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FAMILY PLANNING OF MORMON WOMEN IN  
THREE-GENERATION FAMILIES

by

Brent C. Miller

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

of

MASTER OF SCIENCE

in

Family and Child Development

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Few, if any, of the women in the sample will ever read this, but the acknowledgements would be incomplete without recognizing their contribution to the study. Likewise, a number of local officials of the Mormon Church were understanding enough to assist me in acquiring the sample. To all of these people I write this obscure "thank you".

Finally, I thank myself for getting along with my committee, keeping the peace with my wife, going without sleep, and finishing this thesis.



Brent C. Miller

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## ABSTRACT

Family Planning of Mormon Women  
in Three-Generation Families  
by

Brent C. Miller, Master of Science  
Utah State University, 1972

Major Professor: Dr. Jay D. Schvaneveldt  
Department: Family and Child Development

This intergenerational study compared the family planning and related attitudes of females who were daughter-mother-grandmother relatives. Questionnaire responses of eighty-one subjects in twenty-seven three-generation families were analyzed regarding birth control, abortion, and population crisis attitudes. Other variables studied included Mormon orthodoxy, education, and place of residence.

Except for abortion, the generations had significantly different attitudes. The oldest generation's attitudes, which were the most conservative, differed significantly when contrasted with the more similar attitudes of the middle and younger generations. Mormon orthodoxy was the most dramatically significant factor in attitude differences. Education and residence were not significant sources of attitude variance; however, there was an education and

orthodoxy interaction, with low orthodoxy-high education respondents having abortion attitudes which were significantly more liberal than other respondents.

(86 pages)



## INTRODUCTION

In both popular and professional literature there has recently been extensive coverage of the population growth and environmental crisis due in part to present expected crowding. Popular works like The Feminine Mystique (Friedan, 1963), Motherhood: Who Needs It? (Rollin, 1970), and The Case Against Having Children (Silverman and Silverman, 1971) have criticized the prevalent women-must-be mothers attitude. Female roles other than motherhood have been emphasized increasingly, and occupational equality for women has become a national issue. Medical and legal advances have made family planning and limitation easier. In recent years the mass media has been so saturated with these developments that the topic of family planning should be very apparent to young women who are just now entering their childbearing years.

For members of the Church of Jesus Christ of Latter-day Saints (Mormon) the birth rate per thousand population in 1970 was 28.4 (Church of Jesus Christ of Latter-day Saints, 1971) while the national average for the same year was 18.2 (United States, 1971). In a study where religion was shown to be the single most important social determinant of family size preferences and actual fertility, Mormon women appeared near the prolific end of the continuum (Westoff and Potvin, 1967). Of related interest in providing insight into Mormon attitudes is a study by Christensen and Gregg (1970). In their research on collegiate sexual attitudes in three cultures they used Intermountain Mormons for their "highly restrictive" comparison group.

In summary, young Mormon women are often reared in large families and exposed to mass media that encourages small families. As the family-conscious Mormon culture places heavy emphasis on parents teaching their children, it was believed that considerable intergenerational carry over would be reflected in conservative family planning attitudes among young Mormon women. While it was assumed that young Mormon women had conservative family planning attitudes relative to non-Mormon women generally, it was not known whether or not their attitudes had become more liberal than those of their mothers and grandmothers.

#### Problem

For young Mormon women there exists an apparent conflict between the larger society's appeal for smaller planned families and Mormon intergenerational expectations of large families. Third-generation Mormon women, reared by large-family oriented mothers and grandmothers in a large-family religion, are confronted by a pervasive mass media and literature about the need for and desirability of smaller families. This conflict was the state of affairs assumed to exist--the theoretical conflict, and how third-generation Mormon women intended to resolve it for themselves, constituted the problem. The problem focused on the larger society's impact, as contrasted with religious, familial influence, on the family planning attitudes of young Mormon women--would their attitudes be different? If so, how?

### Purpose

The study was designed to find out if or how family planning attitudes among young Mormon women differed from the attitudes of their mothers and grandmothers. What had been the relative impact on young Mormon women of religious intergenerational learning on one side, and the larger society's influence on the other? Perhaps the third generation Mormon women would be found to think much the same as their mothers and grandmothers did about family planning. However, it was also possible that the larger society's quite recent promotion of smaller families had swayed young Mormon women into regarding family planning quite differently than their mothers and grandmothers. It might have been that younger Mormon women were choosing a position between the patterns of their progenitors and those of the larger society.

How enduring were the family and birth attitudes taught by Mormon mothers to their daughters in opposition to the mass media? Had the mass media's coverage of the population crisis and women's liberation made young Mormon women any more sensitive to their fecundity than were their own mothers at this same stage? If so, did young Mormon women intend to move toward greater acceptance of family planning practices? Would the family planning attitudes of the third generation be more like the second generation's where mothers were more supportive? These were the questions--the gaps in knowledge--with which this study was concerned and to which the investigator hoped to contribute understanding.

Specifically, it was the purpose of this study to: (1) examine the birth control, abortion, and population crisis attitudes of three generations of Mormon women in light of their generation, Mormon orthodoxy, education, place of residence, husband's occupation, and maternal control and support; (2) determine if the Mormon women differed on the attitude scales, and if so; (3) describe in terms of the variables how they differed.

#### Hypotheses

1. There is no significant difference in birth control, abortion, and population crisis attitudes between first, second, and third generations.
2. Across generations those who rank high in Mormon orthodoxy have birth control, abortion, and population crisis attitudes which are significantly different from those who rank low in Mormon orthodoxy.
3. Regardless of generation, the non-rural, the better educated, and the higher occupation-class respondents have significantly different birth control, abortion, and population crisis attitudes.
4. Daughters who rank high in maternal support have significantly different Mormon orthodoxy scores than those who rank low on this factor.
5. The birth control, abortion, and population crisis attitudes of daughters who rank high on mother support are more like their own mother's attitudes than those who rank low on this factor.

## REVIEW OF LITERATURE

### Scope of Review

The nature of this study required a fundamental understanding of several areas. The literature was assessed and there are sub-titles in this review for birth control, abortion, Mormon family size, the Mormon Church and family planning, the population crisis, and intergenerational learning. Because of the profusion of literature on birth control, abortion, and population, a comprehensive review was not undertaken. Only very general overviews of the focal concerns in these areas are presented here.

### Birth Control

Wrong (1968), writing of the historical 19th to 20th Century birth rate decline in Western societies, points out that traditionally birth rate was most affected by the proportions of women who were married and of childbearing age. But this was not so with the Western decline. Rather, Wrong says, the Western decline in birth rate was attributable to voluntary causes--not spots on the sun or females riding bicycles--but restrictions deliberately placed on procreation by modern societies. He suggests the desire for a higher standard of living and the emancipation of women as the reasons for deliberately restricting births.

In the United States birth control was confronted with traditionalism and prudery. The following quote describes the public sentiment in the United States seventy years ago (Price, 1967, p. 74). "At the turn of the century information and devices were not freely available, and it was considered improper, unfashionable, and politically unwise to discuss the subject of birth control in public."

Price (1967) notes that there has been a dramatic liberalization in public thinking over the years regarding the dispensing of information on family planning techniques, and the availability of contraceptives themselves. Whereas at the turn of the century laws and social attitudes toward contraception were restrictive, now dissemination of birth control information and devices occurs in public clinics across the nation.

As recent as 1959 President Eisenhower said (Price, 1967, p. 85): "I cannot imagine anything more emphatically a subject that is not a proper political or governmental activity . . . this government will not . . . as long as I am here, have a positive political doctrine in its program that has to do with the problem of birth control. That's not our business." President Kennedy was the first President to publicly support contraception and fertility research, and policy resulted (Price, 1967). More recent presidents have found family planning even more the government's business.

In a recent Gallup Poll (1971) the percentage of Americans who favor large families was found to be at the lowest point since the surveys began over thirty-five years ago. In 1971, 23 per cent of Americans, compared to 40 per cent in 1967, said four or more is the ideal number of children. The previous

low recorded was 34 per cent in the depression year of 1936. The 23 per cent figure indicates a very dramatic change. In the recent survey the decline in percentage favoring large families was most pronounced among younger persons and the better educated.

Reasons given for this dramatic national attitude change away from large families were: the cost of living, uncertainty of the future, and concern over crowded conditions and overpopulation (Gallup, 1971). Part of the increasing significance of birth control then is attributed to the increasing concern over population growth.

In Utah a survey was conducted in 1971 (Bardsley) that asked respondents to think of the country's population growth and approve or disapprove of the idea of planned parenthood. Even in Utah a 56 per cent majority approved of planned parenthood. Men, non-Mormons, and the middle-aged were most approving of planned parenthood.

In general, the wife holds the primary responsibility for birth control in the family. One author notes that "This is reflected by the fact that the majority of modern birth control methods . . . are designed to be employed by the woman" (Ehrlich and Ehrlich, 1970, p. 213).

There are many kinds of contraceptives available that differ in mode and convenience of use, safety, and dependability. With regard to dependability, the rhythm method of birth control involving periodic abstinence, leaves much to be desired. Of those who use this method Ehrlich (1968, p. 79) says, "Unfortunately, people who practice this method of contraception are commonly called 'parents',"

Other methods, especially the oral contraceptive, or "pill," approach 100 per cent effectiveness.

### Abortion

Abortion in America is not as well accepted as contraception. Abortion appears to be in somewhat the same developmental acceptance stage as contraception was roughly fifty years ago when devices and information were just outgrowing the "bootleg" era (Price, 1967, p. 74).

That abortion is less accepted than contraception may be due to several factors. Bracher (1966) describes abortion being suspect on three counts: there is the risk of death or injury; the moral question of whether or not destruction of the fetus constitutes killing a person; and the desperate nature of abortion. Since abortion needs to be performed by approximately the end of the third month of pregnancy, it is necessarily done under the pressure of time and may therefore be done without sufficient forethought.

Abortion has become less suspect since 1966 as legalization in several states has measurably reduced the risk of death or injury. Havemann (1967, p. 99) quotes a doctor as saying that "Surgical techniques have been refined to the point where the operation is quick, simple, and less dangerous than the removal of tonsils." However, other characteristics of abortion still make it suspect.

