PRE-MARITAL ENVIRONMENT AS A FACTOR
IN THE DECLINING BIRTH RATE
OF COLLEGE WOMEN

THESIS

Presented to the Graduate Council of the North
State College in Partial Fulfillment of the
Requirements

For the Degree of

MASTER OF SCIENCE

By

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CHAPTER I

INTRODUCTION

Orientation of Study

This study is concerned with the pre-marital environmental factors that might influence the declining birth rate among college women. There have been some studies made on this subject, but none of them has taken into consideration so many variables, to the writer's knowledge, as are recognized in this survey.

In 1942 the University of Mississippi conducted a survey, but the only variable factors were whether they were urban or rural college women. It was found that there was no appreciable difference in the desire to marry and the desire to have children in either group. Of the one hundred sixteen urban women, one hundred thirteen, or 98 per cent, registered a definite desire to marry. The same was found to be true of the rural college women. The schedules showed that sixty-seven, or 98 per cent, had a positive marriage attitude.

The urban college group showed that seventeen, or 15 per cent, did not want children, while eight, or 11 per cent of the rural group indicated the same. The size of
the family desired was not taken into consideration as the aim of the survey was to show that there is no "mother instinct" as has been commonly supposed by most people for centuries. Many different answers were given for not wanting children, but this will be discussed more fully in a later chapter.¹

The University of Mississippi, February, 1943, completed another survey on the desired family size. This question was asked: "After you have established your own family, how many children would you like to have?" Male students expressed a desire for families a fraction of a point, but not significantly smaller than female students. The arithmetic mean for males was 2.94 and for females, 2.99. It was interesting to note that the modal group of females desired three children, whereas the modal group of males desired only two children. This survey was taken using a modification of the methods employed by the American Institute of Public Opinion. Two hundred forty students were interviewed, a sample of 26 per cent of the student body, and the sample was controlled so as to be representative of sex. An informal control was also exercised so as to obtain a fair cross-section of the student body by classes. No attempt to control other factors was made since it seemed

probable that in a selected group, such as college students, age, place of residence, religious affiliation, or other factors would not be significantly related.²

In April, 1941, the American Institute of Public opinion questioned the population regarding the ideal size of family. The results found that 77 per cent of all farmers desired three children or more, and 71 per cent of persons in towns under 2500 had the same desire. Only 64 per cent of those in cities of 1,000,000 or more desired three or more children. One might hesitate to accept these figures on the basis that all of the persons surveyed desired children. Apparently the ones who wanted no children were eliminated and the percentage computed on the basis of those persons desiring one or more children. If this was done, we have no basis on which to base the average size of family desired by the general population. This survey has no great significance in terms of college students, but it is interesting for a comparison.³

Brigham Young University, Utah, conducted a poll in which the present size of the interviewee's family was correlated with the number of children desired. The range was from two to twelve, and the modal class was four. The arithmetic mean was 4.59, which was .34 under the family

³Ibid., p. 88.
average. In the female category it was found that 18.5 per cent wanted the same number of children as their mothers had borne, 42.7 per cent wanted more, and 38.8 per cent wanted less. This survey included all women students in the University. Mormons have always been noted as a prolific group, and the environmental factors would probably explain the high average size of desired families.

Many articles have been written concerning the reproduction rates of college graduates, but probably the most clear, concise, and illuminating of these appeared as an Associated Press dispatch entitled "Education Viewed as a Foe of Babies," in a recent issue of a local newspaper. It read as follows:

Maybe the A. B. degree means "abolish babies."
For the Population Reference Bureau came up with the news that college graduates don't produce enough children to replace themselves.
Its study deals with the class of 1924, busy with its twenty-fifth reunion this June. The women, the study shows, have failed to reproduce themselves by 40 per cent, and the men by 16 per cent.
Other quick items from the study:
The more you educate a girl, the less you're likely to educate a mother.
The farther west you go, the more likely you are to run into college-educated parents.
The bureau said that if any class of people wants to reproduce itself, it must as a group average 2.1 children per couple.
By this standard Brigham Young University is bearing up nobly. Its women of the class of 1924 have produced on the average, 3.47 children. Its men 2.45 children.

Contrast this with fair but cautious Harvard. Its average is but 1.47 for each reporting graduate. Vassar, too, is trailing statistically. Its alumnae have averaged 1.49.

