under) wanted the largest family size of 4.07 children. The smallest family size preference existed among females who married at the age of twenty-five or older—-2.56 children. Females marrying between the ages nineteen and twenty-four had mid-family size preferences.


2Bumpass and Mburugu, pp. 32-33.

The relationship between age at marriage and fertility is influenced by other factors directly or indirectly. Westoff and Ryder's findings support that the relationship is complex and not simple between age at marriage and fertility.1

One of the factors which affects the relationship between fertility and age at marriage is the socialization process an individual is exposed to after marriage. The earlier the age at which an individual marries imposes certain limitations or restrictions upon the socialization process. Usually the couple comes from a lower socio-economic status group at a younger age at marriage. Traditionally the lower socio-economic status groups.2 The younger the age at marriage for a couple the harder they may find it to improve their socio-economic status level. This is because of the wives lower level of education and a possible restriction on the husband's level of education and future earning potential.3

The influence of differing socialization upon the relationship of fertility and age at marriage is also found among the number of different roles besides motherhood that

1Ibid.

2Westoff and Ryder, The Contraceptive Revolution; Whelpton, Campbell and Paterson, p. 59.

a female is exposed to when the age at marriage varies. The earlier the age at marriage for a female the fewer competing roles with motherhood she is exposed to. At an earlier age at marriage there is usually more limited exposure to working experience and education. This limited exposure to working experience and education limits her perceived alternative activities to motherhood. As the individual is exposed to more alternative activities she may also be exposed to more nonfamilial roles that would compete with fertility.\(^1\)

The last influence to be considered on influencing the socialization process due to differing age at marriage as found by Bumpass and Mburugu is the quantity of information for making decisions. The younger the age at marriage, the information used in decision-making is limited, less reliable and not as "mature" as at a later age at marriage. The fertility decisions made by couples at a young age at marriage will be much different from fertility decisions made at an older age at marriage.\(^2\)

Another factor found by Freedman and Coombs and others is the time period and the number of years spent together by a couple during the wife's childbearing years, changes

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\(^1\)Ibid.

\(^2\)Bumpass and Mburugu, pp. 32-33; Bumpass, p. 51.
with the age at marriage. The younger the age at marriage for a female the greater the number of years the couple will spend together during the wife's childbearing years. The younger the age of a female at marriage will increase the number of years in which the couple can have children. Not only does it increase number of years in which a couple can have children, but most of those years fall into the period when the female is most fecund. At an early age the risk of subfecundity decreases. The later the age at marriage the fewer the married years in fecundity. Thus, a couple who marries at an early age is more likely to have all the children they desire and if ineffective with birth control more children than they desire.¹

Attitude toward the use of birth control

Westoff and Potvin's "theory of ideal family size formation," suggests that attitudes toward the use of birth control is another variable which reflects the cohesiveness and consistency in one's environment.² Attitude toward the


²Westoff and Potvin, p. 123.
use of birth control is influenced by place of residence, social class, religion, or religiosity. If the subculture associated with place of residence, social class, religion, or religiosity is homogeneous and cohesive then the normative attitudes toward the use of birth control should be reflected in an individual's attitudes toward the use of birth control. If the subculture associated with place of residence, social class, religion, or religiosity is heterogeneous or noncohesive then the normative attitudes toward birth control may not be reflected in an individual's attitudes toward the use of birth control.

The major method in regulating one's family size is the use of birth control. If birth control is used efficiently it will allow one to space and plan the number of children a couple has.

The percentage of females and males who have knowledge about the use of contraceptives is increasing according to Blake. Between 1937 and 1964 the percentage of males between 21 and 44 years of age who had some form of birth control knowledge increased from 66 percent to 89 percent. Females twenty-one to forty-four years of age, did not have as great an increase, from 70 percent to 86 percent. Very few people do not have some form of information about birth control.¹

Attitudes about whether birth control should be used to limit one's family size were found to be related to the size of family considered ideal or desired by Davis among Utah high school senior females in 1970. The smallest ideal and desired family size preferences were among females who favored the use of birth control to limit one's family size. Females who were against the use of birth control to limit one's family had the largest ideal and desired family size preferences.\(^1\)

Four years later Ralls study of Utah high school senior females again found family size preferences to be related to whether couples should limit their families. Females who favored the use of birth control to limit one's family had the smallest ideal and desired family size preferences. Females who were against the use of birth control to limit one's family size had the largest ideal and desired family size preferences.\(^2\)

The relationship between family size preferences or fertility and the use of birth control can be influenced by various factors. Some of the factors found to influence the relationship between family size preferences and fertility are past fertility, religion, religiosity, socio-economic level, and education.

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\(^1\)Clark Davis, p. 95.

\(^2\)Ralls, p. 124.
The first factor to be considered influencing the relationship between family size preferences or fertility and the use of birth control is past fertility performance. Alvarez found the efficiency of use of birth control increased as expected family size was approached.\(^1\)

Religion is another factor which can influence the relationship between family size preferences or fertility and the use of birth control. Whelpton, Campbell, and Paterson have stated that the Catholic church has taken a firm stand that birth control should not be used for selfish reasons and that when it is necessary to use birth control only natural means of contraceptives are acceptable. This means the use of IUD's, birth control pills, sterilization, etc. are nonacceptable means of contraception. The Catholic church has continually popularized its stand on contraceptive use through statements by the Pope. The only acceptable means of contraception are considered abstinence and the rhythm method. This leaves Catholics with few reliable means with which to regulate fertility.\(^2\)

Willis states that the Mormon church has officially taken a stand on the use of birth control. The church officials have used an open-ended statement in which consideration should be given to the mother's health.

\(^1\) Alvarez, p. 25.

This allows for those who use contraception to be able to justify their actions. There is also no restrictions on what type of contraception can be used. Both artificial and natural means of contraception are acceptable. Finally, the officials of the Mormon church have taken no sanctions against members who use contraceptives—they have not been denied access to the temple or excommunicated.¹ So even though the Mormon church glorifies the function of children in the family they do not impose restrictions upon the means to limit or plan a family. Christenson found among Mormon students in marriage and counseling classes at Brigham Young University that married students approved the use of contraceptives by over 65 percent with another 9 percent uncertain about its use. Among unmarried Mormon students over 77 percent either approved the use of contraceptives or else they were uncertain. This study was done in 1947-1948, so a greater percentage today would probably approve the use of contraceptives.²

Whelpton, Campbell and Paterson found that most Protestant denominations have not taken an official stand on contraceptives or on the normative size of families. Most Protestant denominations have approved "the use of all methods of contraception that are mutually acceptable,


² Christenson.
noninjurious to health, and appropriate to degree of effectiveness required in specific situations."\(^1\)

Another factor that influences the relationship between family size preferences or fertility and the use of birth control is the religiosity level of the respondent. Whelpton, Campbell and Paterson found among Catholics the more religious the individual is the more likely the individual will not use any artificial forms of birth control.\(^2\)

Socio-economic level is another factor that may influence the relationship between family size preferences or fertility and the use of birth control. Studies by Rainwater and Weinstein, and Rainwater found the socio-economic level of the individual can influence the individual's attitude toward the effectiveness of birth control. Those from lower socio-economic status groups tended to be fatalistic and decided that no matter what they tried to do it would not be effective--they would still have a lot of children. Where, as the socio-economic class level increases, the individual begins to believe they have more control over the number of children they could have. In other words, they had confidence that they could efficiently use contraceptives.\(^3\)

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\(^1\) Whelpton, Campbell and Paterson, p. 70.

\(^2\) Ibid.

Last, the influence of education upon the relationship of family size preferences or fertility and the use of birth control will be considered. Blake makes the assumption that the more education the respondent has the higher the probability that one will approve the use of birth control. Blake found in 1964 that the greatest difference in approval of birth control was between high school educated and college educated respondents where 12 percent more college educated females approved the use of birth control (86 percent) and 5 percent more college educated males approved the use of birth control (88 percent).¹

Consistency and Continuity in Life Experiences

Educational differences

Westoff and Potvin's "theory of ideal family size formation" qualifies when through the socialization process family size of orientation may not be reflected in family size preferences. One of the qualifications considers the "extent of continuity and consistency of the individual's reference groups in late adolescence and early adulthood with those of the earlier years also appear relevant."²

That is if the individual experiences or expects to experience a change in life style from that of which one was raised

¹ Blake, p. 525.
² Westoff and Potvin, College Women, p. 123.
it will influence family size preferences. If the individual does not expect to experience a change in life style then the relationship between size of family of orientation and size of family of procreation should continue.¹ This non-change in life style will be considered a consistency in norms of the individual.

Johnson and Stokes have operationalized the concept of intergenerational change by comparing respondents education to mothers' education. This intergeneration change would be considered as an inconsistency for the respondent between what is considered as norm during adolescence and what happens in early adulthood. This is the concept of intergenerational change in life style. Generally the respondents should try to replicate their family size of origin within their family size of procreation. If the respondents' level of education was different than her mothers' level of education there was a change in intergenerational lifestyle. The direction of the change between mother and daughter was not considered, resulting in the relationship between the size of family of orientation and size of family of procreation not existing. Johnson and Stokes found among females, aged forty-four, there was a strong relationship between family size of orientation and fertility, who did not experience intergenerational change. The relationship was not

¹Ibid.
as strong for respondents who experienced intergenerational change.¹ Thus, "women whose experience (and association) are most similar to those of the early home environment are most likely to recapitulate the size of family of origin in building their family."²

A study of a heterogeneous population of lower socio-economic and rural residence done by McAlister supports the theory that if there is intergenerational change in lifestyle family size of origin will be different than family size preferences. The individual's who expected a change in their life styles or an improvement in their socio-economic status did not have a relationship between size of family of orientation and family size preferences. This may be due to a high degree of discontinuity in intergenerational lifestyles.³

In the present study, the variable expected change in education between respondent and mother if female and respondent and father if male will be developed similar to Johnson and Stokes' measurement. The measure of expected education will be used instead of actual education since the respondents have just finished high school and have not had time to complete their education.

¹Johnson and Stokes, pp. 178, 183.
²Ibid.
Female and Male Family Size Preferences

Females and males have generally been found to have different family size preferences. Part of this may be the result of different socialization for females and males.

When family size preferences among high school students are studied, males were found to have smaller family size preferences than females. Paterson found among Louisiana high school seniors that male desired, expected, and ideal family size was smaller than female's desired, expected, and ideal family size.¹

Gustavus and Nam found that the difference in family size preferences for males and females (males having smaller family size preferences than females) did not occur until the senior year in high school. In both the sixth and ninth grade, male's ideal and desired family size was greater than female's ideal and desired family size. Among the twelfth graders a change occurred, male's ideal and desired family size was smaller than female's ideal and desired family size. Further, adult males were found to desire either the same or smaller families than adult females from 1947 through 1960 by Blake.²

This leads one to hypothesize that females and males are influenced differently by the socialization process and

¹Paterson, p. 235.
²Blake.
the given socio-economic and demographic variables will influence desired and ideal family size differently for males and females.

Objectives

As stated earlier, the primary objective of this study is to create a causal structure which relates given socio-economic and demographic variables to ideal and desired family size preferences. The given socio-economic and demographic variables will be place of residence, social class, family size of orientation, religion, religiosity, educational difference, ideal or desired age at marriage, and attitude toward the use of birth control. This will be done with the use of a path model.

Specifically it is intended:

1. To measure and analyze the causal relationships between the given socio-economic and demographic variables and desired family size of female high school seniors in the state of Utah, 1974.

2. To measure and analyze the causal relationships between the given socio-economic and demographic variables and ideal family size of female high school seniors in the state of Utah, 1974.

3. To measure and analyze the causal relationships between the given socio-economic and demographic variables and desired family size of male high school seniors in the state of Utah, 1974.
4. To measure and analyze the causal relationships between the given socio-economic and demographic variables and ideal family size of male high school seniors in the state of Utah, 1974.

5. To compare and contrast the causal relationships between the given socio-economic and demographic variables and desired family size of female Utah high school seniors and desired family size of male Utah high school seniors.

6. To compare and contrast the causal relationships between the given socio-economic and demographic variables and ideal family size of female Utah high school seniors and ideal family size of male Utah high school seniors.

**Hypothesis**

The formation of family size preferences is assumed to occur through the socialization process during early adolescence and late childhood.¹ It is generally agreed that males and females experience different socialization processes. The present study will attempt to quantify the difference in male-female socialization of family size preferences by estimating two identical models (one for males and one for females) by ideal and desired family size preferences. Within this model it will be hypothesized that:

1. Ideal or desired family size preferences are a function of place of residence, social class, family size of orientation, religion, educational difference, religiosity, ideal or desired age at marriage, and attitude toward the use of birth control.

2. Attitude toward the use of birth control is a function of social class, family size of orientation, religion, educational difference, religiosity, and ideal or desired age at marriage.

3. Ideal or desired age at marriage are a function of place of residence, social class, family size of orientation, and religion.

4. Religiosity is a function of place of residence, social class, and religion.

5. Educational difference is a function of social class and family size of orientation.

6. Religion is a function of place of residence and social class.

7. Family size of orientation is a function of place of residence and social class.

8. Ideal or desired age at marriage will influence ideal or desired family size preferences through attitude toward the use of birth control.

9. Religiosity will influence ideal or desired family size preferences through ideal or desired age at marriage and attitude toward the use of birth control.
10. Educational difference will influence ideal or desired family size preferences through attitude toward the use of birth control.

11. Religion will influence ideal or desired family size preferences through ideal or desired age at marriage, religiosity, and attitude toward the use of birth control.

12. Family size of orientation will influence ideal or desired family size preferences through educational difference, ideal or desired age at marriage and attitude toward the use of birth control.

13. Social class will influence ideal or desired family size preferences through family size of orientation, religion, ideal or desired age at marriage, educational difference, religiosity, and attitude toward the use of birth control.