National attitudes on abortion have been assessed in recent years and appear to be liberalizing. Gallup polls on this issue were taken in 1966 and 1969.



Blake (1971) discusses the meaning of these Gallup polls and others taken at her own request and the National Fertility Study conducted in 1965 by Westoff and Ryder. She notes that Americans generally still oppose elective abortion but views are changing rapidly, especially for some groups. Blake (1971, p. 544) writes that "Abortion to preserve a mother's health or prevent child deformity may be said to be publicly well accepted, while abortion for discretionary ("selfish") reasons receives minimal but rapidly growing support."

#### Mormon Family Size

Westoff and Ptovin (1967, p. 4) cite as a major finding of their research "... that religion is the most important social determinant of family-size preferences as well as of actual fertility." One of the hypotheses they tested and confirmed was that "... the average size of family desired by Mormon women will be greater than that desired by all other non-Catholic women..." (Westoff and Potvin, 1967, p. 30) In fact Mormon women fell amongst Catholic women in their family size desires; between Catholics in secular schools and those in Catholic schools. Another study (Whelpton and Lauriat, 1956) suggested that Mormon college graduates might even have higher marital fertility than graduates of Catholic colleges, although the comparison was obscured by other variables.

In a professional poll conducted in Utah with a random sample of 600 subjects, (Bardsley, 1971) respondents were asked to approve or disapprove of the idea of family planning. Of all Mormons, 51 per cent, as compared to 79 per

cent of non-Mormons, approved. Only 15 per cent of the non-Mormons disapproved as compared to 42 per cent of Mormons sampled.

Vital Statistics Reports reveal that the state of Utah, which has a Mormon majority population, consistently has a birth rate well above the national average. Utah in 1970 and 1969 had 25.9 and 23.6 births per thousand while the national average was 18.2 in 1970 and 17.7 in 1969 (United States, 1971). In the same report it can be observed that Utah's 25.9 is the highest birth rate of all states in the 1970 provisional summary.

Finally, in their April Conference report (Church of Jesus Christ of Latter-day Saints, 1971) the Mormons are shown to have had a birth rate of 28.4 per thousand population in 1970 as compared to Utah's 25.9 and the nation's 18.2.

#### The Mormon Church and Family Planning

Unlike the Catholic Church the Mormon Church has no well recognized formal edict on birth control. David O. McKay, late president of the church, has said (McKay, 1953, 477), "Parenthood and particularly motherhood should be held as a sacred obligation . . . a married woman who refuses to assume the responsibilities of motherhood . . . is recreant to the highest calling and privilege of womankind."

A more abrupt expression that makes specific reference to contraception is offered by Bruce R. McConkie of the Church's First Council of Seventy:

It follows that those who practice birth control--the regulation of the number of births in a family by the employment of artificial means or contraceptives to prevent conception--are running counter to the foreordained plan of the Almighty. They are in rebellion against God and are guilty of gross wickedness. (McConkie, 1958)

Subsequent to McConkie's writing about Mormons and birth control the First Presidency of the Mormon Church issued a statement on the subject to local church officials. This letter was to aid local leaders in conveying the proper information regarding birth control to church members under their jurisdiction. Parts of it follow.

We seriously regret that there should exist a sentiment or feeling among any members of the church to curtail the birth of their children. We have been commanded to multiply and replenish the earth that we may have joy and rejoicing in our posterity. Where husband and wife enjoy health and vigor and are free from impurities that would be entailed upon their posterity, it is contrary to the teachings of the Church artificially to curtail or prevent the birth of children. . . . However, we feel that men must be considerate of their wives who bear the greater responsibility not only of bearing children, but of caring for them through childhood. To this end the mother's health and strength should be conserved and the husband's consideration for his wife is his first duty. . . . (McKay, Brown and Tanner, 1969).

It can be seen that the basic teaching of the Mormon Church is against artificial birth control. However, according to the First Presidency, hereditary "impurities" and the health and strength of the parents--especially the mother--should be considerations.

This guideline opposing birth control, but with provisions, seems to be interpreted divergently by members of the Church. Ptacek (1971), measuring attitudes toward oral contraception among Catholics, Protestants, and Mormons, found that both the most liberal and conservative scorers were Mormons. Although she noted considerable variation among all three groups, the standard deviation was also greatest for Mormons, and she commented "This indicates a very wide spread of opinion among this group." (Ptacek, 1971, p. 31)

In summary, the Mormons are a very high fertility group bound by no well recognized family planning statement. Individual members appear to vary considerably in their opinions as to what is acceptable within their religious framework with regard to family planning.

#### Population Crisis

The quantity and recency of population literature and the formation of numerous groups around this concern provide evidence of the current interest in this area. Polgar (1966, p. 327) writes, "In terms of it's urgency, the growth of world population is ranked by many as second only to thermonuclear war in its potential hazard to the survival of mankind as we know it."

Cook and Lecht (1968) have clearly outlined the dimensions of this problem. They report that there are 3 billion people living on the earth, and reaffirm that the earth's size is constant. While the earth's size remains the same the number of people on it grows very fast--about 190,000 each day or

70 million each year. They then project that if the number of people continues to increase at the present rate there will be 7 billion on the earth by the year 2000. "This rapid growth of mankind in the 20th Century is called 'the population explosion'" (Cook and Lecht, 1968, p. 7).

Concerned about having enough food, water and even space to live should there be such an increase, Baird (1966, p. 195) wrote of a fifth freedom beyond the four American freedoms; namely the "freedom from the tyranny of excessive fertility." Beyond the immediate front-line concerns of food, water, and space are the second-order dangers of pollution and irreparable environmental scarring of the earth due to the pressure of too many people.

A well known author of both popular and scientific literature on the subject (Ehrlich and Ehrlich, 1970) has written that without question the single most important factor in reproduction rates is the motivation of people toward regulation of family size. The most critical factor in the reduction of family size is the desire for smaller families. He believes that the ultimate key to population control lies in changing the attitudes people have concerning reproductive behavior.

Davis (1967) suggested that population control achieved through birth control would only be possible when childbearing is no longer stressed as woman's main responsibility and duty. Similarly, Stolka and Barnett (1969, p 750) concluded that "If population is to be curbed by lowering the birth rate efforts should be directed toward reducing emphasis in the woman's role upon the importance of having children."

### Intergenerational Learning

Research indicates that adolescents identify with or conform to parental values largely as a result of parental support and warmth. In their decade review of research on parent-child relationships, Walters and Stinnett (1971, p. 78) point out that "The importance of warm, satisfying family relationships as a factor affecting parental identification or orientation is also suggested by the studies."

McGahey and Sporakowski (1972, p. 30), studying intergenerational attitudes of mothers and their adult daughters, report as their finding of major significance "that mothers and their daughters did not differ significantly in their attitudes towards childbearing and child rearing." They noted that the mother-daughter similarity seemed to indicate a substantial overlap in two-generational attitudes, which probably meant a strong parent-child transmission-of-attitudes system.

Thomas (1968, p. 3690) studied adolescent conformity in relation to parental control and support. He interpreted his findings "as underscoring the importance of parental support in socialization practices related to conformity of adolescents while calling into question the influence of parental control upon patterns of conformity."

A companion study to Thomas' (Wiegert, 1968) found that parental support explained more of the variation in adolescent religiosity (conformity) than parental control, even when parental religiosity was controlled.

Adolescents that reported high parental support had the highest religiosity scores which was defined as conforming behavior.

Subsequent publications by these researchers (Wiegert and Thomas, 1970 and Thomas and Wiegert, 1971) have expanded the basic findings they reported earlier. They report the usefulness of the variables "control" and "support" in their research, but call for further verification over a wider range of dependent variables. Using religiosity as the dependent variable, their general conclusion is that "high support from either parent is associated with conforming behavior, and low support, in combination with low control for the mother and high control for the father, with nonconforming behavior" (Wiegert and Thomas, 1970, p. 320).

#### Synthesis

Across the nation public attitudes endorse contraception, and in certain situations, abortion. Attitudes toward abortion are liberalizing in general at the national level. Traditionally the Mormon family has a record of very high fertility. The general Church position is against family planning with few qualifications. However, since the beginning of the century Mormon family size has declined and movement toward acceptance of planned families has been observed (Canning, 1956, Bardsley, 1971). Concern about the "population explosion" has undergone an explosion of its own. Parental support and warmth appear to most strongly affect adolescent conformity or identity with parental values.

This study was designed to search for differences in family planning attitudes between generations within the same family. The literature suggests that younger respondents have more liberal family planning attitudes than older respondents. Other tasks of the study dealt with the effects of Mormon orthodoxy, education, residence, and occupation on family planning attitudes. It is believed that the urban, most orthodox, most educated, and upper occupation class respondents have the most liberal family planning attitudes. The literature indicates that daughters reporting high maternal support are the most orthodox and have attitudes most like their mothers. The study was designed to examine the effects of these factors and to clarify and explore intergenerational influences generally.



## PROCEDURE

### Sample Acquisition

The sample consisted of triads of married Mormon females who were grandmother-mother-daughter blood relatives, with the third generation female residing in Logan, Utah. The desired total sample size was ninety, including thirty respondents in each generation. The third generation was randomly selected from two strata purposively chosen and through the third generation the first and second generations were located. Specifically, from the third generation Mormon women it was determined if their natural mothers and grandmothers were living, met the criteria, and were physically and psychologically able to respond to the data collection method.

The third generation samples came from two populations of 18 to 28 year old married Mormon females living in the area of Logan, Utah. The Mormon Church keeps membership records of all members within defined geographical boundaries on the basis of their actual residence. The larger ecclesiastical organizational units described by such boundaries are called stakes. In and near Logan are eight such stakes, two of which were deliberately chosen for inclusion in this study. One of the stakes selected was the Utah State University 2nd Stake in which young Mormon women themselves, their husbands, or both are university students. The other was the Logan Stake which is largely composed of rural agricultural families living in the valley southwest of Logan

City. These two stakes were considered to best reflect the extremes of differences that might exist due to a young Mormon woman's position--from university student to rural homemaker.