Only Monday Dean Rustin McIntosh of Benard College told Vassar's 269 girl graduates: "Women's biological role is not to support and defend the family but to bear and rear the children.

The dean skipped the part of her speech in which she had planned to say, "Have as many children as you can."

But let's not be too rough on Harvard and Vassar. They're right in line with the national average for college graduates of twenty-five years ago.

The average for men: 1.77. For women: 1.26.

For comparison, the bureau figures noncollege women of the same age would have 2.45 children. If she only went to school four years, she'd have 4.33 children.

This leads to the inevitable question: Why?

Well, Dr. Clarence J. Gamble of Boston, who directed the study, thinks college graduates spend too much of their time trying to provide the proper environment for their children.

"Why can't graduates afford families?" he asks, "If they can't, who can?"?

These figures show the completed family averages for these college graduates. It is important to notice that the average number of children necessary for a group to reproduce itself is 2.1 children per couple. This figure is not exactly agreed upon by all population theorists; some say that they must produce 2.7 children. It is also very important to notice that, with the exception of Brigham Young University, the average is not being reached by college graduates.

The figures also indicate that the less education a person has the more children he is likely to produce.

The statistical facts of the report would also seem to point to the fact that men come closer to having the number of children it takes to reproduce themselves than do the women. The overall average for men college graduates was 1.77 and for women college graduates, 1.26.

As we examine this report containing these informative figures, we find certain questions coming to mind. Is the propensity to have children the same as the actual reproduction rates? Is the choice to have children a deliberate choice? What variable factors enter into the desire to bear or not to bear children? Does the pre-marital or post-marital environment influence the propensity to reproduce? Is there a maternal instinct present among women? Since it is the accepted role of women to bear, and, in a large measure, to rear the children, it is seemingly up to them to have the children. The fact that the persons most qualified to have children are the ones who do not produce the required number to reproduce themselves and the reasons for this will also be examined in this study. This thesis will attempt to analyze the pre-marital environmental factors that influence marriage and birth expectancy and by deductive methods reach a conclusion.

Data will be based on a questionnaire given to an unselected group of two hundred and sixty-eight college women. One hundred and twenty-two are from a women's
college and one hundred and forty-six from a co-educational institution. Some of the factors the questionnaire is designed to bring out are as follows: determining how many college women plan to marry; how many children they plan to have, if they do marry; and what factors, if any, could have an influence on the answers they give. The results emanating from the questionnaire and the conclusions to be drawn from those results will comprise the bulk of the study. The study was of necessity in an exploratory vein and as such could not cover all phases of the problem. One of the primary purposes of delving into it, however, was in the hope that it would add to the various other studies made and in the process of being made on the same educational level, which was the one most available to the writer.

Organization of Chapters

One of the primary problems involved in the study was the formation of the questionnaire. Recognizing the importance of the accuracy of the study, the writer has seen fit to devote Chapter Two to methods of procedure and sources of data used both in devising and in giving the questionnaire. Each question will be discussed separately and an explanation of the choice of the question will be made.

Chapter Three will contain the statistical results of the survey taken at North Texas State College and Texas
State College for Women and a comparison of those results with similar studies and in the light of contemporary sociological theorists. The differences and similarities between the answers from the women's college and the co-educational institution will also be noted, but only in the light of another environmental factor. Findings and interpretation of the results will be accompanied by statistical tables.

Chapter Four will contain the summary and the conclusions of the writer.
CHAPTER II

SOURCES OF DATA AND METHODS OF PROCEDURE

Division of Work

The methodology employed in the study involved two major divisions. Those were: (1) the construction of the questionnaire, and (2) the procedure used in giving the questionnaire.

Much emphasis has been placed on the fact that college women do not ordinarily have the average number of children necessary for population replacement. In light of this, the writer has prepared a questionnaire to be given to single college women and the replies to this questionnaire will be used to determine some pre-marital environmental factors which influence college women regarding marriage and the bearing of children.

Recognizing that all factors could not be considered, the writer has chosen the ones which seem the most pertinent to her, namely, the influence of income, age, college classification, size of the person's family, birth control, the age at which they plan to marry, and the marital status of their parents on their own choice of whether to marry or not to marry and have children or not to have children.
Questionnaire Construction

Material gathered to form the questionnaire came from a variety of sources. Insofar as was feasible those principles of construction and general requisites given in William Addison Neiswanger's *Elementary Statistical Methods* were followed. Several related questionnaires of this type have been given to college students, but none, so far as the writer has been able to ascertain have been given with as many variable factors brought into bearing on the subject. The construction of this part of the questionnaire was then of an exploratory nature.