14. Place of residence will influence ideal or desired family size preferences through family size of orientation, religion, ideal or desired age at marriage, and religiosity.
CHAPTER III
DATA AND METHODS

Data

Data used in this study came from a survey of high school seniors in the state of Utah during the 1973-1974 academic year. The data were collected by the Population Research Laboratory in the Department of Sociology at Utah State University.

The universe consisted of all graduating high school seniors (male and female) enrolled in Utah public high schools during the 1973-1974 academic year. The sample consisted of one-third of the high schools in the state of Utah. The schools that were chosen were the same high schools used in a 1970 study by Clark Davis of Utah high school senior females conducted by the Population Research Laboratory in the Department of Sociology at Utah State University. It was assumed that the schools chosen had the same level of representativeness for metropolitan, urban, and rural areas as if all schools had been chosen.¹

For the 1974 study a list of home addresses of all students enrolled as seniors in the high schools were obtained. Most of the lists consisted of compilation done by the high

¹Clark Davis.
school administrations at the beginning of the 1973-1974 academic year. This resulted in a total sample size of 6,300 Utah high school seniors, both males and females—3,368 males and 2,932 females.

The questionnaire was mailed out to all students on the address lists. These lists may reflect some inaccuracies because of students dropping out of school or moving between the time the lists were compiled and the time the questionnaires were mailed. Especially, for the high schools which compiled the lists in the fall and the data were collected in the late spring. There were two mailings of the questionnaire followed by a postcard to those who had not returned the questionnaires. The mailings took place between May 6, 1974 and June 14, 1974. The postcard was sent on July 25, 1974.

A sample questionnaire is given in Appendix A. The questionnaire used in the 1974 study was an extended version of the 1970 questionnaire. The extension consisted of the inclusion of questions on hypothetical income to the number of children considered ideal and desired, respondents use or non-use of artificial methods of contraceptives under varying circumstances, more generalized questions on the use of birth control, and closed ended questions on the respondent's attitude toward the world population growth.¹

¹For more details see Ralls, and Clark Davis.
For the analysis in the present study all incomplete cases have been eliminated. This was done by including only those questionnaires in which the respondent answered all of the questions used in the present analysis. Which results in 1,015 females of 2,932 females sent questionnaires. A return rate of 35 percent for females. For the males 779 cases of the 3,368 cases were useable. Which results in a return rate of 23 percent for males. However, the response rates were calculated on student enrollment lists which are not always accurate. There are some students that may be on the enrollment lists who are not attending classes and some students who will not graduate. A partial correction for the actual number of students attending school, the return rate becomes 38 percent for females and 25 percent for males. Kim and MacFarlane determined that only 92 percent of the students listed as enrolled actually attend.\(^1\) This does not account for the difference in the enrollment lists due to some of them being compiled in the fall and used in the late spring.

Also, Ralls compared questionnaires received after the first mailing to questionnaires received after the second mailing to see if there was any difference between

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thoe who responded and those who did not respond. There was found to be no significant difference between early and late respondents.¹

Many of the key variables used in fertility analysis have been controlled for within the present study. All of the respondents are of the same general age, educational level, marital status, and occupation.

Although the return rate for females and males was low, which makes it not as reliable to generalize to the rest of the population, it must be kept in mind that there was probably a difference in enrollment lists used and actual enrollment, questionnaires returned at the beginning and end were not significantly different and many of the variables were controlled for in this study.

Variables Used in Analysis

Family size preferences

There are basically three measurements of family size preferences--expected family size, desired family size, and ideal family size. The point of reference varies with the concept of family size preferences. Expected and desired family size preferences are from the individual's point of reference. Desired family size preference is how many children would the respondent like to have or how many children

¹Ralls, p. 61.
does the respondent want. Expected family size is how many children does the respondent think she will end up having. Desired family size may be the same as, greater than, or less than expected family size. For, expected family size may take into consideration circumstances which may result in expected family size being different from desired family size. Ideal family size preferences is a "generalized other" point of reference. It is, what an individual thinks is acceptable for a person in general--what an individual may perceive as normative.

Both desired and ideal family size will be used in this analysis. Expected family size will not be used since that data was not collected. Desired and ideal family size are continuous variables being the number of children the respondent reported as either wanting or considering appropriate for an average couple. By using desired family size, the assumption is made that this is the number of children the individual will strive to have. The individual will attempt to bring actual fertility in line with desired family size.

The question used for desired family size was:
If you could have exactly the number of children you want, what would that number be? _______

The question used for ideal family size was:
What is the ideal number of children for any couple to have? _______
Place of residence

Place of residence is the place in which the high school is located when the respondent was attending high school. There is no record of where the person lived when attending the high school. An assumption is made that even if the respondent lived in a rural environment, goes to an urban school, the environment at the urban school will influence the respondent. Also, it has been found that under the age of eighteen, the length of time spent in a rural environment does not influence the family size preferences of someone living in a nonrural environment. Thus, the assumption is made that the place of where the high school is located will be similar to the place of residence of the respondent.

Place of residence is considered to be either rural, urban, or metropolitan for the respondent depending upon where the high school is located. Rural residence is a city of 2,499 or less people. Urban residence is a city of 2,500 to 149,999 people. Metropolitan is a city of 150,000 or more people.

Social class

Social class is the socio-economic status of the respondent's father. Social class is a scalar measurement with regards to father's education and occupation. The scale

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being used in the present study was validated by Clark Davis with the 1970 Utah high school senior females. The SES scale will be reconstructed in this study using father's education and occupation.

The scale to be used in this analysis is constructed from the Hollingshead and Redlich social position (SES) scale. This consists of a two factor analysis using occupation and education. The first factor used is occupation. Hollingshead developed a seven-point scale ranging occupation from high status to low status: (1) higher executive of large concerns, proprietors, and major professions; (2) business managers, proprietors of medium-sized business, and lesser professionals; (3) administrative personnel, owners of small businesses and minor professions; (4) clerical and sales workers, technicians, and owners of small businesses; (5) skilled manual employees; (6) machine operators and semi-skilled employees; and (7) unskilled employees.

Education, the second factor used, is again developed into a seven point scale: (1) completed a master's or doctorate degree; (2) college graduate; (3) some college training (1-3 years); (4) completed high school; (5) completed tenth to eleventh grade; (6) completed seventh to ninth grade; and (7) less than seven years of school.

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For each respondent, weights were assigned to the occupation and education scale. Occupation has a weight of seven and education has a weight of four. The weights for each scale is multiplied times the persons position in the scale and then the two scores are summed. This allows the scores to vary from eleven points to seventy-seven points. With the lower the score the higher the social position.

There are five social classes that the summed scores can fall into. The five classes are:

<table>
<thead>
<tr>
<th>Social Class</th>
<th>Range of Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>11 - 17</td>
</tr>
<tr>
<td>II</td>
<td>18 - 31</td>
</tr>
<tr>
<td>III</td>
<td>32 - 47</td>
</tr>
<tr>
<td>IV</td>
<td>48 - 63</td>
</tr>
<tr>
<td>V</td>
<td>64 - 77</td>
</tr>
</tbody>
</table>

Where social class I represents the highest social position and social class V represents the lowest social class position.¹

The questions used to develop the social class scale were: What is the occupation of your father and for whom does he work: (Be specific and state in detail what he does) ___________________________ and What is the highest grade of education completed by your father: ___________________________

¹Ibid.
1) Less than the seventh grade
2) Completed 7-9 grades
3) Completed 10-11 grades
4) Completed high school
5) Vocational training after high school
6) Some college training (1-3 years)
7) College graduate
8) Completed a masters or doctorate degree
9) Other (specify) _______________________

Size of family of orientation

Size of family of orientation is the number of children born to the respondent's mother. The concept used in this study is the demographic definition of size of family of orientation since some of the children born to the respondent's mother may be much older or much younger than the respondent. This is a continuous variable which can go from one children (respondent is an only child) to as many children as the respondent's mother had.

The question used was: How many children, including yourself, were born alive to your mother? ________

Religion

Religion is the religion to which the respondent stated as belonging to. Religion is broken down into LDS and non-LDS. This was done because the mean ideal and desired family size preferences for non-LDS were very close.
Desired family size for the females (1974) is 5.18 children for LDS, 2.88 children for Catholics, 2.47 children for Protestants and Others, and 2.18 children for no religious affiliation. Males desired family size preferences were 4.40 children for LDS, 2.90 children for Catholics, 2.57 children for Protestants and Others, and 1.89 children for no religious affiliation. The range of desired family size preferences for males and females is from no children to twelve or more children among LDS and from no children to four children for Catholics, Protestant and Others, and no religious affiliation.

Female ideal family size preferences were 4.27 children for LDS, 3.08 children for Catholics, 2.72 children for Protestants and Others, and 2.71 children for no religious affiliation. Males ideal family size preferences were 3.96 children for LDS, 3.03 children for Catholics, 2.49 children for Protestants and Others, and 2.32 children for no religious affiliation. The range in ideal family size preferences is from two children to twelve or more children among LDS and from two to four children for Catholics, Protestants and Others, and no religious affiliation.

Since, as can be seen from the above, family size preferences for Catholics, Protestants and Others, and no religious affiliation are fairly close, it has been decided to combine all three groups into non-LDS. This also
increases the number of cases since no one of the non-LDS religions was greater than seventy-six cases.

The question used was: What is your religion?

1) L.D.S. 4) None
2) Catholic 5) Other (specify)
3) Protestant

Religiosity

Religiosity is a measure of the level of fundamentalism of the individual. The amount of acceptance of sacred principles over secular principles. The more importance the individual places on sacred principles the more likely the individual will follow the teachings of the church. The measure of fundamental religiosity was used over the measurement of church activities since each religion has a different level of participation for its members and places a different level of importance upon participation.

The scale being used in this study was constructed and validated by Clark Davis in the 1970 study of Utah high school senior females. The religiosity scale is composed of six statements. The statements are written in the form of a summated rating scale. A likert scale of strongly agree, agree, undecided, disagree, and strongly disagree were the possible responses. The responses were weighted from one (1) point to five (5) points with one point representing low religiosity and five points representing high
religiosity. The questions were written to relate to the respondents' beliefs and commitments. The responses to each statement is summed for each respondent, there is a possible range from six (6) points (low religiosity) to thirty (30) points (high religiosity).

Davis developed four categories for the religiosity scale. The four categories were: Low religiosity ranging from six (6) to sixteen (16) points; medium-low religiosity ranging from seventeen (17) to twenty (20) points; medium religiosity ranging from twenty-one (21) to twenty-five (25) points; and high religiosity ranging from twenty six (26) to thirty (30) points. Thus, the lower the respondents summated score, the lower the religiosity level of the respondent.

The questions used to develop the religiosity scale were:

1. My religion is a vital and moving force in my life.
2. Activities such as swimming, movies, work and dancing are all right on Sunday.
3. It is important for an individual to pray daily.
4. An individual is accountable not only to himself but to God for his behavior.
5. Attendance at church meetings is a necessary part of religion.
6. When there is a contradiction between science and religion, the scientists are usually right.

\(^1\) Clark Davis.
Age at marriage

Age at marriage is broken down into two different measurements. The first measurement is desired age at marriage. Desired age at marriage is from the individual's point of reference. Desired age at marriage is how old the respondent would like to be when she/he gets married. Desired age at marriage will be used with desired family size of the respondent.

Ideal age at marriage is the second measurement. Ideal age at marriage is from the "generalized other" point of reference. Ideal age at marriage is the age that the respondent thinks the average individual should marry (either male or female). Ideal age at marriage will be used with ideal family size of the respondent.

Desired and ideal age at marriage is different for females and males. Thus, for the female respondents, the ideal and desired age at marriage they report for themselves and for the "generalized other" female will be used. For male respondents the ideal and desired age at marriage will be the age they report for themselves and for the "generalized other" male.

Age at marriage is a continuous variable which can go from sixteen years and under to thirty-one years and over.

The question used for desired age at marriage was:
At what age would you like to get married?
The question used for ideal age at marriage was:

What do you think is the ideal age for marriage?

_____ for males?       _____ for females?

Attitude toward the use of birth control

Attitude toward the use of birth control is whether or not the respondent would use birth control and under how may different circumstances the respondent would use birth control. Birth control could be used because of low income (to limit family size), to space the birth of children, for poor physical health (danger to health of wife or fetus), emotional problems, the probability of birth defective children, for marital instability, to limit the family size, or for other reasons. The response may go from never use birth control to would use birth control under all eight conditions.

The question used to develop the frequency of use of birth control was: If married, I would use contraceptive devices under the below mentioned circumstances (you may place an "X" beside more than one answer).

_____ 1) low income (to limit family size)
_____ 2) to space the birth of my children
_____ 3) poor physical health (danger to health of wife or fetus)
_____ 4) emotional problems
5) probability of birth defective child
6) marital instability
7) to limit my family size
8) other (specify)
9) never (would never use contraceptive devices)

Educational differences

Educational difference is whether the respondent expected education will be less, equal to or more than the mother's (if female) or father's (if male). The respondents present educational level is high school graduate. So, if mother's education (if female) or father's (if male) is less than a high school graduate the respondent has more education than mother (if female) or father (if male). If the respondent does plan on going on to college and the mother (if female) or father (if male) has some college education or is a college graduate then the respondent will have the same educational level as mother (if female) or father (if male). If the respondent does not plan on going on to college and the mother (if female) or father (if male) is a high school graduate then the educational level is the same. If the respondent plans on going on to college and the mother (if female) or father (if male has some college or is a college graduate, then the educational level will be considered the same. If the respondent plans on going on to college and the mother (if female) or father (if male) has
no college education, then the respondent's education is higher than the mothers (if female) or fathers (if male).

Thus, educational difference can be either negative, zero, or positive. No magnitude is given to the amount of difference between respondent and mother (if female) or father (if male).

The questions used to develop this measure were:

When you graduate from high school, what would you like to do first? If you have second and/or third choices, put 2 or 3 by the appropriate answer.