In hopes of obtaining usable questionnaires for thirty generationally intact families, the investigator decided to select thirty-six third-generation subject's whose mothers and grandmothers were also eligible and likely to respond. Therefore, eighteen third-generation subjects were randomly drawn from each of the rural and university populations and called on the telephone. Their first and second generation counterparts were also identified until thirty-six triads that met the criteria were completed.

It was realized that since Mormon membership records are not public information, access permission would have to be sought and obtained by the investigator. Consequently, the president of the rural stake was contacted, and he provided the names of six local church officials, each of whom were personally visited by the investigator. Church leaders were told that only the names of young couples in the appropriate age group were desired. They were informed that females who were called and gave their consent would be involved in an intergenerational study comparing the family planning attitudes of married daughters, their mothers, and grandmothers. The church leaders were also assured that the investigator's motive was the proposed research only, and that there were no disguised intentions.

From the rural stake a population of fifty-five married Mormon third-generation females were identified from which the sample of eighteen was drawn. After the order was established by using a table of random digits, calls were made in the mornings, afternoons, and evenings of four consecutive days (Friday through Monday) to minimize any bias that might possibly have arisen from the time of day the calls were made. Finding the sample of eighteen rural daughters with living Mormon mothers and grandmothers exhausted fifty of the population of fifty-five. Of the thirty-two third-generation females who were drawn from the population but not included in the sample, twenty-three had no living grandmother or mother, four had disconnected or unlisted telephone numbers, two had grandmothers who they judged unable or unwilling to participate, two were never reached and had to be skipped over, and one chose not to be in the study.

To obtain the university population the investigator first attempted to procure the names and telephone numbers directly from the nine local church leaders in the Utah State University 2nd Stake. After contacting two of the nine, it was apparent that the same explanations and assurances would likely be required by each leader. To facilitate the acquisition of the population, and to avoid any misunderstanding, a meeting with the stake president and local leaders was arranged. At the meeting the study's anonymity, procedure, and intent were discussed and collective approval was granted.

When lists of names were compiled and each name was numbered, the result was a university population of 845. As with the rural sample, subjects were than randomly selected by referring to a table of random digits. A starting point

in the table was located by dropping a pencil on the page from standing height, and by flipping a coin it was decided first to proceed up the column and then to turn right when the column ended.

Telephoning of the third-generation university subjects was carried out during the same periods on the same days as the rural sample. To locate the eighteen youngest generation subjects with living Mormon mothers and grandmothers required using seventy-eight of the university population of 845. Of the sixty university subjects who were drawn from the population but not included in the sample, twenty-four had no living grandmother or mother, nine were eliminated because subjects were not Mormons in all three generations, seven had telephone numbers which had been disconnected or were not listed, four had grandmothers who they judged unable or unwilling to participate, and two declined the request to take part in the research. Thirteen third-generation subjects were skipped over because they could not be located during the four days of calling. However, only two were skipped in locating the first fourteen of the sample of eighteen; the other eleven were skipped to find the last four needed as the time allotted for sample acquisition had expired.

#### Sample Justification

The total N proposed was limited to ninety subjects since requiring that subjects be three-generation blood relatives of the same sex and religion posed genuine acquisition problems due to the scope and locale of this study. A prospectus of the study suggested that the N of ninety would be increased if sampling

was not too adruous; however, acquiring the minimum sample was difficult and therefore the number of intergenerational triads was not increased.

Although the desirability of studying both sexes was recognized, the ideal and real were not congruous in this study. There were three major reasons why only females were studied. First, in marital sexual relationships the burden of contraception and family planning ultimately rests with the woman. Most of the modern birth control methods, and certainly abortion, are of most direct concern to the female. Secondly, the investigator believed that the effects of the recent social developments mentioned in the introduction were apt to have had the greatest impact on female attitudes. This belief was encouraged by the sexual attitude and behavior studies conducted at the University of Georgia (Robinson, King, Dugley, and Clune, 1970) and by Christensen and Gregg (1970). Both of these studies, although dealing with a different realm of sexuality, indicated a recent dramatic female change while male attitudes and behavior had remained about the same. Finally, and most significantly, the scope of this study allowed only one sex to be studied.

#### Instrument

The data collection method was a self-report questionnaire. Since there was no single instrument already developed that would satisfy the objectives of this study one was constructed. Establishment of validity and reliability is an arduous task and instruments reflecting such assessments are most desirable.

Therefore, insofar as possible, existing scales were borrowed and consolidated in an instrument that collected data appropriate for this investigation.

In order to benefit from instrument construction that might have previously been done, Scales for the Measurement of Attitudes (Shaw and Wright, 1967), Family Measurement Techniques (Strauss, 1970) and Measures of Social-Psychological Attitudes (Robinson and Shaver, 1969) were consulted.

Three birth control scales were located and the Wilke Birth Control Scale was chosen because of its seemingly good reliability and Likert format.

Although abortion attitudes have been roughly assessed (Gallup, 1966 and 1969), the investigator was unable to locate scales that measured abortion or population crisis attitudes and these two scales had to be developed.

Since the investigator wished to replicate and extend the prior research of Thomas and Wiegert using the same instrument for measuring parental control and support was very important. The instrument they used was the short form of the Cornell Parent Behavior Description Inventory. It was found included as a footnote in a journal article (Wiegert and Thomas, 1970). Except for a change of verb tense this scale was employed as it was printed there.

In summary, the instrument consisted of the following four scales: A twenty-item modified Wilke Birth Control Scale (Shaw and Wright, 1967, p. 136); a six-item newly constructed abortion scale; a ten-item specially developed population crisis scale; and the eight-item short form of the Cornell Parent Behavior Description as it appeared in Sociometry (Wiegert and Thomas, 1970, p. 310). A background information section which yielded a Mormon orthodoxy

dimension and other demographic data came first in the questionnaire; it was followed by the four scales in the order they are listed above--birth control, abortion, population crisis, and parental behavior. Each of the four scales utilized a Likert-type summated design, with Strongly Agree, Agree, Disagree, and Strongly Disagree answer alternatives.

#### Pretest and corrections

The tentative instrument displayed in Appendix A was administered to twelve non-sample subjects of which six were third-generation, four second-generation, and two first-generation subjects. Some clerical corrections generally, and considerable content revisions, were found to be necessary.

Overall clerical corrections included leaving three spaces rather than two between the "SD" response alternative and the statement numeral adjacent to it, replacing the incorrect "S" answer alternative on pages two and three with the appropriate "A" for Agree, and spacing out the statements over the three pages to present a less crowded appearance. In the background-demographic section, item 6 was simplified by dividing it and making two items.

In order to have a legitimate claim to previous reliability and validity statements, the birth control scale was included in the pretest instrument just as it had appeared in the reference, except as suggested there, dated item 6 was dropped. However, the pretest indicated that much clarification needed to be done. The pronouns "we" and "our" in items 1, 3, 5, 11, 12, and 18 were dropped or the statement sentence structure changed because the pronouns had

no referent. In addition, the respondents were all members of the Mormon church and since questions associated with the Church preceded the birth control scale, the "we" and "our" might easily have been taken to mean, collectively, the Church. An individual's own attitudes were desired; not his understanding of the Church's attitude.

Items 4 and 8 used the words "uncontrolled reproduction" to mean the opposite of practicing birth control. Since in every other item the words "birth control" actually appeared, item 8 was made clearer by writing "the absence of birth control" in place of "uncontrolled reproduction." Item 4 was dropped because it seemed to express the same idea as items 8 and 14.

The grandmothers pretested had difficulty understanding the meanings of some words in the birth control scale. Simpler or more common words were substituted for "imperative" in item 6, "legitimate" in item 10, "propagate" in item 19, and "physiologically" in item 21. Items 15 and 17 were slightly altered to read more clearly.

In item 24 of the abortion scale the technical term "fetus" was replaced by "unborn child".

In the population crisis scale the pronoun "our" was dropped from item 30 for the same reason it was deleted from the birth control scale. "Inventiveness" in item 33 was replaced by "scientific ability," and item 36 was rewritten to gain clarity.

The Cornell Parent Behavior Description was not criticized in the pretest and was left unchanged. The instructions to it were written by the investigator



as they were not found elsewhere, and to the pretest instructions the clause "Circle an answer for every statement" was added. Since the inventory was intended for adolescents and the investigator wished to employ it in retrospect with young adults, the retrospective parts of the instructions were underlined for emphasis.

After the pretest instrument had been corrected and amended it was used exactly as it appears in Appendix A. In this final form there are still three changes which need to be made. In birth control item 3 the word "desirable" is incorrectly spelled, item 4 somehow retained the "we", and item 11 should be changed to read ". . . not only be allowed but provided for families of low income." Item 11 as used was apparently interpreted to mean quasi-compulsory limiting of lower-income families. From the way a number of respondents reacted (even those with liberal birth control attitudes), it was apparent that socio-economic discrimination was as much the understood essence of statement 11 as was birth control. Other than these three suggested changes, the instrument is thought to be quite solid as it was used.

#### Scoring procedures

Throughout the study the terms "points" and "scores" are used and should be understood in a qualified sense. On the various scales the level of measurement approximates interval, but is really only ordinal. There is not a quantifiable, definable distance between different scores, although "points" are used

to serve this purpose. In the most technically accurate sense, when two scores differ it can only be said that one is higher and the other lower. Recognizing that this measurement weakness exists, the investigator treated the data as if it were truly of the interval level.

Mormon orthodoxy categories were derived from answers to the first section of the questionnaire. An earlier study had indicated that objective, physical criteria as indicators of orthodoxy had provided the clearest, most dramatic contrasts between low and high categories (Thomas and Wiegert, 1971). For this reason background items 3, 4, 6, and 8 were the principal Mormon orthodoxy indicators.

Scoring occurred in the following manner. On item 3 one point was given if the respondent had checked "temple", or "both", referring to the preferred Mormon marriage ceremony. On item 4 six points were possible as two points were given for "regular" attendance at each of the three meetings that active Mormon women commonly attend; one point was also given for "sometimes" attendance on this item. On item 6 from zero to a maximum of three points were given depending upon the number of church assignments held. Those who checked "yes" on item 8 were given one point for observing a Mormon Church health code that includes abstinence from tobacco, liquor, coffee, and tea.