Today, the desire to marry and have children is based upon many factors and in making up the questionnaire the writer tried to bring in some of these factors that might influence marriage and child-bearing.

The source data used to substantiate the questions given came from a variety of sources and was used to ascertain the value of that particular question through a recognized authority's eyes on this subject.

**Question one.**—"Your age?" was given because in the last few years a great deal of emphasis has been placed on degree of maturity among college students in relation to age groups. This is one of the variable factors the writer felt might have a bearing on the answers given.

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6 The reader is referred to Appendix I which contains a copy of the questionnaire. It is recommended that the questionnaire be examined before reading further into the study.
Question two.--"Your college classification," is another variable factor given for the reason of determining if advanced educational status had any bearing on the answers given. The writer also felt that it is desirable to try to obtain a fair cross-section of the students by classes: freshmen, sophomores, juniors, seniors, and graduates.

Question three.--"How many children, including yourself, did your parents have?" was given in order to determine whether the person's desire for a small or large family was influenced by the number of siblings he had. The size of the family is a structural characteristic that affects family functioning. A decided lessening of the size of the American family is one of the clearest of structural changes. There has been a striking decrease from the colonial days when the average family had eight children. The home in which there were no children was rare enough at that time to attract attention. This decline in births is in accord with what has generally been true among peoples who have shared western culture.7

The conditions that influence the child during his formative years are too complex to permit causal interpretation wholly dependent upon the size of the family. There is, of course, special opportunity in the small family

for the over-protection of the child by the parents. The atmosphere of the family, the character of the interaction of parents and child are too important to make the mere size of the family decisive in the building of the child's character. The family of one or two children, however, necessarily functions differently from one of five or more. The quantity of family life, that is, the mass experience of the household members, in the former case, is more concentrated, more limited, and can easily be more intense.8

**Question four.**—"Approximate yearly income of your family," was given in an attempt to evaluate material well-being as a variable factor in determining the number of children the person wished to have. It has been said that the falling of the birth rate has been most pronounced among people best able to afford children. Couples who have incomes of $3,000 or more have less than half as many children as the couples who make under $1,000 per year.9

**Question five.**—"Marital status of your parents," was given to see if the answers given had any bearing on the way the student felt about marrying and having children. With the divorce rate so high in the United States,


in 1946 one out of every four marriages ended in divorce,\textsuperscript{10} this was thought to have bearing on this questionnaire. In the family broken by divorce, the age of the child tends to influence whatever hazard develops. In the case of the younger child, his feeling of insecurity is likely to stem from a loss of personal belonging. In the case of the older child, another element is added, a feeling of social insecurity based upon his belief that the family has suffered a loss of prestige. When one of his parents divorces the other, the adolescent may be hurt chiefly because he develops an inferiority feeling which hampers him in courtship, or becomes a distrust, conscious or concealed, which he carries over into his own marriage and which takes away the assurance he needs for successful matrimonial adjustment. His basic motive for marrying may be to recover his one-time confidence, but skepticism, born of his parents' experience, may deny him what he craves and needs.\textsuperscript{11}

No greater tragedy can come to a family than the death of the father or mother, for added to the grief at the parting of the life of the parent, there is, in the case of children, a broken family of the most serious kind. Many of the widowers find the only solution in remarriage, but although this can be a good solution, in many cases

\textsuperscript{10} Ibid., p. 10.
\textsuperscript{11} Groves, op. cit., p. 416.
it presents a problem of greater intensity. The children may receive a hurt during the period of transition that will hinder their future happiness in their own homes.\(^{12}\)

**Question six.**—"Age at which you plan to marry" was of importance to this study because much has to do with the success of marriage of those who marry at the ages when marriage has the best chance of succeeding. In various studies the best ages at which to marry are, for women, twenty to twenty-three.\(^{13}\)

Studies of divorce show that youthful marriages are much more likely to end in divorce. As the age of marriage increases, the divorce rate shows a sharp decline. The age at marriage can also determine how successful the person will be in having the number of children he desires because the age at marriage determines the length of time left in the period of fertility.

**Question seven.**—"If you marry, how many children do you plan to have?" The answer to this question is the core of the problem. With the results obtained from this answer, an analysis will be made. All the other answers to the questions will be taken separately and used with the answer to this question as a basis to determine if a correlation exists between the factors and desire for children.