___ 1) go to college
___ 2) get a job
___ 3) go to a vocational school
___ 4) stay home
___ 5) get married
___ 6) other (specify) _______________________

What is the highest grade of education completed by your mother? (Use the categories listed above and fill in the appropriate number.)

**Methods of Analysis**

The method of analysis will consist of testing a path model shown in Figure 2. This form of analysis is being used since multiple regression will impose statistical
Figure 2. Complete model for the formation of ideal or desired family size preferences among female and male Utah public high school seniors in 1973-1974 academic year.
controls between the dependent and independent variables, but it will not alert one to the implications of the causal structures among predictor variables.¹ Also, zero-order correlation does not allow for the effect of changes between variables as other variables are statistically controlled for.² By using path analysis the causal structure will allow for the indirect effects (effects from independent variables through other variables) to become evident which may not otherwise become evident.

The path model is constructed from the following regression equations where:

- $X_1$ is place of residence
- $X_2$ is social class
- $X_3$ is size of family of orientation
- $X_4$ is religion
- $X_5$ is education difference between respondent and mother (if female) or father (if male).
- $X_6$ is religiosity
- $X_7$ is desired/ideal age at marriage
- $X_8$ is attitude toward birth control
- $X_9$ is desired/ideal family size

² Ibid.
The structural equations in standard form are:

\[ X_3 = P_{31}X_1 + P_{32}X_2 + P_{3E}E \]
\[ X_4 = P_{41}X_1 + P_{42}X_2 + P_{4E}E \]
\[ X_5 = P_{52}X_2 + P_{53}X_3 + P_{5E}E \]
\[ X_6 = P_{61}X_1 + P_{62}X_2 + P_{64}X_4 + P_{6E}E \]
\[ X_7 = P_{71}X_1 + P_{72}X_2 + P_{73}X_3 + P_{74}X_4 + P_{76}X_6 + P_{7E}E \]
\[ X_8 = P_{82}X_2 + P_{83}X_3 + P_{84}X_4 + P_{85}X_5 + P_{86}X_6 + P_{87}X_7 + P_{8E}E \]
\[ X_9 = P_{91}X_1 + P_{92}X_2 + P_{93}X_3 + P_{94}X_4 + P_{95}X_5 + P_{96}X_6 + P_{97}X_7 + P_{98}X_8 + P_{9E}E \]

The use of structural equations allows for the decomposition of total effects into direct effects and indirect effects. A direct effect is the influence of an independent variable upon a dependent variable controlling for the other variables. This is found by using the regression coefficients from the structural equations.

The indirect effects are the influence of the independent variable upon dependent variable through any variable between the independent and dependent variable.
The indirect paths add additional information about the influence of the independent variable upon the dependent variable. The indirect effects are found from the following equation:

$$P_{ij} = \sum_k p_{ik} p_{kj}$$

where:

- $j$ indexes the causal variable of interest
- $i$ indexes the affected variable
- $k$ varies over all variable for which paths led directly to variable $i$ from variable $j$.

$P_{ij}$ represents the indirect paths being calculated between the independent variable $j$ and the dependent variable $i$.

$$\sum_k p_{ik} p_{kj}$$ yields all of the indirect path coefficients for the independent variable $j$ and the dependent variable $i$.  

Both standardized coefficients (betas) and unstandardized coefficients (metric coefficients) will be used in this study. The standardized coefficients allow for comparison of the relative effect of the given socio-economic and demographic variable within the model. The unstandardized coefficients allow for the comparison of the relative effect of the given socio-economic and demographic variables between different models.

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Variables

Family size preferences

As can be seen from Figure 2, it is hypothesized that ideal or desired family size preferences are a function of place of residence, social class, family size of orientation, religion, educational difference, religiosity, ideal or desired age at marriage, and attitude toward the use of birth control.

Attitude toward the use of birth control

As can be seen from Figure 2, it is hypothesized that attitude toward the use of birth control is a function of social class, family size of orientation, religion, educational difference, religiosity, and ideal or desired age at marriage.

Ideal or desired age at marriage

As can be seen from Figure 2, it is hypothesized that ideal or desired age at marriage is a function of place of residence, social class, family size of orientation, and religion. Also, ideal or desired age at marriage will influence ideal or desired family size preferences through attitude toward the use of birth control.
Educational difference

As can be seen from Figure 2, it is hypothesized that educational difference is a function of social class and family size of orientation. Also, educational difference will influence ideal or desired family size preferences through attitude toward the use of birth control.

Religiosity

As can be seen from Figure 2, it is hypothesized that religiosity is a function of place of residence, social class, and religion. Also, religiosity will influence ideal or desired family size preferences through ideal or desired age at marriage and attitude toward the use of birth control.

Family size of orientation

As can be seen from Figure 2, it is hypothesized that family size of orientation is a function of place of residence and social class. Also, family size of orientation will influence ideal or desired family size preferences through educational difference, ideal or desired age at marriage and attitude toward the use of birth control.

Religion

As can be seen from Figure 2, it is hypothesized that religion is a function of place of residence and social class. Also, religion will influence ideal or desired family size preferences through ideal or desired age at
marriage, religiosity, and attitude toward the use of birth control.

**Social class**

As can be seen from Figure 2, it is hypothesized that social class will influence ideal or desired family size preferences through family size of orientation, religion, ideal or desired age at marriage, educational difference, religiosity, and attitude toward the use of birth control.

**Place of residence**

As can be seen from Figure 2, it is hypothesized that place of residence will influence ideal or desired family size preferences through family size of orientation, religion, ideal or desired age at marriage, and religiosity.

**Assumptions**

There are a few basic underlying assumptions in the afore mentioned path model. The model is being treated separately for males and females. In late childhood and early adolescence males and females experience differing socialization processes. Thus, males are socialized into society differently from females and should be treated separately to see if the differing socialization process affects the variables that are hypothesized to influence family size preferences.
Secondly, ideal and desired family size are being treated as a norm that is being formed within the individual and will be fairly constant over time unless there are major discontinuities within the individual's life to influence family size preferences or fertility.

Thirdly, this is a static analysis of the data. The data was collected at one point in time of high school seniors, so it cannot be treated as if it were longitudinal. There may be an interaction in the future between the variables, but that is not taken into consideration in the present model. It is assumed that the causal relationships go in the direction hypothesized. Thus, for place of residence and religion the causal relationship hypothesized is that place of residence causally influences religion. The respondent has no control over their place of residence, but they do have control over religion. Except, it has been found that a higher proportion of the population is LDS in rural areas as compared to metropolitan areas within the state of Utah.¹ For the attitudinal variables, desired or ideal age at marriage, attitudes toward the use of birth control, and educational difference, the respondent may be modifying one or all of the attitudes due to experience which will then modify family size preferences. But being

¹Frank Hirschi, per letter from Department of Seminars and Institutes of Religion, Church of Jesus Christ of Latter-day Saints, February 4, 1976.
single and not having yet experienced fertility the respondent is not modifying family size preferences yet from experience. Thus, family size preferences are not yet modifying the attitudinal variables, desired or ideal age at marriage, attitudes toward the use of birth control, and educational difference.
CHAPTER IV
ANALYSIS OF DESIRED AND IDEAL FAMILY SIZE
OF FEMALES AND MALES

This chapter will analyze and measure the causal relationships between the selected socio-economic and demographic variables and desired or ideal family size preferences for female and male high school seniors in the State of Utah, 1974. The four models that will be analyzed are:

1. The selected socio-economic and demographic variables and desired family size of female Utah high school seniors, 1974.

2. The selected socio-economic and demographic variables and ideal family size of female Utah high school seniors, 1974.

3. The selected socio-economic and demographic variables and desired family of male Utah high school seniors, 1974.

4. The selected socio-economic and demographic variables and ideal family size of male Utah high school seniors, 1974.

The graphic presentation of the socio-economic and demographic model that will be used in the analysis is presented in Figure 3. This diagram is based upon Westoff and
Figure 3. Complete model for the formation of ideal or desired family size preferences among female and male Utah public high school seniors in 1973-1974 academic year.
Potvin's "theory of ideal family size formation." Basically, the theory states family size preferences are formed at an early age via the socialization process. There are four categories through which socialization can influence family size preferences. The four categories are family size in environment variables, social context variables, consistency and continuity in life experiences, and interaction between beliefs and behavior. The socio-economic and demographic variables selected to test this model were size of family of orientation, place of residence, social class, religion, religiosity, desired age at marriage, ideal age at marriage, attitude toward the use of birth control, and educational difference. These socio-economic and demographic variables are described below:

**Desired family size**

Desired family size is from the individual's point of reference. Desired family size is the number of children the respondent wants to have (see Chapter III for the question used and discussion). The number of children wanted can go from no children (zero) to twelve or more children. This is a continuous variable.

**Ideal family size**

Ideal family size is from the "generalized other" point of reference. Ideal family size is the number of children for any couple to have. The number of children
for any couple to have can go from no children (zero) to twelve or more children. This is a continuous variable.

**Attitude toward the use of birth control**

Attitude toward the use of birth control is whether or not the respondent will use birth control. If the respondent will use birth control, under how many different circumstances this use will occur. The circumstances for which the respondent could use birth control were low income (to limit family size), to space the birth of children, poor physical health (danger to health of wife or fetus), emotional problems, probability of birth defective children, marital instability, to limit their family size, and/or other reasons. Thus, the responses can go from never use birth control (zero) to would use birth control under all circumstances (8).

**Desired age at marriage**

Desired age at marriage is from the individual's point of reference. Desired age at marriage is how old the respondent would like to be when she/he gets married. Desired age at marriage is used with desired family size. Desired age at marriage can go from sixteen years and under (1), seventeen years (2), eighteen years (3), etc., to thirty-one years and over (16).
Ideal age at marriage

Ideal age at marriage is from the "generalized other" point of reference. Ideal age at marriage is the age the respondent thinks the average individual should marry (either for female or male). Ideal age at marriage can go from sixteen years and under (1), seventeen years (2), eighteen years (3), etc., to thirty-one years and over (16).

Educational difference

Educational difference is whether the respondent's expected education will be less, equal to, or more than the mother's (if female) or father's (if male). The respondent's present educational level is high school graduate. If the mother's education (if female) or father's education (if male) is less than high school graduate the respondent has more education than mother (if female) or father (if male). If the respondent plans on going on to college and the mother (if female) or father (if male) has no college education then the respondent's education level is higher than the mother's (if female) or father's (if male). If the respondent does not plan on going on to college and the mother (if female) or father (if male) has some college education or is a college graduate then the respondent will have a lower educational level than mother (if female) or father (if male). If the respondent does not plan on going on to college and the mother (if female) or father (if male) has
no college education then the educational level will be considered the same for respondent and mother (if female) or father (if male).

Thus, the educational difference can be either negative, zero, or positive. No magnitude is given to the amount of difference between respondent and mother (if female) or father (if male). The educational difference will be negative if the respondent has less education than mother (if female) or father (if male) (1). The educational difference will be zero if the respondent has the same education as mother (if female) or father (if male) (2). The educational difference will be positive if the respondent has more education than mother (if female) or father (if male) (3).

Religion

Religion is the religion to which the respondent stated as being a member of. Religion is broken down by LDS (1) and non-LDS (2). Respondents with no religious preference were grouped with the non-LDS (see Chapter III for a detailed presentation of the grouping by religion).

Religiosity

Religiosity is a measure of the level of fundamental commitment to religion of the individual. Fundamental commitment to religion is the level sacred principles take over secular principles. The more importance the individual
places on sacred principles the more likely the individual will follow the teachings of a given religion. The measure of fundamental religiosity was used over the measurement of church activities since each religion has a different level of expected participation.

The religiosity scale classified the respondent as low fundamental religiosity (1), medium-low fundamental religiosity (2), medium-high fundamental religiosity (3), and high fundamental religiosity (4).

**Family size of orientation**

Family size of orientation is the number of live births to the respondent's mother. This is the demographic concept of family size of orientation. Family size of orientation can go from one child (if respondent is an only child) to the number of brothers and sisters born alive to the respondent's mother plus the respondent.

**Social class**

Social class is the socio-economic status of the respondent's father. Social class is a scalar measurement with regards to father's education and occupation (see Chapter III for details of how the scale was constructed). There are five social class levels--high social class (1), medium-high social class (2), medium social class (3), medium-low social class (4), and low social class (5).
Place of residence

Place of residence is the place in which the high school is located that the respondent was attending. The place of residence is considered to be either rural (population under 2,499), urban (population between 2,500 and 14,999) or metropolitan (population 150,000 or more). Place of residence can be either rural (1), urban (2), or metropolitan (3).

The analysis in this chapter will use standardized regression coefficients or betas. By using standardized regression coefficients the relative importance of each socio-economic and demographic variable within the desired or ideal family size preference models for males and females can be analyzed.

Desired Family Size of Female High School Seniors

The first model to be discussed is desired family size of female high school seniors in Utah, 1974. Table 1 presents the zero-order correlation matrix for desired family size of female high school seniors in Utah. From this table it can be seen desired family size is larger for respondents who are LDS, have a high religiosity level, come from large families, and would not tend to use birth control. Also, respondents who have a high religiosity level would not tend to use birth control and would be LDS.
TABLE 1
ZERO-ORDER CORRELATION MATRIX FOR THE MODEL OF SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES UPON DESIRED FAMILY SIZE PREFERENCES OF FEMALE UTAH HIGH SCHOOL SENIORS, 1974

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<th></th>
<th>Family Size of Orientation</th>
<th>Religion</th>
<th>Religiosity</th>
<th>Educational Difference</th>
<th>Desired Age at Marriage</th>
<th>Attitude Toward Birth Control</th>
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Basically the female sample has the following characteristics. Desired family size was 4.73 children on the average. Family size of orientation of 4.93 children is very similar to desired family size. Desired age at marriage is twenty-two years of age. The respondents came from mainly urban residence and medium social class levels. The majority of the respondents are LDS (83 percent of the sample) and have a medium-high religiosity level. On the average, the respondents will use birth control under three different circumstances (circumstances are low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size and/or other reasons) and expect approximately the same education as their parents.