The scoring scheme for Mormon orthodoxy delineated above resulted in a maximum possible score of 11. It was noted that, as was desired, the scale was heavily weighted toward church attendance and active participation. However, this scheme was found to be biased in its orthodoxy judgment of the

first generation as their age and poorer health more often tended to keep them from church attendance and participation. To offset this bias against grandmothers, retrospective items 7 and 11 were counted for the first generation only. On item 7 one point was given if two or more church jobs were listed as having been held, and one point was given on item 11 if whole-life church activity was recorded as "very active". This generation differential was only a very crude but necessary compensation for the scale's inadequacy for assessing orthodoxy over three generations.

The other scales were numerically summated after the Likert format. On the birth control, abortion, and population crisis scales the four response alternatives, "SA", "A", "D", and "SD", were assigned values 4, 3, 2, and 1 respectively when the statement was positive (pro), and 1, 2, 3, 4 when the statement was negative (con) regarding the variable.

On the birth control scale it was possible to score four points per item if statements favoring birth control were circled "SA" and those opposing birth control were answered "SD". Conversely, a one-point-per-item minimum was possible by circling "SD" for statements favoring birth control and circling "SA" for statements opposing birth control. Thus, with twenty items, the lowest possible birth control score was twenty; the highest possible was eighty. A total of nine items (numbers 3, 5, 7, 9, 11, 13, 14, 17, and 19) were pro birth control and eleven opposed birth control.

The six-item abortion scale (items 21-26) was scored in the same manner, making a minimum of six and a maximum of twenty-four points possible. Three of the items (numbers 22, 23, and 25) read favorably toward abortion, and three opposed it.

Items 27 through 36 constituted the ten-statement population crisis scale. It was scored like the birth control and abortion scales with items 27, 28, 31, 32, and 34 being positively concerned about the population crisis, and the other five reading negatively about the existence and concern over population crisis. There was a maximum score of forty and a minimum score of ten possible on this scale.

In the Cornell Parent Behavior Description inventory all statements read in the same direction (all positive) so a "SA" response was scored as four and a "SD" as one. As four items (numbers 1, 3, 5, and 7) measured maternal control, and the other four items assessed maternal support, the maximum possible score on either dimension was sixteen; the minimum possible was four.

### Reliability

Reliability coefficients were computed for each of the subscales using a revision of the Kuder-Richardson formula 21 (Richardson and Kuder, 1939). This formula is a conservative estimator of equivalence. Since the scales were likely to have different reliability for each generation, separate coefficients were computed for each generation on each scale.

On the twenty-item modified birth control scale the investigator computed coefficients of .86, .87, and .80 for the youngest, middle, and oldest generations respectively. Wilke, the author of the basic scale, reported split-half reliability of .91 and test-retest reliabilities ranging from .88 to .83 (Shaw and Wright, 1967, p. 136).

As assessed by the K-R formula 21, the six-item abortion scale had questionable reliability. For the youngest generation the coefficient was .64, for the middle generation it was .51, and for the oldest generation the reliability coefficient was .50.

The population crisis scale showed even a more marked generational difference in reliability. While for the youngest and middle generations the coefficients figured were .69 and .64, the oldest generation reliability coefficient was .41.

In every case the scales were least reliable for the grandmothers in the sample. The reliability of the scales was usually highest for the youngest generation, although on the birth control scale the second and third generation coefficients were virtually the same. The birth control scale, especially as revised, appears to have excellent reliability even across three generations. The abortion and population crisis scales, especially the former, appear to suffer from a lack of items assessing intermediate degrees of attitude.

### Validity

Face or surface validity of the items included in the abortion and population crisis scales was acceptable to professionals. The items were clear, specific, and relevant to the topic being investigated. They also appeared to have content validity. The weakness of these two scales was not what was included, but what was not. There were not enough items that were capable of making intermediate distinctions of degree between respondents.

Shaw and Wright (1967, p. 136) reported that all the birth control items had substantial content validity with regard to moral and pragmatic reactions to birth control.

Another indication of the validity of the scales lies in their correlation with one another. Scores on the birth control scale were correlated with scores on the abortion scale which yielded coefficients of .50, .74, and .54 for the oldest, middle, and youngest generations respectively. Higher correlations of .75, .66, and .78 for first, second, and third generations, were found between the birth control and population crisis scale scores. Population crisis and abortion score correlation coefficients were .39 for grandmothers, .76 for mothers, and .64 for daughters. Generationally, the scales correlated highest with each other among the middle generation sample. Coefficients were nearly as high for the younger generation, but considerably lower for grandmothers.

### Administration

The questionnaires were mailed to all subjects. However, since the percentage of return is often a crucial factor with mailed questionnaires, several precautions were taken to assure a high rate of return.

First, all third generation subjects were contacted via telephone and their cooperation requested as previously described. From them came the information necessary to reach their mothers and grandmothers, but in addition each young Mormon woman was given two post cards to personally address and sign which explained her participation in the study and requested that her mother and grandmother participate also (see Appendix B).

After every subject in the sample had been identified, an envelope containing a questionnaire, a cover letter (Appendix B), two postcards with personal note (Appendix B), and a stamped, self-addressed envelope was sent out to each of the thirty-six third-generation subjects. They were instructed to fill out and return the questionnaire, and send the postcards to their first and second generation counterparts. In cases where daughters lived so near their mothers and/or grandmothers that sending postcards was considered superfluous, they were asked to visit or telephone about the study.

The investigator then allowed five days to elapse before sending envelopes containing exactly the same contents (except postcards) to the first and second generations. The questionnaires were coded to allow follow-up on those which were not returned and to designate family and generation. After approximately two weeks the subjects living within local telephone distance of the investigator

who had not returned their questionnaires were called and urged to do so. Those who lived further away were sent a second questionnaire and letter (Appendix B) also urging their cooperation.

The cover letter asked that the questionnaires be returned in one week. Questionnaires were sent out in mid-February 1972, and after one month a deadline was declared and tabulation began. The cover letter also promised respondents that their responses would remain anonymous. The invitation to inquire about the study's findings was answered by six subjects, of which three were second-generation subjects, two were first, and one was a third-generation subject.

#### Analysis of Data

A one-factor analysis of variance (Glass and Stanley, 1970) was used to test the first hypothesis which was concerned with intergenerational attitude differences. The attitudes were represented by the respondent's summated scores on each of the attitude scales.

High, middle, and low orthodoxy categories were established by objective measures of religious behavior on a point system basis. High and low education categories were defined as beyond high school and high school or less respectively. Attitude differences (utilizing the summated attitude scale scores) between high and low orthodoxy and education groups were analyzed using a two-factor ANOVA design for disproportionate cell frequencies (Glass and Stanley, 1970).



An independent sample t-test was used to test attitude differences between rural and non-rural respondents. Means, medians, standard deviations, and ranges were used descriptively with the data. The .05 level of significance was the critical level employed in testing all hypotheses, although significance beyond .05 was reported when it occurred.

All statistical analyses were first performed manually with the aid of a calculator by the investigator. Subsequently, both the one and two-way ANOVA's, means, standard deviations, and scale correlations were verified by the computer center. One discrepancy appeared which changed an analysis from significant to non-significant status. (The computer did not make the mistake).

## FINDINGS

Responses and Sample Characteristics

Thirty-six triads of first, second, and third-generation subjects (total N = 108) were identified in the original sample selection. However, before questionnaires were mailed, one of the youngest generation sent the investigator a note withdrawing her triad from the study as requested by her mother. As thirty-five intergenerational triads remained, 105 questionnaires were mailed out, of which ninety-six were returned (91.4 percent). All thirty-five daughters returned questionnaires (100 percent), thirty-one of their mothers returned them (88.6 percent), and thirty grandmothers (85.7 percent) returned their questionnaires. Of the nine subjects who did not return questionnaires four declined to participate and five never responded.

Among the ninety-six questionnaires returned were twenty-seven intact, three-generation maternal families (total N = 81). Because the study was intended primarily to examine differences between generations, a tighter design was believed possible where individual family patterns and attitudes were controlled for by comparing generational differences within families. As this was the intent, the returned questionnaires of individuals whose other generation counterparts had not responded were discarded. Of the ninety-six questionnaires returned, thirteen were discarded for this reason; two others were discarded because of incompleteness. The final sample which was analyzed

consisted of eighty-one respondents (84.4 percent of return; 77.1 percent of total) in twenty-seven intact, three generation families of daughters, their mothers, and grandmothers.

Table 1 is the first of several tables that describe the sample. The average age of the older generation was 70.6 as compared with the 45.5 and 22.7 means of the middle and younger generations. For the older generation child bearing occurred many years ago, while for the middle generation it had been more recent, and for the younger generation it was just beginning. It should be noted that the age range of the youngest generation is considerably truncated compared with the middle and older generations.

Table 1 also summarizes the number of children of each of the generation groups. There are fewer children reported by the second generation than the first, a difference that probably has stabilized, since with an average age of 45.5 most of the middle generation women were through the childbearing years.

To establish education categories for comparative purposes the instrument's background section item 2 was used. Respondents with formal education beyond high school were included in category one, and those with a high school education or less, in category two. The resulting dichotomy is depicted in Table 2. With forty-three subjects in category one and thirty-eight in category two the division was quite even. By generations the results are as would be expected considering the increased emphasis and availability of higher education in more recent years. A little over two-thirds of the daughters, about

Table 1. Age of respondents and their number of children

Family number	Generations					
	1		2		3	
	age	children	age	children	age	children
1	65	5	40	6	20	0
2	65	4	46	4	21	1
3	74	5	44	4	24	1
4	71	9	41	6	21	0
5	73	7	45	1	24	1
6	75	3	48	6	19	1
7	60	3	40	5	23	2
8	72	6	44	2	23	1
9	70	3	49	4	23	1
10	73	6	43	5	24	1
11	80	5	61	5	24	1
12	69	4	56	3	21	1
13	75	4	51	5	27	2
14	65	6	46	5	25	3
15	69	6	41	8	23	2
16	65	9	45	2	23	1
17	79	5	43	6	23	1
18	72	3	43	6	23	0
19	57	6	44	5	22	0
20	75	5	45	4	21	0
21	64	6	46	2	23	0
22	63	5	41	4	22	0
23	89	11	45	6	22	0
24	72	5	46	9	24	1
25	68	4	46	9	25	3
26	67	7	40	6	21	1
27	70	3	48	3	23	1
-----						
Mean	70.6	5.3	45.5	4.9	22.7	.96
Range	89-60	11-3	61-40	9-1	27-19	3-1

one-half of their mothers, and one-third of their grandmothers had some education beyond high school.