\(^{12}\) Ibid., pp. 418-419.

\(^{13}\) Landis, *op. cit.*, p. 381.
Question eight. — "Do you plan to practice birth control when you marry?" was asked to see how many appeared to be from families with knowledge of birth control practices and how many planned to use that knowledge. In 1936 the United States Court of Circuit Appeals nullified the Comstock Act passed in 1873 which prohibited the sending of information on contraception through the mails. Some states have laws to control the giving and printing of contraceptive information; however, the laws in most states are not enforced.\textsuperscript{14}

A change in thinking concerning the use of contraceptives is reflected in the establishment of birth control clinics. In 1943 there were seven hundred and eighty-six clinics in the United States. North Carolina was the first state in which the State Board of Health instituted a birth control program. In six other states, including Texas, contraceptive clinic service is included in the public health program. The United States Public Health Service had adopted a policy of helping to set up a child-spacing program by any state just as it would assist with any other health program of the state.

Present indications are that dissemination of contraceptive information will be more open in the future. Especially will it be made available to the poorer classes and to those who in the past could not get reliable

\textsuperscript{14}Ibid., p. 110.
information. Since these groups are the ones that have had a high birth rate, greater availability of contraceptive information will tend to depress the birth rate in the future.15

Procedure Methods

Any single woman student at North Texas State College and Texas State College for Women, regardless of classification, was asked to answer the questionnaire. The writer felt that it would be desirable to get answers from all levels of college women and not the comparison, if any, between the educational levels. The nature of the questionnaire made it desirable for the investigator to be present when the student took it, if the answers were to be useful; consequently, the subjects had to be easily available. The decision to take part of the sample from Texas State College for Women and part from North Texas State College was made because of the excellent opportunity of studying differences, if any, in the answers from a women's college and from a co-educational college. The sample quantity was not definitely set because the writer wished to secure as many as possible from both colleges in a certain limited time and with a limited summer enrollment consisting of a great number of mature students which were not considered desirable.

15 Ibid., p. 381.
for the study, and for whom it was not designed. The writer was able to secure answers from two hundred and sixty-eight women students. This number seemed sufficient for the purpose of exploratory research.

Separate methods of getting the questionnaire filled in were used at Texas State College for Women and at North Texas State College because of varying regulations.

**Texas State College for Women.**--Permission for giving a questionnaire to the women of this institution must be secured from the president of the school. The Dean of Women must also approve the questionnaire. The director of any department to which the investigator wished to give the questionnaire must also give his permission. The questionnaire was given to students in the classes of the Department of Sociology, after the writer secured permission to give it during a small portion of class time. Since this method did not provide the investigator with enough samples, the remainder were secured at random from the students in the dormitories. The procedure employed here was to spend several afternoons going from room to room until the sample of one hundred and twenty-two women had been completed.

**North Texas State College.**--Permission to give the questionnaire to women students in their classes was secured from the teachers. It also had to meet with the approval of the director of their department. Students in sociology
classes and psychology classes were given the questionnaire. When this procedure had been exhausted, the investigator then went to the women's dormitories and here again went from room to room until the sample of one hundred and forty-six women had been completed.
CHAPTER III

TABULATION AND ANALYSIS OF STATISTICAL RESULTS

Texas State College for Women, one of the largest and most outstanding women's colleges in the United States, being so easily available, provided the opportunity for the writer to secure part of the sample there. Texas State College for Women is interested primarily in training women for their role in society as homemakers, but it also provides adequate training for those who desire careers.

Selection of the other part of the sample from North Texas State College, a co-educational institution, was advisable since most college women today secure their educations at similar schools. The availability of North Texas State College was especially fortunate as it is one of the state's larger and more outstanding colleges. A particularly good sample appears to have been acquired there, since the summer enrollment is larger than that of the women's college and thus, a greater diversity could be secured.