The path model with the standardized regression coefficients or path coefficients for the effect of socio-economic and demographic variables upon desired family size preferences is presented in Figure 3. This will allow one to see the complete desired family size model with all path coefficients, residuals, and correlations at one glance. The next table, Table 2, presents the total effect of each socio-economic or demographic variable upon each dependent variable (desired family size, attitude toward the use of birth control, desired age at marriage, religiosity, size of family of orientation, and religion). The total effect of the socio-economic and demographic variables are decomposed into direct effect and indirect effect. The direct effect
states how much of a causal influence does the independent variable have upon the dependent variable controlling for all other independent variables within the given equation. The indirect effect modifies the causal influence of the independent variable upon the dependent variable by any intervening variable. Within this analysis the indirect effect is broken down by each intervening variable between the independent and dependent variable. Each affect coefficient is represented by standardized regression coefficients which allows for comparisons of the relative effect of the variables within the model.

Effects of socio-economic and demographic variables upon desired family size preferences

It is apparent from Table 2 and Figure 4 that desired family size is largely the result of religiosity, religion, size of family of orientation, social class, and the number of circumstances a female would use birth control (circumstances were low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size, and/or other reasons).

Religiosity has the greatest total influence upon desired family size. Females from high fundamental religiosity levels desire the largest families. For example, desired family size of a female with high fundamental religiosity is 5.88 children as compared to desired family size of a female
TABLE 2
INTERPRETATION OF EFFECTS OF SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES UPON DESIRED FAMILY SIZE FORMATION OF FEMALE UTAH HIGH SCHOOL SENIORS, 1974

<table>
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<th>Educational Difference</th>
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<th>Attitude Toward Birth Control</th>
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Figure 4. The complete path model of socio-economic and demographic variables upon desired family size preferences among female Utah high school seniors, 1974.
with medium fundamental religiosity of 3.80 children. A difference of 2.08 children. The total effect of the influence of religiosity upon desired family size is composed of direct and indirect effects. Almost all of the total effect of religiosity upon desired family size is the result of the direct effect of religiosity upon desired family size. The direct effect is the influence of religiosity upon desired family size controlling for all the other variables. The indirect effect of religiosity upon desired family, which is the influence of religiosity upon desired family size modified by any intervening variable is very small. The influence of the number of circumstances a female would use birth control upon the relationship of religiosity and desired family size is very small. This strong relationship between religiosity and desired family size has also been found by Westoff and Ryder, Alverez, DeJong, Davis, and Ralls. ¹

Religion has the next largest total influence upon desired family size. An LDS female desires a larger family than a non-LDS female. Desired family size of an LDS female is 5.18 children as compared to 2.55 children desired by non-LDS females. Davis and Ralls both found among Utah high school senior females in 1970 and 1974, respectively, LDS

¹Westoff and Ryder, p. 284; Alverez; DeJong, p. 235; Clark Davis, p. 67; Ralls, p. 80.
females desire the largest family size of any religious group—Catholic, Protestant, Other, and no religion.¹ Catholic and LDS freshmen and senior in college were similar to high school seniors in desiring the largest families.² When actual fertility is considered, Westoff and Ryder, found LDS and Catholics have the largest families of all religious groups.³ A smaller part of the total effect is due to the direct effect of religion upon desired family size. When the total influence of religion upon desired family size is decomposed into the direct and indirect effects, it can be seen religion has very little influence upon desired family size directly. The influence of religion upon desired family size is very small when all other variables are controlled for. The majority of the total influence of religion upon desired family size is due to the religiosity level within the religion. This means the higher the religiosity level of a female within a given religion the larger the desired family size. As was found by Alverez, desired family size will be greater for a female from a higher religiosity level within a given religion.⁴

¹Clark Davis, p. 58; Ralls, p. 70.
²Westoff and Potvin, College Women.
³Westoff and Ryder, p. 280.
⁴Alverez.
The size of family the female grew up in has the next greatest relative influence upon desired family size. The larger the size of family a female grew up in the larger the desired family size. A female who grew up in a family of four children will desire a family 4.13 children compared to a female who grew up in a family of three children desiring a family of 3.73 children. Size of family of orientation has been consistently found to influence desired family size. Davis found a strong relationship between size of family of orientation and desired family size. Females from families of one or two children desire families of 3.71 children and females from families of nine to seventeen children desired families of 4.97 children.¹ Ralls found, four years later, the relationship stronger between desired family size and size of family of orientation. The desired family size of females from families of one or two children was 3.83 children and for females from families of nine to seventeen children was 5.56 children.² This strong relationship has also been found by Gustavus and Nam, and Paterson.³ The total effect of the influence of size of family of orientation upon desired family size was mainly due to the direct effect of the influence of size of family of orientation

¹Clark Davis, p. 78.
²Ralls, p. 100.
³Gustavus and Nam, p. 49; Paterson.
upon desired family size. This means the influence of size of family of orientation upon desired family size controlling for all other variables. The indirect effect, the influence of size of family of orientation upon desired family size was not modified by any intervening variables (expected educational difference, desired age at marriage, and attitude toward the use of birth control).

Desired family size is next directly influenced by the number of circumstances the female would use birth control (circumstances were low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size, and/or other reasons). The larger the desired family size the fewer the varied circumstances the female would use birth control. For example, a female who would use birth control for three different reasons desire a family size of 4.82 children as compared to a female who would use birth control for only one reason desires a family of 5.16 children, a difference of .34 of a child. Both Davis and Ralls found females who desired large families were against the use of birth control to limit one's family size.¹

¹Clark Davis, p. 95; Ralls, p. 124.
class level. A female from a high social class level desires 5.28 children as compared to 4.74 children desired by a female from a middle social class level. The majority of the total effect of the influence of social class upon desired family size is due to the direct effect of social class upon desired family size, that is, controlling for all of the other variables the influence of social class upon desired family size. No intervening variable (size of family of orientation, religion, religiosity, expected educational difference, desired age at marriage, and attitude toward the use of birth control) have a large indirect effect upon desired family size. Only due to the accumulated direct and indirect effects is there a relative total effect of social class upon desired family size. This may partly account for the lack of a strong relationship between social class and desired family size not being found by Davis or Ralls.\textsuperscript{1} Social class has an influence due to the accumulated effects (direct effects and indirect effects).

All of the socio-economic and demographic variables, religion, religiosity, size of family of orientation, attitude toward the use of birth control, place of residence, social class, educational difference, and desired age at marriage explain 41 percent of the variation in desired family size. Size of family of orientation explains the

\textsuperscript{1}Clark Davis, p. 58; Ralls, p. 70.
greatest amount of the variation in desired family size, 13 percent. Religion and religiosity explain, separately, an additional 11 percent of the variation in desired family size (total of 22 percent). Attitude toward the use of birth control explains an additional 4 percent of the variation in desired family size.

Basically, within this study, desired family size had a majority of the variation explained by family size of orientation, religion, religiosity, and the number of circumstances a female would use birth control. This is supported by Davis's 1970 study of Utah female high school seniors where he found desired family size to be significantly influenced by religion, religiosity, attitude toward the use of birth control to limit one's family, attitude toward the seriousness of world population growth, and the size of family of orientation.¹ This was also supported by Ralls among Utah high school senior females in 1974 where she found desired family size to be significantly influenced by attitudes toward the use of birth control to limit one's family, attitude toward the seriousness of world population growth, and size of family of orientation.²

¹Clark Davis, p. 103.
²Ralls, p. 133.
Effects of socio-economic and demographic variables upon the antecedents of desired family size

The number of circumstances for which a female would use birth control (circumstances were low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size, and/or other reasons) is influenced by religion, religiosity, and size of family of orientation as can be seen by Table 2 and Figure 1. The greatest total effect upon the number of circumstances a female would use birth control is religiosity. Females from lower fundamental religiosity levels would use birth control for more circumstances than females from higher fundamental religiosity levels. The total effect when decomposed into direct and indirect effect is mainly the result of the direct effect. The majority of the influence of religiosity upon the number of circumstances a female would use birth control is due to the incidence of religiosity upon the number of circumstances a male would use birth control holding all other factors constant. There is no indirect influence of religiosity upon the number of circumstances a female would use birth control. Religion has the next relative total influence upon the number of circumstances a female would use birth control. There is no direct effect of religion upon the number of circumstances a female would use birth control. Only indirectly via religiosity does religion have an influence on
the number of circumstances a female would use birth control. The higher the fundamental religiosity level within a given religion the fewer circumstances a female would use birth control as compared to a female from a lower fundamental religiosity level within the same religion. The relative total effect of size of family of orientation upon the number of circumstances a female would use birth control comes next. A female from a large family would tend to use birth control for fewer circumstances as compared to a female from a small family. The majority of the total effect is due to the direct effect of size of family of orientation upon the number of circumstances a female would use birth control. Social class and desired age at marriage had no influence (either total, direct, or indirect) upon the number of circumstances a female would use birth control.

Nineteen percent of the variation in the number of circumstances a female would use birth control is explained by social class, size of family of orientation, religiosity, religion, and desired age at marriage. Religiosity explains 8 percent of the variation in number of circumstances a female would use birth control. An additional 5 percent each (total 10 percent), is explained by size of family of orientation and religion.

Religion has an influence upon desired age at marriage which is apparent from Table 2 and Figure 4. An LDS female
desires to marry at a younger age than a non-LDS female. Social class, place of residence, size of family of orientation, and religiosity have no relative total effect upon desired age at marriage.

Religion explains 1 percent of the variation in desired age at marriage. With an additional 2 percent of the variation explained by place of residence, social class, size of family of orientation, and religiosity.

As is apparent from Table 2 and Figure 4, religiosity is influenced by religion and social class. An LDS female has a higher fundamental religiosity level than a non-LDS female. This may partly be due to a difference in emphasis for the various religions. The higher social class levels also have a higher religiosity level than the lower social class levels. Part of the reason for higher social class levels having higher religiosity may be the result of a larger number of LDS in the higher social class levels and a smaller number of non-LDS in the higher social class levels.

Educational difference was not influenced by social class or size of family of orientation. Together social class and size of family of orientation explained 1.5 percent of the variation in expected educational difference between respondent and mother.

Size of family of orientation and religion were not influenced by place of residence or social class. Nor was .5 percent of the variation in either size of family of
orientation or religion explained by place of residence or social class.

Summary

In summary, desired family size preferences of female Utah high school seniors is mainly influenced by religion, religiosity, size of family of orientation, social class, and the number of circumstances a female would use birth control.

Only the variables which had a substantive total effect upon desired family size will be considered here. Religiosity was found to be mainly influenced by religion. Place of residence and social class did not have an influence upon size of family of orientation. Religion, religiosity, and size of family of orientation were influenced by the number of circumstances a female would use birth control. Last, religion was found not to be influenced by place of residence or social class.

Religion, religiosity, size of family of orientation, social class, and the number of circumstances a female would use birth control had relative total effects upon desired family size.

For a conceptual presentation of the variables which have a relative total effect upon desired family size of Utah female high school seniors (see Figure 5).
Figure 5. The reduced path model of socio-economic and demographic variables upon desired family size preferences among female Utah high school seniors, 1974.
Ideal Family Size of Female High School Seniors

Ideal family size of Utah female high school seniors is the second model that will be discussed. The zero-order correlation matrix for ideal family size of Utah female high school seniors is presented in Table 3. Ideal family size is larger for respondents who are LDS, have a high religiosity level, come from large families, and would tend not to use birth control. But, the correlation is not as strong as the correlation for desired family size. It should be remembered ideal family size is for the average couple or the "generalized other" and desired family size applies to the self. Therefore, the norms applicable to the "generalized other" may not be influenced by specific characteristics of the individual.

Additional characteristics of the female sample with regards to ideal family size is ideal family size was 4.43 children on the average. Ideal family size is slightly smaller than desired family size. Desired family size was 4.73 children as compared to the 4.43 children considered ideal. This has been found by Davis\(^1\) and Ralls\(^2\) among Utah high school senior females in 1970 and 1974, respectively. Also among non-Utah population, Paterson\(^3\) and Gustavus and

\(^1\)Clark Davis.
\(^2\)Ralls.
\(^3\)Paterson, p. 235.
### TABLE 3

**ZERO-ORDER CORRELATION MATRIX FOR THE MODEL OF SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES UPON IDEAL FAMILY SIZE PREFERENCES OF FEMALE UTAH HIGH SCHOOL SENIORS, 1974**

<table>
<thead>
<tr>
<th></th>
<th>Social Class</th>
<th>Family Size of Orientation</th>
<th>Religion</th>
<th>Religiosity</th>
<th>Educational Difference</th>
<th>Desired Age at Marriage</th>
<th>Attitude Toward Birth Control</th>
<th>Ideal Family Size</th>
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</thead>
<tbody>
<tr>
<td>Place of Residence</td>
<td>-.193</td>
<td>-.034</td>
<td>-.009</td>
<td>-.046</td>
<td>.010</td>
<td>.071</td>
<td>-.013</td>
<td>.019</td>
</tr>
<tr>
<td>Social Class</td>
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<td>-.019</td>
<td>-.073</td>
<td>-.101</td>
<td>.093</td>
<td>-.040</td>
<td>-.015</td>
<td>-.048</td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
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</tr>
<tr>
<td>Attitude Toward</td>
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</tr>
<tr>
<td>Birth Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Nam found desired family size of high school seniors to be larger than ideal family size. Ideal age at marriage was found to be approximately the same as desired age at marriage for females of 22 years of age. All of the other variables are the same as those for desired family size preferences of female high school seniors.