Table 2. Educational level of the respondents

Education	Generations			Totals
	1	2	3	
Number of respondents with education beyond high school	10	13	20	43
Number of respondents with education less than high school	17	14	7	38
Totals	27	27	27	81

Husbands' occupations were to be written in answer to item 9 on the instrument's background section. These responses were sorted according to the following classifications: Class one included doctors, lawyers, professors, etc.; class two was comprised of managers, teachers, etc.; class three included farmers, mechanics, craftsmen, etc.; in class four were laborers, janitors, and unskilled workers; class five was left for no response; and class six was for students. The distribution that resulted is shown in Table 3.

Table 3. Classifications of husband's occupation

Occupational classification	Generations			Totals
	1	2	3	
1 professional	0	2	0	2
2 managerial	6	9	0	15
3 farmer, etc.	18	16	10	44
4 laborer	1	0	1	2
5 not given	2	0	2	4
6 student	0	0	14	14
-----				
Totals	27	27	27	81

Categorized by occupations, the sample was very homogeneous. Clustering occurred especially in classes two and three. The only other numerically significant group was the student category. Since rural and university third-generations and low and high education groups were to be contrasted as suggested by hypothesis 4, there seemed to be very little value in comparing occupational classes two and three with students. As adjacent categories two and three were not felt to be powerful occupational contrasts, occupation as a variable was dropped from the analysis.

The Mormon orthodoxy score was based on a point scheme described previously in the procedure section. However, on two different questionnaires grandmothers had written "I am ill" and "because of inability to see and hear" as explanations of church inactivity and nonparticipation. Because of this, a two-point differential was given to grandmothers reporting "very active" church participation in retrospect of their past lives. After the first-generation compensatory scoring had been applied, respondents in all generations who had acquired six points or less on the four orthodoxy items were classified as having low orthodoxy. The results of the Mormon orthodoxy classification are depicted in Table 4.

Table 4. Categories of Mormon orthodoxy

Orthodoxy	Generations			Totals
	1	2	3	
high	8	10	9	27
middle	10	10	7	27
low	9	7	11	27
Totals	27	27	27	81

\*Expressed in actual numbers of each generation.

The middle generation high orthodoxy group consisted of those who scored ten or eleven possible points. As six points and below had been categorized across generations as low orthodoxy, those in the second generation who scored seven, eight, or nine points were in neither high nor low orthodoxy groups.

Because highly orthodox first-generation subjects in good health usually received the two point differential that was intended to boost their ailing cohorts from low orthodoxy, those scoring twelve and thirteen of the thirteen possible points were considered highly orthodox in the first generation. Using the low and high cutoff lines described left ten of the oldest generation in the middle orthodoxy group.

At the high orthodoxy end of the scale the youngest generation subjects faced a bias apparently because they had often not yet been assigned church jobs. High mobility and young age were factors which were partially responsible for the fewer church assignments reported by third-generation subjects. If the same high orthodoxy criterion of ten and eleven points used for the middle generation was applied to the youngest generation, only four of the twenty-seven could be considered highly orthodox. In order to have more proportionate generation frequencies and a more realistic measure of third-generation orthodoxy, respondents acquiring nine, ten, or eleven of the eleven possible points were classified as highly orthodox.

Table 5 gives the maternal control and support scores for the youngest and middle generations. Responses to the Cornell Parent Behavior Description were not tabulated for the oldest generation. The scale was constructed for



Table 5. Second and third generation maternal control and support scores

Family number	Generation			
	2		3	
	Control	Support	Control	Support
1	12	12	9	11
2	12	13	12	12
3	11	15	12	8
4	16	16	12	12
5	13	13	12	12
6	15	13	14	11
7	10	12	11	12
8	15	14	10	14
9	11	12	11	9
10	12	12	13	10
11	12	12	9	15
12	*	*	16	16
13	*	*	12	12
14	13	9	15	12
15	11	10	8	9
16	8	9	10	11
17	16	16	10	10
18	12	12	11	14
19	13	15	12	12
20	8	14	10	12
21	10	12	9	12
22	11	12	9	16
23	13	13	14	11
24	10	12	15	14
25	11	10	8	13
26	8	9	10	14
27	9	11	13	15
-----				
Mean score	11.68	12.32	11.37	12.18
High score	16	16	16	16
Low score	8	9	8	8
Range	8	7	8	8

\*Responses not given.

adolescents who were to describe their parent's behavior in the present, and the investigator's use of the scale in a retrospective fashion with young adults was stretching its applicability.

By inspection it was obvious that the youngest generation's reporting of maternal control and support neither supported nor contradicted hypotheses 4 and 5. As eight was the lowest score reported for either dimension, there really were no low scores in the distribution. Out of curiosity the maternal control and support scores reported by the second generation were tabulated with similar results.

The sample scores of reported maternal behavior were too homogeneous to allow contrasts of Mormon orthodoxy or correlations of mother-daughter attitudes to be made between high and low groups. The two hypotheses dealing with maternal control and support were not tested due to this sample homogeneity. The upper-end clustering of scores may have been affected by the scale's retrospective (rather than its intended present) use in the study. It is probable that adolescents living at home are harsher judges of parental behavior than are reflective young adults who are establishing homes of their own.

### Hypotheses Tested

#### Hypothesis 1

Hypothesis 1 stated that there would be no significant differences between generations one, two and three on measures of birth control, abortion, and population crisis attitudes. The hypothesis was rejected at the .05 level of confidence

for birth control and population crisis, but not for abortion attitudes. A simple one-way analysis of variance (ANOVA) was used to test for significant differences between generations on the attitudes scales.

Table 6 gives the generation's means, standard deviations, and ranges, and also a standard ANOVA table showing the computed values for the birth control attitude scale. The birth control scale mean for generation one reflects much more conservative attitudes than generations two and three. Note that the means and the high and low scores of the middle and younger generations are very similar, but much different from the older generation's conservative mean and range.

When significance was found with the ANOVA test, the investigator could tell by inspection that generation one was almost certainly significantly different from both generations two and three. To determine if generations two and three differed significantly from one another, a parametric contrast was computed between the two means. Using the .05 level of confidence, generations two and three did not differ significantly. It was the birth control attitudes of the older generation which were really different from the other two generations.

Table 7 gives the generation's means, standard deviations, and ranges on the abortion scale. The same pattern--generations two and three being similar and generation one different--is observed. Again this is true for both means and ranges. The accompanying ANOVA table shows that abortion attitude differences between the generations were not significant. Abortion is probably a variable on which the generations have more similar attitudes than birth control;

Table 6. Birth control attitude scale--means, standard deviations, and ranges by generation

Birth control attitude scale	Generations		
	1	2	3
mean	43.52	53.96	56.96
standard deviation	9.63	11.29	10.35
range	57-20	78-32	78-36

ANOVA table for birth control attitude differences between generations

Source of variance	df	SS	MS	F	p
Between generations	2	2684.62	1342.31	12.29	.001
Error	78	8518.56	109.17	.....	.....
Total	80	11200.17	.....	.....	.....

however, the lower reliability of the abortion attitude scale should be kept in mind. Generations may have differed significantly if the scale had included more items of a less extreme nature that would have distinguished attitude degrees between individuals more finely.

Table 7. Abortion attitude scale--means, standard deviation, and ranges by generation

Abortion attitude scale	Generations		
	1	2	3
mean	12.81	14.59	14.85
standard deviation	3.37	3.37	3.84
range	30-13	40-16	39-14

ANOVA table for abortion attitude differences between generations

Source of variation	df	SS	MS	F	p
Between generations	2	66.40	33.19	2.66	NS
Error	78	974.00	12.48	.....	...
Total	80	1040.40	.....	.....	...

In Table 8 are given the means, standard deviations, and ranges of the generations for the population crisis attitude scale. Again the pattern of youngest and middle generation similarity and oldest generation difference is evident for both measures of central tendency and variability. The ANOVA table shows the population crisis attitude differences between generations to be significant at the .05 level. Generational attitudes on this variable were significantly different, but not so extremely different as on the birth control variable.

Table 8. Population crisis attitude scale--means, standard deviations, and ranges by generations

Population crisis attitude scale	Generations		
	1	2	3
mean	22.59	25.19	25.74
standard deviation	4.04	5.01	5.27
range	30-13	40-16	39-14

ANOVA table for population crisis attitude differences between generations

Source of variance	df	SS	MS	F	p
Between generations	2	152.47	76.23	3.31	.05
Error	78	1797.77	23.05	....	....
Total	80	1950.24	....	....	....

### Hypothesis 2

This hypothesis stated that across generations the birth control, abortion, and population crisis attitudes of respondents with high Mormon orthodoxy would differ significantly from respondents with low orthodoxy. This hypothesis was accepted beyond the .05 level for all three attitudinal variables. The birth control, abortion, and population crisis attitudes of highly orthodox Mormons were

significantly more conservative than the attitudes of the low-orthodoxy Mormons. In order to test for a possible interaction between orthodoxy and education, this hypothesis was tested by using a two-way ANOVA. Table 9 depicts the education and orthodoxy two-way design and the resulting ANOVA table for the birth control attitude scale.

As logic and the literature would suggest, the highest birth control attitude mean appeared in the high education - low orthodoxy cell, and the lowest mean in the low education - high orthodoxy cell. In the rightmost column the mean of the twenty-nine subjects with education beyond high school (53.64) is compared with the mean of the twenty-five subjects with education of high school or less (49.97). Similarly, in the bottom row the equal size (N=27) high and low orthodoxy group means of 46.64 and 56.98 respectively are compared.

The ANOVA test of significance summarized in Table 9 shows that birth control attitude differences between subjects with formal education beyond high school and subjects with high school education or less were not significant. Birth control attitude differences between the high and low Mormon orthodoxy groups were significant beyond the .01 level of confidence. Education and Mormon orthodoxy did not interact significantly with regard to birth control attitudes.

Table 10 illustrates the relationship between education and orthodoxy for the abortion variable. As depicted in the far right column, the means of the

Table 9. Birth control attitude scale--Mormon orthodoxy and education two-way ANOVA design

Education	Mormon orthodoxy		Totals
	high	low	
Beyond high school	N=18 mean=47.83	N=11 mean=59.45	N=29 mean=53.64
High school or less	N=9 mean=45.44	N=16 mean=54.50	N=25 mean=49.97
Totals	N=27 mean=46.64	N=27 mean=56.98	N=54

Birth control two-way ANOVA table--education and Mormon orthodoxy

Source of variance	df	MS	F	p
Between rows (education)	1	168.49	1.368	NS
Between columns (orthodoxy)	1	1335.71	10.842	.01
Interaction	1	20.56	.166	NS
Error	50	123.19	.....	...
Total	53	.....	.....	...



two education groups (14.71 and 13.93) were more similar than were the means of the high and low orthodoxy groups (12.85 and 15.79) shown in the bottom row.

Table 10. Abortion attitude scale--Mormon orthodoxy and education two-way ANOVA design

Education	Mormon orthodoxy		Totals
	high	low	
Beyond high school	N=18 mean=12.16	N=11 mean=17.27	N=29 mean=14.71
High school or less	N=9 mean=13.55	N=16 mean=14.31	N=25 mean=13.93
Totals	N=27 mean=12.85	N=27 mean=15.79	N=54

Abortion two-way ANOVA table--education and Mormon orthodoxy

Source of variance	df	MS	F	p
Between rows (education)	1	8.84	.73	NS
Between columns (orthodoxy)	1	103.36	8.56	.01
Interaction	1	56.11	4.65	.05
Error	50	12.69	....	...
Total	53	....	....	...

The summary of the two-factor ANOVA computations performed on the abortion scale data show that the education groups did not differ significantly, but the high and low orthodoxy groups were different at the .01 confidence level. In addition, at the .05 level, education and orthodoxy interacted significantly on the abortion attitude scale. Of the three dependent variable ANOVAs computed with education and orthodoxy as the independent variables, abortion was the only attitude which showed significant education and orthodoxy interaction.

The education and orthodoxy two-way ANOVA for the population crisis scale data is depicted in Table 11. The expected pattern of the lowest score mean being in the lower education--higher orthodoxy cell and the highest mean in the higher education--lower orthodoxy cell is observed. Again the row total means for education groups are much more similar than the column total means for orthodoxy. This observable mean difference was verified in the two-way ANOVA table computations, where Mormon orthodoxy, but not education, was shown to be a significant source of variance. The third of the total sample which was least orthodox, as contrasted with the most orthodox third, had more liberal population crisis attitudes than would be expected by chance in one out of one thousand replications.

Table 11. Population crisis attitude scale--Mormon orthodoxy and education two-way ANOVA design

Education	Mormon orthodoxy		Totals
	high	low	
Beyond high school	N=18 mean=22.66	N=11 mean=28.09	N=29 mean=25.38
High school or less	N=9 mean=22.11	N=16 mean=26.68	N=25 mean=24.36
-----			
Totals	N=27 mean=22.39	N=27 mean=27.39	N=54

Population crisis two-way ANOVA table--education and Mormon orthodoxy

Source of variance	df	MS	F	p
Between rows (education)	1	7.16	.32	NS
Between columns (orthodoxy)	1	285.31	12.98	.001
Interaction	1	5.22	.24	NS
Error	50	21.97	****	***
Total	53	****	****	***

### Hypothesis 3

This hypothesis stated that the higher education, higher occupation, and non-rural groups would have significantly different birth control, abortion, and population crisis attitudes. Occupation was an unwieldy variable in the sample--it did not lend itself to analysis as explained previously. The hypothesis relative to differences in education groups was rejected for all three of the attitude variables as explained throughout the discussion of hypothesis two in the two-way analysis.

The hypothesis as it applied to residence was rejected. An examination of rural-non-rural attitude differences was desired primarily so that the differences which the investigator expected to find between the generations would not be suspect because of the third generation's university residence. To answer the possible criticism that generations differed because the younger generation was located at the university, rural and university third-generation samples were contrasted.

Table 12 describes some characteristics of the birth control, abortion, and population crisis attitudes of the youngest generation rural and university groups. None of the attitudes of the two groups differed significantly as tested by independent sample t-tests.

In summary, hypothesis 3 dealing with the demographic variables of education and residence was rejected. There were not significant differences between third-generation rural and university subjects, or, across generations,

Table 12. Third generation attitude comparisons: rural-university

Attitude scale	rural (N=12)	university (N=15)
<u>Birth Control</u>		
mean	55.83	57.86
standard deviation	8.45	11.90
range	67-44	78-36
<u>Abortion</u>		
mean	15.33	14.47
standard deviation	4.14	3.68
range	22-11	19-6
<u>Population Crisis</u>		
mean	26.17	25.40
standard deviation	3.33	4.33
range	32-21	39-14

between high and low education groups, on measures of birth control, abortion, and population crisis attitudes. Attitude differences between occupational classes were not analyzed as the sample was too homogeneous to provide contrast categories on this variable.

#### Hypothesis 4

This hypothesis stated that in the youngest generation there would be significant Mormon orthodoxy differences between respondents reporting low and high maternal support. This hypothesis could not be tested since the maternal control and support scores reported did not have sufficient variance to allow valid low and high categorization.

#### Hypothesis 5

Hypothesis 5 stated that correlations between mother-daughter attitude scores for daughters reporting high maternal support would differ significantly from mother-daughter attitude correlations of daughters reporting low maternal support. As the testing of this hypothesis was also dependent upon establishing low and high maternal support categories, it was not tested because of the sample's homogeneity on this variable.

#### Summary of Findings

Birth control and population crisis attitude differences between the three generations were significant; the most extreme difference occurred between the oldest and middle generations. The generations did not differ significantly regarding abortion attitudes. High and low Mormon orthodoxy groups were significantly different on all attitudes measured. An interaction effect between orthodoxy and education was observed. Low orthodoxy--high education

respondents had abortion attitudes which differed significantly from all other respondents. Education and residence were not found to be significant sources of attitude variability. The effects of occupational class and maternal behavior were not analyzed due to measurement difficulties. The data were so homogeneous on these two variables that no analysis was possible.

## SUMMARY AND DISCUSSION

### Summary

#### Objectives

The main objective of this study was to determine if female generations within families had significantly different birth control, abortion, and population crisis attitudes. Secondary emphasis was focused on the effects of Mormon orthodoxy, education, residence, husband's occupation, and maternal support on family planning attitudes.

#### Procedure

Questionnaire responses of eighty-one adult subjects who were daughter-mother-grandmother relatives in twenty-seven families were analyzed. Most of the respondents lived in or near the city of Logan, Utah and nearly all of them lived in the northern Utah-southern Idaho region. Of the 105 questionnaires mailed out 91.4 per cent were returned and 84.4 per cent of these were utilized. The questionnaires contained birth control, abortion, population crisis, and maternal control-support scales. The birth-control scale was a modified version of Wilke's scale (Shaw and Wright, 1967, p. 136), and the maternal control-support scale used was the short form of the Cornell Parent Behavior Description (Wiegert and Thomas, 1970, p. 310). The abortion and population crisis



scales were newly developed. Reliability and validity assessment was a major concern for all of the scales.

The background section of the questionnaire provided information for high and low Mormon orthodoxy and education categorization, and occupational classifications. Rural and university residence of the third generation was controlled in sample selection.

The scales were all of the Likert summated design. The letters "SA", "A", "D", and "SD", which stood for Strongly Agree, Agree, Disagree, and Strongly Disagree were adjacent to every item and subjects indicated their opinion by circling one of the four alternatives. If the statement read in favor of the variable (i. e., pro birth control), "SA" was assigned a value of four, "A" a value of three, "D" a value of two, and "SD", a value of one. If a statement read negatively (i. e., against birth control) the numerical values assigned the four alternatives were reversed. Consequently, on the twenty-item birth control scale the possible range was 80-20, and the six-item abortion scale possible range was 24-6. On the population crisis scale (ten items) there was a 40-10 possible range, and the maternal control and support (four items each) scales had 16-4 possible ranges.

### Analysis

Three of the five original hypotheses were tested using the .05 critical level to determine significance. Hypotheses 1, 2, and 3 were tested using a one-factor analysis of variance, a two-factor analysis of variance, and an

independent sample t-technique respectively. The part of hypothesis 3 which dealt with husband's occupation, and hypotheses 4 and 5 dealing with maternal support, were not tested due to the homogeneous sample and/or categorization difficulties. Other statistics were used to describe the sample characteristics and scale findings.

### Findings

The first hypothesis--that there would not be significant attitude differences between generations--was rejected for birth control and population crisis attitudes, but not for abortion attitudes. The youngest generation had a tendency to be the most liberal on all attitudes. However, the middle and youngest generation attitudes were quite similar; it was the oldest generation that had attitudes which differed significantly from both generations two and three.

Mormon orthodoxy, as suggested by hypothesis 2, was a significant factor in attitude differences. The third of the sample classified as highly orthodox had attitudes on all three scales that were significantly different from the attitudes of the low-orthodoxy third. The attitude differences between orthodoxy groups were significant at the .01 level for birth control, the .01 level for abortion, and the .001 level for population crisis.

Contrary to hypothesis 3, education and residence were not found to be significant factors in attitude differences. Hypothesis 3, which stated that

higher education and non-rural respondents would have significantly different attitude scores than lower education and rural respondents, was rejected.