Figure 6 presents the path model with all standardized regression coefficients or path coefficients for the influence of socio-economic and demographic variables upon ideal family size. When all path coefficients, residuals, and correlations are presented together it is easier to comprehend the complete model. The total effect of the socio-economic or demographic variable upon each dependent variable (ideal family size, attitude toward the use of birth control, ideal age at marriage, religiosity, size of family of orientation, and religion) is presented in Table 4. The total effect of the socio-economic and demographic variables are decomposed into direct effect and indirect effect. The direct effect states what portion of the causal influence is the result of the dependent variable controlling for all other variables. The indirect effect allows for the causal influence to be modified by intervening variables between the independent and dependent variable. The indirect effect is broken down for each intervening variable. Standardized

\(^1\)Gustavus and Nam, p. 49.
Figure 6. The complete path model (standardized coefficients) of socio-economic and demographic variables upon ideal family size preferences among female Utah high school seniors, 1974.
## TABLE 4

### INTERPRETATION OF STANDARDIZED EFFECTS OF SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES UPON IDEAL FAMILY SIZE OF FEMALE UTAH HIGH SCHOOL SENIORS, 1974

<table>
<thead>
<tr>
<th>Dependent Variable</th>
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<th>Indirect Effects</th>
<th>Direct Effect</th>
<th>Total Effect</th>
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<td>-.005</td>
<td>.018</td>
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</tr>
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<td></td>
<td>Family Size of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Orientation</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>Religion</td>
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<td>.000</td>
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<td>.059</td>
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<td>Ideal Age at Marriage</td>
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<td>.015</td>
<td>.018</td>
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<tr>
<td></td>
<td>Attitude Toward Birth Control</td>
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<td>.098</td>
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<td>Independent Variable</td>
<td>Indirect Effects</td>
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<td>-------------------</td>
<td>----------------------</td>
<td>------------------</td>
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<td></td>
<td>Social Class</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
regression coefficients are used which allows for comparisons of the relative effect of the variables within the model.

**Effects of socio-economic and demographic variables upon ideal family size**

Ideal family size is a consequence of religion as is apparent from Table 4 and Figure 6. Religion has the strongest total influence upon ideal family size. LDS females have larger family ideals than non-LDS females. An LDS female considers 4.27 children ideal as compared to 2.85 children considered ideal among non-LDS females. Largest family size ideals were found for LDS females as compared to Catholics, Protestants, Others, and no religion by both Davis\(^1\) and Ralls.\(^2\) Catholic and LDS freshmen and seniors in college have the largest ideal family size.\(^3\) Only the total effect of religion had a relative influence upon ideal family size. Religion, controlling for all other variables, is the greater part of the total effect of religion upon ideal family size. Religion via religiosity explains the rest of the total effect of religion upon ideal family size. LDS females with high religiosity levels have larger family size ideals than LDS females with lower religiosity levels. This also

\(^1\) Clark Davis, p. 58.

\(^2\) Ralls, p. 70.

\(^3\) Westoff and Potvin, *College Women.*
existed for desired family size where the higher the religiosity level within a given religion the larger the ideal family size.

Ideal family size was not influenced by size of family of orientation, religiosity, place of residence, social class, expected educational difference between a female and her mother, ideal age for a female to marry and the number of circumstances a female would use birth control (the circumstances were low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size, and/or other reasons).

A total of 5 percent of the variation in ideal family size is explained by place of residence, social class, size of family of orientation, religion, religiosity, educational difference, ideal age for a female to marry, and the number of circumstances a female would use birth control. The majority of this is explained by religion and size of family of orientation--total of 4 percent. A total of 95 percent of variation in ideal family size is left unexplained by this model.

Ideal family size was found to be influenced by religion only. Davis found among Utah high school senior females ideal family size was significantly related to religion, attitude toward the seriousness of world population growth, size of family of orientation, and residential
background. As can be seen in the present model, attitude toward the seriousness of world population growth was not included. The measurement of residential background was different in the two models. Davis used place of longest residence and the present study uses place of high school. Also, size of family of orientation was a categorial variable in Davis's study and a continuous variable in the present study. Ralls found for Utah high school senior females ideal family size preferences were related to religion, religiosity, attitude toward the use of birth control to limit one's family, and attitude toward the seriousness of world population growth. Ralls used the size of the F-statistic to determine if ideal family size was significantly related to ideal family size. The present study used the size of the total effect to determine the influence of the socio-economic and demographic variables upon ideal family size. The size of the total effect was used because the size of the F-statistic can be influenced by large sample sizes.

Gustavus and Nam found ideal family size to be influenced by socio-economic status and religion. Paterson found ideal

1 Clark Davis, p. 102.
2 Ralls, p. 132.
4 Gustavus and Nam, p. 50.
family size to be influenced by size of family of orientation and father's education.¹

Effect of socio-economic and demographic variables upon the antecedents of ideal family size

As is apparent from Table 4 and Figure 6, religiosity, religion, and size of family of orientation have total influences upon the number of circumstances birth control would be used by a female (circumstances were low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size, and/or other reasons). Religiosity has the greatest and total effect upon the number of circumstances a female would use birth control. A female from a higher religiosity level will use birth control for fewer circumstances than a female from a lower religiosity level. The majority of the total effect is the result of the direct effect of religiosity upon the number of circumstances a female would use birth control. This means when all of the other variables are held constant, the direct effect is the influence of religiosity upon the number of circumstances a female would use birth control. The indirect effect, the ideal age at marriage for a female, does not amplify the influence of religiosity upon the number of circumstances a female would use birth control.

¹Paterson, p. 235.
The religion of the female has the next largest total influence upon the number of circumstances she would use birth control. An LDS female would use birth control less often than a non-LDS female. This is similar to the stand of the LDS church as compared to Protestant religions. The LDS church has taken an open-ended stand toward the use of birth control\(^1\) and Protestant religions have supported the use of birth control.\(^2\) The majority of the influence between religion and the number of circumstances a female will use birth control is due to the indirect effect of the religiosity level of the female. The higher the religiosity level of an LDS female the less likely she would use birth control for any circumstances. Whelpton, Campbell, and Paterson found this among Catholics where the more religious the individual is the more likely the individual will not use any artificial forms of birth control.\(^3\)

The number of circumstances a female would use birth control is a strong total effect of size of family of orientation. Females from large families are less prone to use birth control for any reason compared to females from smaller families. The indirect effect in the majority of the

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\(^1\) Willis, p. 283.

\(^2\) Whelpton, Campbell and Paterson, p. 70.

\(^3\) Ibid.
total effect of size of family of orientation upon the number of circumstances a female would use birth control. There was no indirect influence for size of family of orientation via expected educational difference and ideal age for a female to marry upon the number of circumstances a female would use birth control.

Neither social class or ideal age at marriage has a total effect upon the number of circumstances a female was receptive to the use of birth control.

Religiosity, religion, and size of family of orientation explain a total of 18 percent of the variation in number of circumstances a female would use birth control. The majority of the explanation in variation, 8 percent, is due to religiosity. Then religion and size of family of orientation, each explain an additional 5 percent (total 10 percent).

Basically, female use of birth control for various circumstances is influenced by religion, religiosity, and size of family of orientation. Religiosity has the only total affect upon the ideal age for a female to marry as can be seen in Table 4 and Figure 6. This means on females with higher religiosity levels consider a female should marry at a younger age than a female with a medium religiosity level considers a female should marry. The total effect and the direct effect are the same since there is no indirect effect between religiosity and ideal age for a female to marry.
Place of residence, social class, size of family of orientation, and religion do not have an effect upon the ideal age for a female to marry.

Approximately 3 percent of the variation in ideal age at marriage for females is explained by place of residence, social class, size of family of orientation, religion, and religiosity. Of this 3 percent, religiosity explains 1.6 percent of the variation in ideal family size. Approximately 97 percent of the variation in ideal age at marriage for females is left unexplained.

It is apparent from Table 4 and Figure 6 that religiosity is influenced by religion and social class. Religion has a very strong influence upon religiosity. LDS females tend to have a higher fundamental religiosity level than non-LDS females. The emphasis in the LDS church may be different than the emphasis in other churches which may make the fundamental religiosity scale a better measure for the LDS females. Also, the total effect of social class upon religiosity has an influence. This is composed of the indirect effect, social class via religion, and the direct effect. The indirect effect of social class via religion upon religiosity may be influenced by the high number of LDS who are in the upper social class levels as compared to non-LDS.

Expected educational difference between a female and her mother was not influenced by size of family of
orientation or social class as can be seen in Table 4 and Figure 6. One and a half percent of the variation in expected education between a female and her mother is explained by size of family of orientation and social class.

Social class and place of residence do not have an influence upon size of family of orientation or religion as can be seen in Table 4 and Figure 6. Social class and place of residence explain less than .5 of 1 percent of the variation for size of family of orientation and religion.

Summary

In summary, religion is the main influence upon ideal family size of female high school seniors in Utah.

When the variables which influence religion are considered it is found neither social class or place of residence had an effect upon religion. Ideal family size is influenced by religion.

Desired Family Size of Male High School Seniors

The third model to be discussed is desired family size of male high school seniors in Utah, 1974. Male desired family size is larger for LDS males, with higher fundamental religiosity levels, who would tend not to find acceptable the use of birth control and come from large families, as can be seen in Table 5 of the zero-order correlation matrix. The males would tend not to use birth control if they are LDS
TABLE 5
ZERO-ORDER CORRELATION MATRIX FOR THE MODEL OF SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES UPON DESIRED FAMILY SIZE PREFERENCES OF MALE UTAH HIGH SCHOOL SENIORS, 1974

<table>
<thead>
<tr>
<th>Place of Residence</th>
<th>Family Size of Orientation</th>
<th>Religious Orientation</th>
<th>Religiosity</th>
<th>Educational Difference</th>
<th>Desired Age at Marriage</th>
<th>Attitude Toward Birth Control</th>
<th>Desired Family Size</th>
</tr>
</thead>
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<tr>
<td>Place of Residence</td>
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<td>-.107</td>
<td>-.047</td>
<td>-.119</td>
<td>.011</td>
<td>.076</td>
<td>.059</td>
</tr>
<tr>
<td>Social Class</td>
<td>1.000</td>
<td>-.008</td>
<td>-.029</td>
<td>-.072</td>
<td>-.111</td>
<td>-.047</td>
<td>.036</td>
</tr>
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<td>Family Size of Orientation</td>
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<td>.194</td>
<td>.046</td>
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<td>-.164</td>
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<tr>
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<td>-.057</td>
<td>.033</td>
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<td></td>
</tr>
<tr>
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<tr>
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</table>
and have a high fundamental religiosity level. Also, male LDS tend to have a high fundamental religiosity level.

The sample of male respondents have basically the following characteristics. Desired family size was 4.08 children, on the average. Desired family size for males is slightly smaller than desired family size for females (4.08 children and 4.73 children, respectively). This agrees with Blake's findings that males desire smaller families than females.\(^1\) Family size of orientation of 4.89 children is larger than their desired family size. Desired age at marriage is approximately twenty-four years of age. Male desired age at marriage is older than female desired age at marriage of twenty-two years of age. The respondents come from mainly urban residence and between medium-low and medium social class levels. The majority of the respondents are LDS (84 percent of the male respondents) and are of the upper medium-low religiosity level. On the average, the respondents expect the same or higher educational attainment than their fathers. Similar to the female respondent's, the male consider three different circumstances acceptable for the use of birth control.

The path model with the standardized regression coefficients or path coefficients for the effect of socio-economic and demographic variables upon desired family size

\(^1\)Blake.
preferences is presented in Figure 7. This will allow one to see the complete desired family size model with all path coefficients, residuals, and correlations at one glance. The next table, Table 6, presents the total effect of each socio-economic or demographic variable upon each dependent variable (desired family size, attitude toward the use of birth control, desired age at marriage, religiosity, size of family of orientation, and religion). The total effect of the socio-economic and demographic variables are decomposed into direct effect and indirect effect. The direct effect states how much of a causal influence does the independent variable have upon the dependent variable controlling for all other independent variables within the given equation. The indirect effect modifies the causal influence of the independent variable upon the dependent variable by any intervening variable. Within this analysis the indirect effect is broken down by each intervening variable between the independent and dependent variable. Each effect coefficient is represented by standardized regression coefficients which allows for comparisons of the relative effect of the variables within the model.

Effects of socio-economic and demographic variables upon desired family size

Desired family size for males is influenced by religi-
Figure 7. The complete path model (standardized coefficients) of socio-economic and demographic variables upon desired family size preferences among male Utah high school seniors, 1974.
<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Indirect Effects</th>
<th>Direct Effect</th>
<th>Total Effect</th>
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<td>Desired Age at</td>
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number of circumstances a male would accept the use of birth control, as is apparent from Table 6 and Figure 7. Religiosity has the largest total and direct effect upon desired family size. A male from a high fundamental religiosity level will desire a larger family than a male from a medium fundamental religiosity level. For example, a male from a high religiosity level will desire a family of 5.44 children as compared to 3.77 children desired by a male from a medium religiosity level. The indirect effect, religiosity modified by the number of circumstances a male would consider the use of birth control acceptable upon desired family size has only a slight influence.

Religion has the next strongest influence upon desired family size. An LDS male would desire a family larger than a non-LDS male. This can be seen where LDS males desire a family of 4.40 children and a non-LDS male desires a family of 2.47 children. This is a difference of 1.93. Most of the influence of religion upon desired family size is due to the indirect effect or intervening effect of religiosity. An LDS male from a high fundamental religiosity level will desire a larger family than an LDS male from a medium religiosity level.

Desired family size of males is then influenced by size of family the male comes from. Desired family size is larger for males from large families. A male from a family
of six children will desire a family of 4.37 children, where a male from a family of four children will desire a family of 3.74 children. The majority of the influence (total effect) is due to the direct effect of size of family of orientation upon desired family size. That is, the influence of size of family of orientation upon desired family size controlling for all other variables. The indirect effect of size of family of orientation upon desired family size has no influence upon the relationship. Expected educational difference between male and his father, desired age at marriage, and the number of circumstances the male would consider the use of birth control acceptable does not have a modifying influence upon the relationship of size of family of orientation upon desired family size.

Desired family size is also influenced by the number of circumstances a male would consider the use of birth control acceptable. The more circumstances a male would find birth control acceptable the larger his desired family size. The influence of the number of circumstances a male would use birth control is composed of only a direct effect. There is no indirect effect between the number of circumstances a male would consider acceptable for the use of birth control and desired family size.

All of the socio-economic and demographic variables place of residence, social class, size of family of orientation, religion, religiosity, expected educational
difference between a male and his father, desired age at marriage, and the number of circumstances a male would find the use of birth control acceptable, explained 33 percent of the variation in desired family size. Fifteen percent of this variation is explained by religiosity. An additional 8 percent of the variation in desired family size is explained by size of family of orientation. Religion adds 5 percent more to the explanation of the variation in desired family size. The number of circumstances a male would find birth control acceptable has a further explanatory power of 1.5 percent of the variation in desired family size. This results in religiosity, religion, size of family of orientation, and the number of circumstances a male would find the use of birth control acceptable explaining a total of 29.5 percent of the 33 percent of the variation in desired family size that was explained.

In summary, desired family size is influenced by religion, religiosity, size of family of orientation, and the number of circumstances a male would find the use of birth control acceptable.

Effects of socio-economic and demographic variables upon antecedents of desired family size

As is apparent from Table 6 and Figure 7, the number of circumstances a male would consider acceptable for the use of birth control is influenced by religion and religiosity.
The possible circumstances for which birth control could be used were low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size, and/or other reasons.

Religiosity has the strongest relative influence upon the number of circumstances a male would find birth control acceptable. The higher the fundamental religiosity level of a male the less likely the male will approve any circumstances for which birth control should be used.

The number of circumstances a male would find the use of birth control acceptable is also influenced by religion. An LDS male would be less likely to accept the use of birth control than a non-LDS male. The majority of the influence of religion upon the number of circumstances a male would find birth control acceptable is due to the indirect influence of religion via religiosity. An LDS male from a high fundamental religiosity level will find the use of birth control less acceptable than a medium-high fundamental religiosity level LDS male.

Nineteen percent of the variation in the number of circumstances a male would consider acceptable for the use of birth control is explained by religiosity, religion, and size of family of orientation. Size of family of orientation does not have an influence upon the number of circumstances a male would find acceptable for the use of birth control.
Attitude toward the number of circumstances a male would consider acceptable the use of birth control is the result of the influence of religion and religiosity.

Religion is the only variable which has an influence upon the male's desired age at marriage as is apparent from Table 6 and Figure 7. An LDS male would like to marry at a younger age than a non-LDS male. There was no influence by place of residence, social class, size of family of orientation, or religiosity upon desired age at marriage.

Religion explained most of the variation in desired age at marriage, 1.25 percent. A total of 98 percent of the variation was not explained by place of residence, social class, size of family of orientation, religion, or religiosity.

It is apparent from Table 6 and Figure 7 that the expected difference in education between the male and his father is influenced by social class. A higher social class male will expect an education greater than his father's. Size of family of orientation does not influence expected education difference between a male and his father.

Expected educational difference between a male and his father has 1.20 percent of the variation explained by social class.

The religiosity level of a male is the result of religion and place of residence as can be seen in Table 6 and Figure 7. An LDS male would tend to have a higher
fundamental religiosity level than a non-LDS male. The fundamental scale of religiosity may be more closely related to the teachings of the LDS church than the non-LDS churches. Also, place of residence has a total effect upon religiosity. For males, in rural environments, their fundamental religiosity level is higher than for males in urban or metropolitan environments.

Interesting religion explains 24 percent of the variation in the measure of fundamental religiosity level. Place of residence explains only a small part in comparison, 1.40 percent.

As can be seen in Table 6 and Figure 7, place of residence has an influence upon size of family of orientation. Males from rural environments will come from larger families than males from urban environment or metropolitan environment. Also, males from urban environment will come from larger families than males from metropolitan environment. Social class does not have an influence upon size of family of orientation.

Place of residence also explains 1.20 percent of the variation in size of family of orientation.

Religion is not a result of place of residence or social class and none of the variation in religion is explained by place of residence or social class.
Summary

Male desired family size is influenced by religion, religiosity, size of family of orientation, and the number of circumstances a male would find the use of birth control acceptable.

These variables, religion, religiosity, size of family of orientation, and the number of circumstances a male would consider acceptable for the use of birth control had relative influence in comparison to the other variables and will be considered only in that context. Religion was not influenced by place of residence or social class. Place of residence and religion influenced religiosity. Place of residence also influenced the size of family the male came from. The number of circumstances a male would find acceptable the use of birth control is the result of religion and religiosity.

For a conceptual presentation of the socio-economic and demographic variables which have a substantive effect upon desired family size of male high school seniors see Figure 8.

Ideal Family Size of Male High School Seniors

The fourth and last model to be discussed in this chapter is ideal family size of male high school seniors in the state of Utah, 1974. Table 7 presents the sero-order correlation matrix for male ideal family size. Ideal family size for males is larger for LDS respondents with high religiosity.
Figure 8. The reduced path model (standardized coefficients) of socio-economic and demographic variables upon desired family size preferences among male Utah high school seniors, 1974.
TABLE 7

ZERO-ORDER CORRELATION MATRIX FOR THE MODEL OF SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES UPON IDEAL FAMILY SIZE PREFERENCES OF MALE UTAH HIGH SCHOOL SENIORS, 1974

<table>
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<th>Family Size of Orientation</th>
<th>Religious Orientation</th>
<th>Religiosity</th>
<th>Educational Difference</th>
<th>Desired Age at Marriage</th>
<th>Attitude Toward Birth Control</th>
<th>Ideal Family Size</th>
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levels, from large families, and with the tendency to consider few if any circumstances acceptable for the use of birth control. The correlations for ideal family size are not as strong as the correlations for desired family size. This was also found for females. Ideal family size, it must be remembered, is the "generalized other" concept and desired family size is the self concept. The "generalized other" concept is not as closely related to the characteristics of individual's as the self concept. Ideal age at marriage was not strongly related to any of the variables. All other correlations are the same as those for desired family size of males.

The following are the additional characteristics of the male sample with regards to ideal family size. Ideal family size is smaller than desired family size of males. Males consider 3.75 children ideal and desire 4.08 children. This is consistent with female desired and ideal family size and other studies. Males, also, desired to marry at a younger age than they consider ideal for the average male (22 years and 23.8 years respectively). All other characteristics are the same as those for males desired family size.

Figure 9 presents the path model with all standardized regression coefficients or path coefficients for the influence of socio-economic and demographic variables upon ideal
Figure 9. The complete path model (standardized coefficients) of socio-economic and demographic variables upon ideal family size preferences among male Utah high school seniors, 1974.
family size. When all path coefficients, residuals, and correlations are presented together it is easier to comprehend the complete model. The total effect of the socio-economic or demographic variable upon each dependent variable (ideal family size, attitude toward the use of birth control, ideal age at marriage, religiosity, size of family of orientation, and religion) is presented in Table 8. The total effect of the socio-economic and demographic variables are decomposed into direct effect and indirect effect. The direct effect states that portion of the causal influence is the result of the dependent variable controlling for all other variables. The indirect effect allows for the causal influence to be modified by intervening variables between the independent and dependent variable. The indirect effect is broken down for each intervening variable. Standardized regression coefficients are used which allows for comparisons of the relative effect of the variables within the model.

Effects of socio-economic and demographic variables upon ideal family size

Size of family of orientation, religion, and religiosity have a total influence upon ideal family size of male high school seniors in Utah, as is apparent from Table 8 and Figure 9. Religiosity has the greatest total and direct influence upon ideal family size. Ideal family size increases for males from higher religiosity levels. There is
TABLE 8

INTERPRETATION OF STANDARDIZED EFFECTS OF SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES UPON IDEAL FAMILY SIZE OF MALE UTAH HIGH SCHOOL SENIORS, 1974

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<td>Social Class</td>
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TABLE 8--Continued
no indirect effect or modifying effect upon the relationship between ideal family size and religiosity via the number of circumstances a male considers acceptable for the use of birth control (circumstances were low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size, and/or other reasons).

Ideal family size is then influenced by religion. LDS males consider larger families ideal more than non-LDS males. An LDS male would find 3.96 children ideal as compared to 2.60 children found ideal among non-LDS males. This is mainly due to the indirect influence of religiosity. That is, LDS males who have a high fundamental religiosity level consider larger ideal families than LDS males from medium fundamental religiosity levels.

Size of family of orientation is the next variable which has an influence upon ideal family size. Males who come from large families tend to have larger family ideals as compared to males from small families. This was also found by Paterson among male high school seniors in Florida.¹

Ideal family size was not influenced by place of residence, social class, expected educational difference between a male and his father, ideal age for a male to marry or the number of circumstances a male would find birth control acceptable.

¹Paterson, p. 235.
The majority of the variation, 17 percent, in ideal family size is explained by religiosity, size of family of orientation, and religion. The majority is explained by religiosity—8 percent of the variation in ideal family size. Size of family of orientation explains 6 percent of the variation in ideal family size. The least amount is explained by religion, 3 percent of the variation.

In summary, ideal family size is a result of religion, religiosity, and size of family of orientation for male high school seniors in Utah.

Effects of socio-economic and demographic variables upon antecedents of ideal family size

Religion and religiosity have an influence upon the number of circumstances a male would consider acceptable for the use of birth control as is apparent from Table 8 and Figure 9. The types of circumstances for which birth control could be used were low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size, and/or other reasons.

The number of circumstances a male would consider acceptable for the use of birth control is strongly effected by religiosity. A male from a high fundamental religiosity level would tend to consider the use of birth control acceptable for fewer circumstances than a male from a lower fundamental religiosity level.
Religion influences the number of circumstances a male considers acceptable for birth control to be used. The indirect effect of religion via religiosity is the main influence of religion upon the number or circumstances a male finds acceptable for the use of birth control. An LDS male with a high religiosity level will consider fewer circumstances acceptable for the use of birth control as compared to an LDS male of medium religiosity level.

Eighteen and a half percent of the variation in the number of circumstances a male would consider acceptable for the use of birth control was explained by religion, religiosity, and size of family of orientation. Religiosity explains 12.5 percent of the variation in the number of circumstances a male would consider acceptable for the use of birth control. Religion explains an additional 4 percent and size of family of orientation explains 2 percent of the variation in the number of circumstances a male would find acceptable for the use of birth control. Size of family of orientation is a continuous variable, if it were collapsed into categories it may then have an influence upon the number of circumstances a male would consider acceptable for the use of birth control.

As is apparent from Table 8 and Figure 9, ideal age for a male to marry is a result of religion and social class. An LDS male considers the average male should marry at a younger age than a non-LDS male. The higher social class
males have a younger ideal age for a male to marry than lower social classes. The higher proportion of LDS in upper social class levels may help explain the younger ideal age for males to marry at higher social class levels.

Religion and social class explain the variation in ideal age for a male to marry. Religion explains 2.5 percent of the variation in ideal age for a male to marry. Social class explains an additional 1.80 percent of the variation in ideal age for a male to marry.

Educational difference is influenced by social class as can be seen in Table 8 and Figure 9. A male who expects to have a higher educational level than his father will tend to be from a higher social class level. Social class explains 1.80 percent of the variation in the expected educational difference between a male and his father.

Religion and place of residence have a substantive effect upon the fundamental religiosity level as can be seen in Table 8 and Figure 9. Religiosity is influenced the most by religion. An LDS male has a higher religiosity level than a non-LDS male. Place of residence has the next influence upon fundamental religiosity level. A male from a rural environment tends to have a higher religiosity level than a male from an urban or metropolitan environment. A male from an urban environment tends to have a higher fundamental religiosity level than a male from a metropolitan environment.
Religion has a very strong explanatory influence upon religiosity. Religion explains 24 percent of the variation in religiosity. Place of residence explains an additional 1.20 percent of the variation in religiosity.

Size of family of orientation is influenced by the place of residence of the male as is apparent from Table 8 and Figure 9. A male from an urban environment comes from a larger family than a male from a metropolitan environment.

Place of residence explains 12 percent of the variation in the size of family a male comes from.

As is apparent from Table 8 and Figure 9 religion is not influenced by place of residence or social class.

Summary

Size of family of orientation, religion, and religiosity had a strong influence upon ideal family size of male high school seniors in the state of Utah.

Just the variable which had a relative effect upon ideal family size will be considered here. Size of family of orientation was influenced by place of residence. Religion was not influenced by place of residence or social class. Place of residence and religion had relative effects upon religiosity.

For a conceptual presentation of the effects of the socio-economic and demographic variables upon ideal family size of male high school seniors in Utah see Figure 10.
Figure 10. The reduced path model (standardized coefficients) of socio-economic and demographic variables upon ideal family size preferences among male Utah high school seniors, 1974.
Conclusion

The present study applied Westoff and Potvin's "theory of ideal family size formation" to desired and ideal family size of male and female high school seniors in the state of Utah in 1974.

Desired family size for both females and males were closer fits to Westoff and Potvin's "theory of ideal family size formation" than ideal family size of female or male high school seniors.

It was found female desired family size was a result of religion, religiosity, size of family of orientation, social class, and the number of circumstances a female would use birth control. These variables were influenced by other of the socio-economic and demographic variables. Religiosity was influenced by religion. Religion and size of family of orientation were not influenced by any of the variables. The number of circumstances a female would use birth control was the result of religion, religiosity, and size of family of orientation.