### Discussion

Although there was a tendency for youngest generation subjects to have the highest birth control, abortion, and population crisis attitudes, significant differences that would have contrasted the younger against the two older generations did not appear. Rather, the two younger generations were found to be similar and both significantly different from the oldest generation.

The preceding generalization was true for both birth control and population crisis attitudes. That generational differences were most extreme between generations one and two rather than two and three, may suggest that the attitudes of the oldest generation have been least affected by the larger society's population concern and endorsement of birth control. In other words, if there has been a differential effect of the mass media on the generations, probably there has been much less impact on grandmothers than on the middle and younger generations.

Birth control issues and population concerns were probably a very small part of life's experience for the oldest generation. Having reared families largely without birth control because it was socially less valued and not readily available, it may now be relatively easier for grandmothers than younger women to be critical of contraception. Today contraception and population

concern are prevalent and socially valued. For young women today to be conservative regarding these issues requires a personal choice against the grain of social pressure, whereas, for women fifty years ago similar conservatism was comfortably in tune with society.

The above are suggested explanations for the different attitudes of the eldest generation. Following is a discussion of why second and third generation's attitudes were similar.

Perhaps second-generation Mormon women have been as much affected by the mass media as have their daughters. In addition, the societal acceptance of contraception may have undergone as great or a greater transition twenty or thirty years ago than it has in the recent decade.

Bardsley (1971), found that women just leaving the child bearing life stage tend to have more favorable attitudes toward family planning than those just entering the child bearing age. Presumably, those who have undergone the motherhood experience more readily accept family planning than those anticipating it.

After having one's own desired number of children during an era when this was acceptable, it may now be easier to say that others should not have as many children. Perhaps this is more easily said looking back than ahead. Prospective parents may tend to be more reluctant about family limitation than those who have already had families.

It appears to the investigator that the youngest generation is probably the target group most directly aimed at by the larger society's contraception and population crisis propaganda. However, with the interaction of the factors enumerated above the middle generation's attitudes turn out to be very similar to those of the youngest generation.

That the generations did not differ significantly on abortion attitudes may be attributable to several factors. It is probable that abortion is a subject that Mormon women really have more unified attitudes about than they do regarding birth control or population crisis. Attitudes toward preventing conception (birth control) among Mormons vary considerably as pointed out in the review of literature. However, in terms of degree, after conception the prevention of birth by termination of pregnancy (abortion) would be considered a much more morally and religiously questionable practice. It seems to be very likely that as the scale indicated Mormon women across generations do not have attitudes toward abortion that are very different.

Previous mention has been made of the low reliability of the abortion scale. Items were not included that could make the finer distinctions of degree between persons with similar attitudes. However, in the test for attitude differences between Mormon orthodoxy groups, the abortion scale differentiated between those of high and low orthodoxy as well as the birth control scale did (both beyond .01). In pragmatic terms, the abortion scale

demonstrated validity by its ability to distinguish between individuals who differed in orthodoxy.

From the data it may be argued that abortion as an issue is a more serious concern to the respondents than the other attitudes tested. It is important to reiterate that it was the only variable for which a significant education-orthodoxy interaction was obtained. Of the four groups contrasted by the two-way ANOVA design, the low orthodoxy-high education group had abortion attitudes which were significantly more liberal than the other three groups.

Mormon orthodoxy was a very significant source of variance on all attitudes. Orthodoxy explains more attitude variance than either level of education or place of residence. There was a tendency, although not significant, for education to influence attitudes; but overwhelmingly, on all attitudes, the high and low Mormon orthodoxy groups differed.

That the frequently found rural-non-rural attitude differences did not appear in this study was probably due to the lack of contrast in the two groups compared. The non-rural respondents attend a modest size university recognized for its excellence in agriculture and related disciplines. The university is located in Logan, a town of less than 25,000 residents in the center of an agricultural valley. Therefore, the rural-university comparison was not a strong contrast.

### Suggestions for Further Research

The investigator is intrigued that, of the attitude variables measured, abortion was unique. Both between generations and with the orthodoxy-education interaction this variable was different. An interesting study could be done with various or matched samples using the birth control scale for one group and substituting abortion in place of birth control for the other group. The extent of birth control and abortion attitude differences could be assessed for different groups. This would be especially interesting in light of recent trends toward abortion acceptance and legalization.

As previously mentioned, in this locale when a rural sample is included the farmer-non-farmer contrast might be more useful than occupational classifications.

That parental support is found most often in combination with adolescent conformity is very interesting. The inability of this study to focus on this dimension might be corrected in the future by using a more heterogeneous sample and/or respondents who are still adolescents dependent on their parents.

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## APPENDIXES

## Appendix A

InstrumentPretest Draft

YOU HAVE AGREED TO HELP ME IMPROVE THIS QUESTIONNAIRE. WILL YOU PLEASE TURN THIS PAGE AND ANSWER EACH ITEM AND THEN TURN BACK AND ANSWER THE FOUR QUESTIONS ON THIS PAGE? THANK YOU.

1. Were the instructions clear enough? Yes \_\_\_\_\_ No \_\_\_\_\_  
If "no," make an "X" where they seemed unclear.
2. Were the items clear? Yes \_\_\_\_\_ No \_\_\_\_\_  
If "no," write the numbers of unclear items here \_\_\_\_\_  
\_\_\_\_\_.
3. Did any of the items seem too personal or offensive to you? Yes \_\_\_\_\_  
No \_\_\_\_\_  
If "yes," which ones? \_\_\_\_\_
4. Do you have any comments or suggestions please?

THANK YOU VERY MUCH

Do not write your name on this questionnaire; it is anonymous and responses are confidential. However, please respond to every item as you will be helping us understand why people have differing opinions.

- Please write the year of your birth \_\_\_\_\_.
- Check the level of your formal education: 0-9th grade\_\_\_\_; 9-12th grade\_\_\_\_; some college\_\_\_\_; college graduate\_\_\_\_.
- My marriage was: a civil ceremony\_\_\_\_; performed in the temple\_\_\_\_; both\_\_\_\_.
- I attend Relief Society: regularly\_\_\_\_; sometimes\_\_\_\_; seldom\_\_\_\_.  
I attend Sacrament Meeting: regularly\_\_\_\_; sometimes\_\_\_\_; seldom\_\_\_\_.  
I attend Sunday School: regularly\_\_\_\_; sometimes\_\_\_\_; seldom\_\_\_\_.
- How many children do you have? \_\_\_\_ Their ages are: sons\_\_\_\_,\_\_\_\_,\_\_\_\_,\_\_\_\_,\_\_\_\_; daughters\_\_\_\_,\_\_\_\_,\_\_\_\_,\_\_\_\_,\_\_\_\_.
- Have you ever or do you now have an assignment in the Church? Yes\_\_\_\_; No\_\_\_\_.  
List Church positions: Present: \_\_\_\_\_  
Past: \_\_\_\_\_
- Do you consider yourself to be an observer of the Word of Wisdom?  
Yes\_\_\_\_; No\_\_\_\_.
- My husband's occupation is or was: \_\_\_\_\_
- Considering most aspects of the Church I am now:  
very active\_\_\_\_; moderately active\_\_\_\_; inactive\_\_\_\_.
- Looking back on my lifetime Church activity I have been:  
very active\_\_\_\_; moderately active\_\_\_\_; inactive\_\_\_\_.

Listed below are some statements with which you may agree or disagree. There are no right or wrong answers, so answer according to your own opinion. Indicate your opinion by drawing a circle around "SA" if you STRONGLY AGREE, around the "A" if you AGREE, around the "D" if you DISAGREE, and around "SD" if you STRONGLY DISAGREE. It is very important to the study that all questions be answered. Many of the statements will seem alike but all are necessary to show slight differences of opinion.

- SA A D SD 1. We should be absolutely opposed to birth control.
- SA A D SD 2. Birth control reduces the marital relation to the level of vice.
- SA A D SD 3. We ought to approve of birth control because of the advantages to women's health resulting from the correct spacing of children.
- SA A D SD 4. Uncontrolled reproduction should be opposed on the grounds that it is a fundamental cause of crime.
- SA A D SA 5. We should not approve of women taking the health risks involved in birth control.
- SA A D SA 6. Wide-spread acceptance and approval of birth control is imperative.
- SA A D SA 7. The practice of birth control is equivalent to murder.
- SA A D SA 8. Uncontrolled reproduction should be discouraged since it leads to many social evils.
- SA A D SA 9. Birth control is race suicide.
- SA A D SA 10. Birth control is a legitimate health measure.
- SA A D SA 11. Our laws should prohibit giving, even to adults, information concerning birth control.
- SA A D SA 12. We should not only allow but strongly urge birth control to limit the size of families of low income.
- SA A D SA 13. Effective measures should be taken to prevent any sale of birth control devices.
- SA A D SA 14. Birth control would help to solve many of our social problems.
- SA A D SA 15. Birth control is highly desirable for women who must earn a living.
- SA A D SA 16. The possible benefits of birth control do not alter the fact that it is morally wrong.

- SA A D SD 17. Wide-spread knowledge of birth control methods should be opposed as likely to lead to the spread of venereal disease.
- SA A D SD 18. We should approve as socially desirable the program of those organizations supporting the movement for birth control.
- SA A D SD 19. The practice of birth control evades man's duty to propagate the race.
- SA A D SD 20. Birth control increases the happiness of married life.
- SA A D SD 21. Every normal healthy couple should have as many children as is physiologically possible.
- SA A D SD 22. Abortion is against God's will.
- SA A D SD 23. A woman should have the right to terminate an unwanted pregnancy by abortion.
- SA A D SD 24. If a doctor's examination found that the fetus being carried was severely malformed the woman should be allowed to have an abortion if she wanted.
- SA A D SD 25. Having an abortion leaves a woman with permanent emotional scars.
- SA A D SD 26. A victim of rape or incest should be permitted to have an abortion.
- SA A D SD 27. If a woman's pregnancy was such that she had a 50% chance of dying in childbirth she still should not seek an abortion.
- SA A D SD 28. People who ignore the population crisis are really unaware of the facts.
- SA A D SD 29. It is becoming difficult to enjoy recreation because there are so many people.
- SA A D SD 30. Our natural energy resources such as oil and coal are not really endangered by growing population.
- SA A D SD 31. People who are concerned about a population explosion are concerned about nothing.