Desired family size of male high school seniors were a result of religion, religiosity, size of family of orientation, and the number of circumstances a male would consider acceptable for the use of birth control. In turn, religion was not influenced by place of residence or social class. Size of family of orientation was influenced by place of
residence. Religiosity was influenced by religion and place of residence. The number of circumstances a male would find the use of birth control acceptable was the result of religion and religiosity.

Both female and male desired family size was influenced by religion, religiosity, and size of family of orientation, and the number of circumstances a female/male would use birth control. Desired family size for females was also influenced by social class. Religion, religiosity, size of family of orientation, social class, and the number of circumstances birth control would be used by a female were a good predictor of female desired family size, 39 percent of the variation was explained. For males, 29.5 percent of the variation in desired family size was explained by religion, religiosity, size of family of orientation, and the number of circumstances a male would consider the use of birth control acceptable. The model explained more variation for female desired family size than male desired family size.

Ideal family size of female high school seniors was only relatively influenced by religion.

Ideal family size of male high school seniors were influenced by religion, religiosity, and size of family of orientation. In turn, religion was not influenced by place of residence or social class. Place of residence had an
effect upon size of family of orientation. Religiosity was influenced by religion and place of residence.

Ideal family size for females is quite different from ideal family size for males. Female ideal family size was influenced only by religion. Male ideal family size was influenced by religiosity and size of family of orientation, also. The female model of ideal family size was a very poor predictor, where religion explained 4 percent of the variation in ideal family size. The male model of ideal family size was a much better predictor, 17 percent of the variation in ideal family size was explained by religion, religiosity, and size of family of orientation.
CHAPTER V
DIFFERENCES IN IDEAL AND DESIRED FAMILY SIZE
OF FEMALES AND MALES

Chapter will analyze the difference in female desired or ideal family size to male desired or ideal family size among Utah high school seniors. The models developed in chapter IV on the influence of socio-economic and demographic variables upon desired and ideal family size among female and male Utah high school seniors will be used to make the comparisons. The two models to be analyzed are:

1. The socio-economic and demographic variables upon desired family size among female Utah high school seniors to desired family size among male Utah high school seniors, 1974.

2. The socio-economic and demographic variables upon ideal family size among female Utah high school seniors and ideal family size among male Utah high school seniors, 1974.

A comparison will not be made of desired family size of females to ideal family size of females, or desired family size of males to ideal family size of males. The reason for this is the two variables in the model are measuring different factors. Both desired family size and desired age at marriage measure the number of children the respondent would like to have and the age the respondent would
like to marry. Both ideal family size and ideal age at marriage measure the number of children an average couple should have and the average age an individual should marry. The ideal variables are measurements for the "generalized other" or average couple or individual. The desired variables are measures for the self. Since these two concepts, desired and ideal, are basically different, they will not be compared.

The model used in the analysis is based upon Westoff and Potvin's "theory of ideal family size formation." Westoff and Potvin's "theory of ideal family size formation" states family size of females is a result of early socialization. The socialization can be influenced by four categories or processes. The four categories are family size in environment variables, social context variables, consistency and continuity in life experiences, and interaction between beliefs and behavior. The socio-economic and demographic variables selected to test this model were size of family of orientation, place of residence, social class, religion, religiosity, desired age at marriage, ideal age at marriage, the number of circumstances females or males would consider acceptable for the use of birth control, and educational difference. These variables were described and discussed in Chapters III and IV.

From Chapter IV it can be seen that female desired family size was influenced by religion, religiosity, size of family
of orientation, social class, and the number of circumstances for which a female would use birth control. The circumstances for which birth control could be used were low income, spacing of children, poor physical health, emotional problems, birth defective children, marital instability, limit family size, and/or other reasons. Male desired family size was influenced by religion, religiosity, size of family of orientation, and the number of circumstances a male considers acceptable for the use of birth control. Ideal family size of females was influenced by religion. Male ideal family size was influenced by religion, religiosity, and size of family of orientation.

Religion is the only variable which appears consistently in all four analyses of desired and ideal family size among female and male Utah high school seniors. When comparisons are made of the socio-economic and demographic variables upon the desired family size of females to the desired family size of males and the ideal family size of females to the ideal family size of males the results are:

1. Desired family size of females and desired family size of males were both influenced by religion, religiosity, size of family of orientation, and the number of circumstances a female or male would consider acceptable for the use of birth control. Female desired family size was also influenced by social class.
2. Ideal family size of females and ideal family size of males were both influenced by religion. Female ideal family size was not influenced by religiosity or size of family of orientation as was male ideal family size.

The above presents the socio-economic and demographic variables which had relative importance within a model. This does not mean the relative effect between female desired family size and male desired family size or female ideal family size and male ideal family size are the same. This chapter will make the comparisons for desired and ideal family size considering the influence of sex socialization upon the socio-economic and demographic variables. To do this, metric (unstandardized) regression coefficients will be used through this chapter.

**Desired Family Size**

The first comparison to be made is desired family size of female Utah high school seniors to desired family size of male Utah high school seniors, 1974. By making this comparison it will be possible to see the influence of sex socialization upon the relationship of the socio-economic and demographic variables to desired family size.

As can be found in Tables 1 and 5, desired family size of females, 4.73 children, is larger than desired family size of males, 4.08 children. This is consistent with most studies. Blake found males tend over time to desire smaller
families than females.\textsuperscript{1} Gustavus and Nam found among high school seniors in Florida females desired larger families than males.\textsuperscript{2} Female high school seniors desired larger families than male high school seniors was also found by Paterson in Louisiana.\textsuperscript{3} Females come from slightly larger families than males, 4.93 children and 4.89 children, respectively. Social class level of females is slightly higher than the social class level of males. Females tend to have a higher religiosity level than males. Males expect more education than their fathers, whereas, females expect the same education as their mothers. Both females and males find approximately the same number of circumstances acceptable for the use of birth control, come from the same residential background and have the same proportion of LDS within the sample (83 percent of the sample is LDS). Males have a higher desired age than females. Males would like to be 23.9 years old when they marry as compared to 22 years of age females would like to be when they marry.

Desired family size of females and desired family size of males (Table 9 and Figure 11) were both found to be influenced by religion, religiosity, size of family of orientation, and the number of circumstances females/males consider

\footnotesize{\textsuperscript{1}Blake.  
\textsuperscript{2}Gustavus and Nam.  
\textsuperscript{3}Paterson.
## Table 9

**Interpretation of Unstandardized Effects of Socio-Economic and Demographic Variables upon Desired Family Size Preferences of Female and Male Utah High School Seniors, 1974**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Indirect Effects</th>
<th>Attitude Toward Birth Control</th>
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<tr>
<td></td>
<td>Orientation</td>
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<td>Social Class</td>
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<td>Marriage</td>
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<td>Birth Control</td>
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**Note:** All values are unstandardized regression coefficients.
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<th>Religious Difference</th>
<th>Educational Social Class</th>
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( ) = male
Figure 11. The complete path model (unstandardized coefficients) of socio-economic and demographic variables upon desired family size preferences of female and (male) Utah high school seniors, 1974.
acceptable for the use of birth control. Female desired family size was found to also be influenced by social class.

For both males and females, LDS desire larger families than non-LDS. The difference between female LDS and non-LDS family size desires is greater than the difference between male LDS and non-LDS family size desires. When the influence of religion via religiosity is taken into consideration there is very little difference between females and males. A female from a high religiosity level who is LDS will tend to desire a larger family than a female from a medium religiosity level who is LDS similar to males from a high religiosity level who are LDS will tend to desire larger families than males from a medium religiosity level who are LDS.

When just the religiosity level of the female or male is considered, there is no difference in the relative influence of religiosity upon female desired family size or male desired family size.

Size of family of orientation has a slightly greater relative influence for female desired family size than for male desired family size. Part of the difference in influence is due to differences in educational expectations between females and mothers and educational expectations of males and fathers. Males expect more education than their fathers, whereas, females expect the same level of education as their mothers. Size of family males come from
via educational difference upon desired family size slightly depresses the relationship, whereas, size of family females come from via educational difference upon desired family size reinforces the relationship. This may be due to the difference in educational expectations of males and females.

Birth control has a greater influence for females than males. Females were more willing to use birth control for more circumstances than males were willing to accept the use of birth control.

Social class for females was found to influence desired family size when both direct and indirect effects were taken into consideration. For males, social class did not have total influence upon desired family size. The difference in relative importance of social class within female desired family size as compared to male desired family size is also found for the unstandardized regression coefficients. Again the difference in educational expectations and the number of circumstances a female would use birth control were found to heighten the influence of social class for females where it did not do so for males. Also, females tend to be influenced to a greater extent by their family social class level than males.

Religion was found to be not influenced by either place of residence or social class for either males or females.
Religiosity was influenced by religion for both females and males. Also, place of residence had an influence upon religiosity of males but not females. The influence of religion upon religiosity is the same for both females and males. The influence of place of residence is twice as strong for males as for females. Males from rural environments tend to be more religious than males from urban or metropolitan environments. Whereas, for females there is not as strong an influence of environment upon religiosity.

Size of family of orientation of females was not substantively influenced by place of residence or social class. Size of families of males was substantively influenced by place of residence. Again, rural males would tend to come from larger families than urban or metropolitan males. Male’s size of family is influenced almost three-fourths of the time more often than females.

The number of circumstances birth control would be considered acceptable to be used by females/males was a consequence of religion and religiosity for both females and males. Also, the size of families females come from influenced the number of circumstances females would use birth control. The relative importance of religiosity upon the number of circumstances females/males would use birth control was the same for females and males. Religion was slightly more important for females than for males.
Females from larger families would use birth control for fewer circumstances. Males were not influenced relative to females by the size of family they came from upon the number of circumstances they considered acceptable for the use of birth control. This may be a result of females being the person who used birth control and the male referring to when he would consider it acceptable for someone (such as his wife) to use birth control.

Desired family size of female Utah high school seniors is slightly different from desired family size of male Utah high school seniors. The relative influence of religion, size of family of orientation, the number of circumstances a female/male would find the use of birth control acceptable and social class has slightly greater relative influence for females than for males upon desired family size.

Desired family size was explained better for females than for males by religion, religiosity, size of family of orientation and the number of circumstances a female/male would find acceptable for the use of birth control. Desired family size of female Utah high school seniors had 39 percent of the variation explained by religion, religiosity, size of family of orientation, and the number of circumstances females would use birth control. Desired family size of male Utah high school seniors had 29.5 percent of the variation explained by religion, religiosity, size of family
of orientation, and the number of circumstances a male would consider acceptable for the use of birth control.

**Ideal Family Size**

The second comparison to be made will be ideal family size of female Utah high school seniors to ideal family size of male Utah high school seniors, 1974.

As can be seen in Tables 3 and 7, male ideal family size of 3.75 children is smaller than female ideal family size of 4.44 children. Paterson¹ and Gustavus and Nam² found among high school seniors in different areas males tended to have smaller ideal family size preferences than females. Ideal age for females to marry, 22.1 years of age, is younger than the 23.8 years of age males consider ideal for males to marry. This is what would be excepted. All of the other characteristics of female and male Utah high school seniors are the same as were described under desired family size.

Female ideal family size and male ideal family size were influenced by the socio-economic and demographic variables differently. Female ideal family size was influenced by religion. Male ideal family size was influenced by religion, religiosity, and size of family of orientation.

¹Paterson.
²Gustavus and Nam.
As can be seen in Table 10, religion has a much stronger relative effect upon female ideal family size than male ideal family size. There is a greater difference between the ideal family size of LDS females and non-LDS females than there is the difference between ideal family size of LDS males and non-LDS males. Ideal age females want to marry modifies the influence of religion upon religiosity, female LDS will want families closer to non-LDS female family size ideals (see Figure 12).

Male ideal family size has a greater relative influence from religiosity than female ideal family size. The religiosity level among males will change more from an increase in ideal family size from, say three to four children, than female religiosity level will increase. Even when indirect effects are taken into consideration religiosity level among males influences ideal family size more than females religiosity level influences ideal family size.

Size of family of orientation has the same relative influence upon ideal family size for both females and males. A change in ideal family size will result in similar changes in the social class level among females or males.

All of the other relationships found within the analysis of female ideal family size and within analysis of male ideal family size have the same relative influences upon female ideal family size or male desired family size.
### TABLE 10

**INTERPRETATION OF UNSTANDARDIZED EFFECTS OF SOCIO-ECONOMIC AND DEMOGRAPHIC VARIABLES UPON IDEAL FAMILY SIZE PREFERENCES OF FEMALE AND MALE UTAH HIGH SCHOOL SENIORS, 1974**

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<th>Independent Variable</th>
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<th>Religious Difference</th>
<th>Ideal Age at Marriage</th>
<th>Attitude Toward Birth Control</th>
<th>Direct</th>
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( ) = male
Figure 12. The complete path model (unstandardized coefficients) of socio-economic and demographic variables upon ideal family size preferences of female and (male) Utah high school seniors, 1974.
The influence of the socio-economic and demographic variables upon ideal family size of females is different from the socio-economic and demographic influences upon ideal family size of males. Female ideal family size is influenced more by religion and less by religiosity than male ideal family size is influenced. Social class has the same relative influence upon female and male ideal family size.

Religion, religiosity, and social class are better predictors of ideal family size for males than they are of ideal family size of females. Religion, religiosity, and social class explain 13 percent of the variation in ideal family size. Whereas, only 4 percent of the variation in ideal family size of females is explained by religion.

Conclusion

Westoff and Potvin's "theory of ideal family size formation" was used to analyze the influence of socio-economic and demographic variables upon desired family size of females or males and ideal family size of females or males among Utah high school seniors in 1974.

The relative influence of socio-economic and demographic variables varied between desired family size of female and desired family size of males. Also, the relative influence of the socio-economic and demographic variables varied between the ideal family size of females and the ideal family size of males.
Desired family size of female Utah high school seniors is slightly different from desired family size of male Utah high school seniors. The relative influence of religion, size of family of orientation, the number of circumstances a female/male would find the use of birth control acceptable and social class have slightly greater relative influence for females than for males upon desired family size.