- SA A D SD 32. More water and air pollution seem to be likely consequences of population growth.
- SA A D SD 33. Even considering our inventiveness, food shortage could become a serious problem with continued population growth.
- SA A D SD 34. The increase in population has had no apparent effect on communities where I have lived.
- SA A D SD 35. Overpopulation is a serious world problem.
- SA A D SD 36. We should not meddle with population growth but should let nature take its course.
- SA A D SD 37. Population problems in other countries need not concern us in America.

Below there are eight statements describing a mother's behavior toward her daughter who is still living at home. Looking back as a daughter, please indicate how well each statement describes your own mother's behavior toward you by circling the appropriate letter as before.

- SA S D SD 1. She kept after me to do well in school.
- SA S D SD 2. If I had any kind of problem I could count on her to help me out.
- SA S D SD 3. She expected me to keep my things in good order.
- SA S D SD 4. She said nice things about me.
- SA S D SD 5. She kept pushing me to do my best in whatever I did.
- SA S D SD 6. She taught me things I wanted to learn.
- SA S D SD 7. If I didn't do what was expected of me she was very strict about it.
- SA S D SD 8. She made me feel she was there if I needed her.



Final Draft

Do not write your name on this questionnaire; it is anonymous and responses are confidential. However, please respond to every item as you will be helping us understand why people have differing opinions.

1. Please write the year of your birth \_\_\_\_\_.
2. Check the level of your formal education: 0-9th grade \_\_\_\_; 9-12th grade \_\_\_\_;  
some college \_\_\_\_; college graduate \_\_\_\_.
3. My marriage was: a civil ceremony \_\_\_\_; performed in the temple \_\_\_\_;  
both \_\_\_\_.
4. I attend Relief Society: regularly \_\_\_\_; sometimes \_\_\_\_; seldom \_\_\_\_.  
I attend Sacrament Meeting: regularly \_\_\_\_; sometimes \_\_\_\_; seldom \_\_\_\_.  
I attend Sunday School: regularly \_\_\_\_; sometimes \_\_\_\_; seldom \_\_\_\_.
5. How many children do you have? \_\_\_\_ Their ages are: sons \_\_, \_\_, \_\_, \_\_, \_\_.  
daughters \_\_, \_\_, \_\_, \_\_, \_\_.
6. List any church jobs or assignments you now have: \_\_\_\_\_  
\_\_\_\_\_
7. List the major assignments or positions you have held in the Church: \_\_\_\_\_  
\_\_\_\_\_
8. Do you consider yourself to be an observer of the Word of Wisdom?  
Yes \_\_\_\_; No \_\_\_\_.
9. My husband's occupation is or was: \_\_\_\_\_
10. Considering most aspects of the Church I am now:  
very active \_\_\_\_; moderately active \_\_\_\_; inactive \_\_\_\_.
11. Looking back on my lifetime Church activity I have been:  
very active \_\_\_\_; moderately active \_\_\_\_; inactive \_\_\_\_.

Listed below are some statements with which you may agree or disagree. There are no right or wrong answers, so answer according to your own opinion. Indicate your opinion by drawing a circle around "SA" if you STRONGLY AGREE, around the "A" if you AGREE, around the "D" if you DISAGREE, and around "SD" if you STRONGLY DISAGREE. It is very important that all questions be answered. Many of the statements will seem alike but all are necessary to show slight differences of opinion.

- |    |   |   |    |     |  |
|----|---|---|----|-----|--|
| SA | A | D | SD | 1.  | Birth control should be absolutely opposed.  |
| SA | A | D | SD | 2.  | Birth control reduces the marital relation to the level of vice.   |
| SA | A | D | SD | 3.  | Birth control is desirable because of the advantages to women's health resulting from the correct spacing of children. |
| SA | A | D | SD | 4.  | We should not approve of women taking the health risks involved in birth control.                                      |
| SA | A | D | SD | 5.  | Wide-spread acceptance and approval of birth control is essential.   |
| SA | A | D | SD | 6.  | The practice of birth control is equivalent to murder.   |
| SA | A | D | SD | 7.  | The absence of birth control in a society leads to many social evils.  |
| SA | A | D | SD | 8.  | Birth control is race suicide.   |
| SA | A | D | SD | 9.  | Birth control is important in preserving a mother's health.  |
| SA | A | D | SD | 10. | Laws should prohibit giving, even to adults, information concerning birth control.                                     |
| SA | A | D | SD | 11. | Birth control should not only be allowed but urged to limit the size of families of low income.                        |
| SA | A | D | SD | 12. | Effective measures should be taken to prevent any sale of birth control devices.                                       |
| SA | A | D | SD | 13. | Birth control would help to solve many of our social problems.   |
| SA | A | D | SD | 14. | Birth control is highly desirable for women employed outside of the home.  |

- SA A D SD 15. The possible benefits of birth control do not alter the fact that it is morally wrong.
- SA A D SD 16. Wide-spread knowledge of birth control methods is likely to lead to the spread of venereal disease.
- SA A D SD 17. Organizations that encourage the use of birth control should be supported as socially desirable.
- SA A D SD 18. The practice of birth control evades a man's duty to multiply and replenish the earth.
- SA A D SD 19. Birth control increases the happiness of married life.
- SA A D SD 20. Every normal healthy couple should have as many children as is physically possible.
- SA A D SD 21. Abortion is against God's will.
- SA A D SD 22. A woman should have the right to terminate an unwanted pregnancy by abortion.
- SA A D SD 23. If a doctor's examination found that the unborn child being carried was severely malformed the woman should be allowed to have an abortion if she wanted.
- SA A D SD 24. Having an abortion leaves a women with permanent emotional scars.
- SA A D SD 25. A victim of rape should be permitted to have an abortion.
- SA A D SD 26. If a woman's pregnancy was such that she had a 50% chance of dying in childbirth she still should not seek an abortion.
- SA A D SD 27. People who ignore the population crisis are really unaware of the facts.
- SA A D SD 28. It is becoming difficult to enjoy recreation because there are so many people.
- SA A D SD 29. Natural energy resources such as oil and coal are not really endangered by growing population.
- SA A D SD 30. People who are concerned about a population explosion are concerned about nothing.

- SA A D SD 31. More water and air pollution seem to be likely consequences of population growth.
- SA A D SD 32. Even considering our scientific ability, food shortage could become a serious problem with continued population growth.
- SA A D SD 33. The increase in population has had no apparent negative effect on communities where I have lived.
- SA A D SD 34. Overpopulation is a serious world problem.
- SA A D SD 35. Population growth should not be tampered with but nature should be allowed to take its course.
- SA A D SD 36. Population problems in other countries need not concern us in America.

Below there are eight statements describing a mother's behavior toward her daughter who is still living at home. Looking back as a daughter, please indicate how well each statement describes your own mother's behavior toward you by circling the appropriate letter as before. Circle an answer for every statement.

- SA A D SD 1. She kept after me to do well in school.
- SA A D SD 2. If I had any kind of problem I could count on her to help me out.
- SA A D SD 3. She expected me to keep my things in good order.
- SA A D SD 4. She said nice things about me.
- SA A D SD 5. She kept pushing me to do my best in whatever I did.
- SA A D SD 6. She taught me things I wanted to learn.
- SA A D SD 7. If I didn't do what was expected of me she was very strict about it.
- SA A D SD 8. She made me feel she was there if I needed her.

## Appendix B

LettersQuestionnaire Cover Letter

February 24, 1972

Dear Friend:

I am a graduate student interested in mother-daughter relationships and I really need your help. In your family a married daughter, mother, and grandmother have been chosen to participate in a study comparing their family planning attitudes. Since there are only 30 in each generation, your participation is very important. The generations can only be compared if the daughter, mother, and grandmother in each family all respond; so please help make the study successful.

You will find that the enclosed questionnaire is very interesting and it will only take 15-20 minutes to complete. You should answer every question as honestly as possible and you can be assured that no names will be used in any phase of the study. Please fill out the questionnaire and send it back in the stamped, self-addressed envelope provided. In order to meet my time commitments I need to have you return it within one week.

If you are interested in the results of the study and request them I will gladly see that they are made available to you. Again, thank you very much; without your help the study could not be completed.

Sincerely,

Brent C. Miller  
Graduate Student  
Family and Child Development

Enclosures  
kcm

Follow-up Letter

Dear Mrs. Jones:

You are one of thirty grandmothers to whom I have sent questionnaires. Every person's response is very important to me as this project represents nearly a year's work to me.

Since it is so important, and since you might never have received or might have lost the first envelope, I am enclosing duplicates of its contents with this letter.

I would certainly appreciate your filling out and returning this questionnaire. As you know, your answers will be anonymous.

Sincerely,

Brent C. Miller

Postcard and Personal Note

I have just completed a questionnaire for a study being conducted in the Department of Family and Child Development at Utah State University. The study is comparing how daughters, mothers, and grandmothers feel about family planning, so your opinion is needed too. The study must have the attitudes of all three generations together, so unless you take part my participation will have been meaningless. A short questionnaire will soon be sent for you to complete and return anonymously. That's all there is to it, so I hope you will help.

Dear Mrs. Jones:

Please address, sign, and send one of these postcards to your mother and the other one to your grandmother. Add to them any personal comments you wish.

Thanks,

## VITA

Brent C. Miller

Candidate for the degree of

Master of Science

Thesis: Family Planning of Mormon Women in Three-Generation Families.

Major Field: Family and Child Development

## Biographical Information:

Personal Data: Born at Logan, Utah, January 11, 1947, a son of Kae V. and Leona H. Miller; married Kevon Costley on September 11, 1969.

Education: Attended elementary in Logan, Utah; graduated from Weber County High School, Ogden, Utah, in 1965; received the Bachelor of Science degree in 1971 from Weber State College with a major in Psychology and minor in Family Relations; completed requirements for the Master of Science degree in the field of Family Relations at Utah State University in 1972.