The socio-economic and demographic model of desired family size was a better explanatory model for females than for males. Religion, religiosity, size of family of orientation and the number of circumstances birth control would be used explained 39 percent of the variation in desired family size of females. Religion, religiosity, size of family of orientation, and the number of circumstances birth control would be used explained 29.5 percent of the variation in desired family size of males.

The influence of socio-economic and demographic variables upon ideal family size of females is different from the socio-economic and demographic variables influences upon ideal family size of males. Female ideal family size was influenced more by religion and less by religiosity than male ideal family size was influenced. Social class has the same relative influence upon female and male family size. The socio-economic and demographic variables had different relative influences upon ideal family size of females and
ideal family size of males. Female ideal family size was influenced by religion. Male ideal family size was influenced by religion, religiosity, and size of family of orientation.

The socio-economic and demographic model of male ideal family size was a better predictor than the socio-economic and demographic model of female ideal family size. Religion, religiosity, and social class explain 13 percent of the variation in ideal family size. Whereas, only 4 percent of the variation in ideal family size of females is explained by religion.
CHAPTER VI
SUMMARY AND CONCLUSIONS

The purpose of this study was to measure the direct and indirect relationships between socio-economic and demographic variables and ideal and desired family size preferences among female and male high school seniors in Utah in 1974. Furthermore, the analysis was carried out separately for females and males to see if male and female ideal and desired family size are influenced differently by the socio-economic and demographic variables.

Specifically it was intended to analyze:

1. The selected socio-economic and demographic variables upon desired family size of female Utah high school seniors, 1974.

2. The selected socio-economic and demographic variables upon ideal family size of female Utah high school seniors, 1974.

3. The selected socio-economic and demographic variables upon desired family size of male Utah high school seniors, 1974.

4. The selected socio-economic and demographic variables upon ideal family size of male Utah high school seniors, 1974.
5. The socio-economic and demographic variables upon
desired family size among female Utah high school seniors
to desired family size among male Utah high school seniors, 1974.

6. The socio-economic and demographic variables upon
ideal family size among female Utah high school seniors to
ideal family size among male Utah high school seniors, 1974.

The universe from which the sample was drawn consisted
of all senior females and males in the state of Utah during
the academic year 1973-74. Twenty-eight of the high schools
were systematically chosen resulting in a sample size of
1,015 females and 779 males that were used in the analysis.

There were some limitations upon generalizing the find­
ings of the analysis to the total population due to small
return rate for females and males. It must be remembered
that the lists used were incomplete, compiled at the begin­
ing of the school year and not at the end, and many of the
key variables were controlled for. Also Ralls compared
questionnaires received after the first mailing to question­
naires received after the second mailing to see if there was
a difference in response. There was no significant differ­
ence in response of the earlier to late respondents.

Westoff and Potvin's "theory of ideal family size for­
mation" was used to formulate the models used for analysis.
Westoff and Potvin's "theory of ideal family size formation"
states family size of female's ideal family size is a result
of early socialization. The socialization can be influenced
by four categories or processes. The four categories are family size in environment variables, social context variables, consistency and continuity in life experience, and interaction between beliefs and behavior. The socio-economic and demographic variables selected to test this model were size of family of orientation, place of residence, social class, religion, religiosity, desired age at marriage, ideal age at marriage, the number of circumstances females or males would consider acceptable for the use of birth control, and educational difference.

The socio-economic and demographic models of desired family size of females and males were closer fits to Westoff and Potvin's "theory of ideal family size formation" than the socio-economic and demographic models of ideal family size of females or males.

It was found female desired family size was influenced by religion, religiosity, size of family of orientation, social class, and the number of circumstances a female would use birth control. These variables were influenced by other of the socio-economic and demographic variables. Religiosity was influenced by religion. Religion and size of family of orientation were not influenced by any variables. The number of circumstances a female would use birth control was influenced by religion, religiosity, and size of family of orientation.
Desired family of males was influenced by religion, religiosity, size of family of orientation, and the number of circumstances a male would use birth control. In turn, religion was not influenced by place of residence or social class. Size of family of orientation was influenced by place of residence. Religiosity was influenced by religion and place of residence. The number of circumstances a male would consider the use of birth control acceptable was influenced by religion and religiosity.

Female ideal family size was influenced by religion.

Male ideal family size was influenced by religion, religiosity, and size of family of orientation. In turn, religion was not influenced by place of residence or social class. Place of residence was influenced by size of family of orientation. Religiosity was influenced by religion and place of residence.

The relative influence of socio-economic and demographic variables varied between desired family size of females and desired family size of males. Also, the relative influence of the socio-economic and demographic variables varied between the ideal family size of females and the ideal family size of males.

Desired family size of female Utah high school seniors is slightly different from desired family size of male Utah high school seniors. The relative influence of religion,
size of family of orientation, the number of circumstances a female/male would find the use of birth control acceptable and social class have slightly greater relative influence for females than for males upon desired family size.

The influence of socio-economic and demographic variables upon ideal family size of females is different from the socio-economic and demographic influences upon ideal family size of males. Female ideal family size is influenced more by religion and less by religiosity than male ideal family size is influenced. Social class has the same relative influence upon female and male family size. The socio-economic and demographic variables had different influences upon ideal family size of females and ideal family size of males. Female ideal family size was influenced by religion. Male ideal family size was influenced by religion, religiosity, and size of family of orientation.

Both female and male desired family size was influenced by religion, religiosity, size of family of orientation, and the number of circumstances a female/male would use birth control. Desired family size for females was also influenced by social class. Female desired family size was predicted better than male desired family size by the given socio-economic and demographic variables, Religion, religiosity, size of family of orientation, and the number of circumstances a female would use birth control explains 39 percent of the variation in female desired family size.
These variables explained 29.5 percent of the variation in male desired family size.

Male ideal family size was predicted better than female ideal family size. Religion, religiosity, and social class explain 17 percent of the variation in ideal family size of males, whereas only 4 percent of the variation in ideal family size of females is explained by religion.

The applicability of Westoff and Potvin's "theory of ideal family size formation" is more applicable to desired family size, how many children the respondent wants, than ideal family size, how many children the average couple should want. The socio-economic and demographic variables religion, religiosity, size of family of orientation, and the number of circumstances a female/male would consider acceptable for the use of birth control, were found to influence desired family size of females or males.

The findings of this study suggest there is a need to find the influences of other variables upon family size preferences among high school seniors, such as peer group influences, size of family of peers, career expectation, etc.

Also, more research needs to be done on male family size desires and ideals. Males have been neglected in the past because females were the ones who had children. Males contribute to the decision-making once they are married on how many children they will have. We need to find out what factors have an influence on the number of children they
desire and how these factors influence their desired family size.
REFERENCES

Adamchak, Donald J. "Ideal Family Size and Family Background: An Examination of Mothers' Employment and Daughters' Family Size Preferences." Social Biology 24(2) (Summer 1977):170-172.


ATTITUDE SURVEY OF
IDEAL SIZE OF FAMILY

INSTRUCTIONS:

Each question of the questionnaire has a line in front of the answer or following the question where the proper response is to be placed. For example, on question number 1, if you were 18 years old you would place a 4 on the blank line in front of the choices.

Please Indicate your sex: Male Female.

1. How old were you on your last birthday?
   1) Below 16 2) 16 3) 17 4) 18 5) 19 or above

2. Are you married? (If your answer is "yes" skip questions.)
   1) yes 2) no

3. Do you plan to get married sometime in the future?
   1) yes 2) no 3) undecided

4. If you do, at what age would you like to get married?

5. State the number of years that you have spent in each of the following size cities:
   (roughly estimate the time spent in each area)
   1) cities with a population less than 2,499 people
   2) cities with a population between 2,500 and 9,999 people
   3) cities with a population between 10,000 and 19,999 people
   4) cities with a population between 20,000 and 29,999 people
   5) cities with a population 30,000 and 49,999 people
   6) cities with a population 50,000 or more people

6. During high school, what has your average grade been?
   1) A 2) Between A and B 3) B 4) Between B and C 5) C
   6) Between C and D 7) D or below

7. When you graduate from high school, what would you like to do first? If you have second and/or third choices, put 2 or 3 by the appropriate answer.
   1) go to college 2) get a job 3) go to a vocational school 4) stay home
   5) get married 6) other (specify)

8. How many children, including yourself, were born alive to your mother?

9. How many children were born to your father's parents (include your father and those who have died)?

10. How many children were born to your mother's parents (include your mother and those who have died)?

11. What do you think is the ideal age for marriage?
   ______ for males? ______ for females?

12. Do you plan to have children?
   1) yes 2) no

IF YOUR ANSWER IS "NO" SKIP QUESTIONS 13 THROUGH 15.

13. How long after your marriage would you like to have your first child?
   (put your answer in years and/or months)
14. How old would you like to be when you give birth to your last child? 

15. If you could have exactly the number of children you want, what would that number be? 

16. What is the ideal number of children for any couple to have? 

17. What is the largest number of children you personally would be willing to have? 

18. What is the fewest number of children you personally would be willing to have? 

19. When you were growing up, at what age did you first consider how many children you might have? 

After you are married and you and your marriage partner anticipate a certain income when you are age 30, how many children would you personally desire if your income is $5,000? $10,000? $15,000? $20,000? $25,000 or above?

<table>
<thead>
<tr>
<th>Income</th>
<th>Desired Number of Children</th>
</tr>
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<tbody>
<tr>
<td>$5,000</td>
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<td>$10,000</td>
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<td>$15,000</td>
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<td>$20,000</td>
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<tr>
<td>$25,000+</td>
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</tbody>
</table>

How many children do you think would be ideal for a couple with that income to have?

<table>
<thead>
<tr>
<th>Income</th>
<th>Ideal Number of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5,000</td>
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<td>$15,000</td>
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<td>$20,000</td>
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<tr>
<td>$25,000+</td>
<td></td>
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</tbody>
</table>

30. What is your religion?
   1) L.D.S.  2) Catholic  3) Protestant  4) None  5) Other (specify) 

31. If you held membership in a church what percentage of the meetings that you were eligible to attend in the past two years did you attend?
   1) None  2) 1/4 of the meetings  3) 1/2 of the meetings  4) 3/4 or more of the meetings 

32. Have you held a church position in the past two years?
   1) yes  2) no 

33. During the past two years have you been a member of a committee in your church?
   1) yes  2) no 

34. On the following questions check the blank that most nearly represents your opinion on each of the statements. For example: if the statement were, "Women have less intelligence than men," and you strongly disagreed with the statement you would check the appropriate blank:

   STRONGLY AGREE  AGREE  UNDECIDED  DISAGREE  STRONGLY DISAGREE

   ANS

   (1) My religion is a vital and moving force in my life.

   STRONGLY AGREE  AGREE  UNDECIDED  DISAGREE  STRONGLY DISAGREE
(2) Activities such as swimming, movies, work and dancing are all right on Sunday.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

(3) It is important for an individual to pray daily.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

(4) An individual is accountable not only to himself but to God for his behavior.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

(5) Attendance at church meetings is a necessary part of religion.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

(6) When there is a contradiction between science and religion, the scientists are usually right.

STRONGLY AGREE AGREE UNDECIDED DISAGREE STRONGLY DISAGREE

35. What is your race:
   1) White
   2) Indian
   3) Black
   4) Oriental
   5) Chicano
   6) Other (specify)

36. What is the occupation of your father and for whom does he work? (Be specific and state in detail what he does.)

37. What is the occupation of your mother and for whom does she work? (Be specific and state in detail what she does.)

38. What is the annual income of your family?
   1) Below $3,000
   2) $3,000 to $6,999
   3) $5,000 to $9,999
   4) $10,000 to $14,999
   5) $15,000 to $19,999
   6) $20,000 to $24,999
   7) $25,000 and above

39. What is the highest grade of education completed by your father?
   1) Less than the 7th grade
   2) Completed 7-9 grades
   3) Completed 10-11 grades
   4) Completed high school
   5) Vocational training after high school
   6) some college training (1-3 years)
   7) College graduate
   8) Completed a Masters or Doctorate Degree
   9) Other (specify)

40. What is the highest grade of education completed by your mother? (Use the categories listed in #39 and fill in the appropriate number.)
As in the preceding section check the blank that most nearly represents your opinion on each of the statements.

41. I am personally against the use of artificial methods of contraception.
   STRONGLY AGREE   AGREE   UNDECIDED   DISAGREE   STRONGLY DISAGREE

42. If married, I would use contraceptive devices under the below mentioned circumstances. (You may place an "X" beside more than one answer.)
   __________  __________  __________  __________  __________
   1) low income (to limit family size)
   2) to space the birth of my children
   3) poor physical health (danger to health of wife or fetus)
   4) emotional problems
   5) probability of birth defective child
   6) marital instability
   7) to limit my family size
   8) other (specify)
   9) never (would never use contraceptive devices)

43. Many married couples do something to limit the number of births they will have. In general, would you say that you are for or against this?
   __________  __________  __________
   1) for
   2) against
   3) undecided

44. A married couple should be able to regulate their family size through contraceptive devices.
   STRONGLY AGREE   AGREE   UNDECIDED   DISAGREE   STRONGLY DISAGREE

45. The growth of the world's population is a serious problem.
   STRONGLY AGREE   AGREE   UNDECIDED   DISAGREE   STRONGLY DISAGREE

46. Couples should have no more than two children so that the world's population can be stabilized.
   STRONGLY AGREE   AGREE   UNDECIDED   DISAGREE   STRONGLY DISAGREE

47. I feel a personal obligation to limit my own family size.
   STRONGLY AGREE   AGREE   UNDECIDED   DISAGREE   STRONGLY DISAGREE
VITA

Linda Rose Hagen

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Doctor of Philosophy

Dissertation: The Formation of Desired and Ideal Family Size Among Utah High School Senior Females and Males, 1974

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