Question one.--In the first question the women were asked to give their ages. It will be noted in Table 1
that at Texas State College for Women, or T.S.C.W. as it
is more commonly called, the ages of the women ranged from
seventeen to twenty-five, with only four falling in the
first bracket; whereas, at North Texas State College, or
N.T.S.C. as it is more commonly called, there were ten
in the first bracket giving a slightly more representative
total when taken collectively. The ages at N.T.S.C. ranged
somewhat higher them they did at T.S.C.W., the oldest
being twenty-nine. It will be noticed that in Table 1,
the ages were grouped in one-year intervals until the
age of twenty-four and then merely given as "over twenty-
four." This was done since the numbers were so few in
those older brackets. The averages for Table 1 were arrived
at by taking the answer to the question, "If you marry,
how many children do you plan to have?" and getting the

TABLE 1

AVERAGE NUMBER OF CHILDREN DESIRED AMONG WOMEN STUDENTS AT
N.T.S.C. AND T.S.C.W. BY AGE GROUPS, SUMMER SESSION, 1949

<table>
<thead>
<tr>
<th>Ages</th>
<th>T.S.C.W.</th>
<th>N.T.S.C.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Average</td>
<td>Number</td>
</tr>
<tr>
<td>17</td>
<td>4</td>
<td>2.000</td>
<td>10</td>
</tr>
<tr>
<td>18</td>
<td>12</td>
<td>3.000</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>32</td>
<td>2.625</td>
<td>46</td>
</tr>
<tr>
<td>20</td>
<td>52</td>
<td>3.500</td>
<td>34</td>
</tr>
<tr>
<td>21</td>
<td>10</td>
<td>2.400</td>
<td>14</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
<td>2.000</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>2</td>
<td>0.000</td>
<td>8</td>
</tr>
<tr>
<td>24</td>
<td>6</td>
<td>2.333</td>
<td>2</td>
</tr>
<tr>
<td>over 24</td>
<td>2</td>
<td>2.000</td>
<td>12</td>
</tr>
</tbody>
</table>
averages in all age groups. This method was employed in all of the tables, basing each question on the number of children desired in relation to that particular question.

It will be noticed that the average number of children desired by the seventeen-year-old age group at T.S.C.W. was two, and for N.T.S.C. it was 3.400, giving an over-all average of 3.000 for both schools.

The eighteen-year-old age group gave a slightly better representation with twelve at T.S.C.W. and eighteen at N.T.S.C. The number of children desired here was exactly the same, 3.000.

The nineteen-year age group gave a much better collective total with thirty-two at T.S.C.W. and forty-six at N.T.S.C. The average number of children desired was slightly higher at N.T.S.C., 3.043, than at T.S.C.W. with 2.625, giving a total average of 2.872. Two at T.S.C.W. did not plan to marry.

The twenty-year age group presented an even more representative class than did any of the other groups with fifty-two at T.S.C.W. and thirty-four at N.T.S.C. Here, the average number was somewhat higher at T.S.C.W. with 3.500 children desired as compared with 2.882 at N.T.S.C., giving an over-all average of 3.326. Since this is the most representative group, some facts should be mentioned. This average number of children desired by these college women is significantly higher than the average number actually
produced by college women according to the Population Reference Bureau; the average it found for college women who have completed their reproductive years is 1.26 children. However, this is not out of line with a study done by Judson T. Landis in 1947 when he found the average number of children desired by the women at Michigan State College to be 3.000. He compares his figure with a similar study made by Howard M. Bell in 1936 in which Bell found that the average number of children desired then was 2.3.

This gives some indication that the average size of the family may increase, since, for a number of years, college women have been asked the number of children they considered desirable in the ideal family, and that number has gradually increased.16

The twenty-one year bracket is not so representative as one would think since both colleges are four-year institutions, and twenty-one is usually the age when most women are just nearing the completion of their educations. However, this survey contains only ten in this group from T.S.C.W. and fourteen from N.T.S.C., the higher average number of children desired being at the coeducational institution, 3.286, giving a total average of 2.917 for both colleges. However, there were two women in the group from T.S.C.W. who did not plan to marry, thus bringing the total down for that school.

16 Ibid., p. 368.
The twenty-two year group contained a fewer number than any of the other categories, only two from each school. Of their replies on thing did stand out, the fact that the average number of children desired by the women at N.T.S.C. was 4,000, giving a total average from both schools of 3.0.

If there were more in this bracket, some things could be observed, namely, the fact that such a large number of children were desired by the group from N.T.S.C. considering their ages and the length of time left for childbearing, which is shorter than it would be in many of the younger groups, and the fact that the average here is higher than in any other category at N.T.S.C. or T.S.C.W.

The twenty-three year age group did not present a representative total at either school, containing only ten from both colleges. Two things were noticeable, however; of the two in this group from T.S.C.W. neither of them planned to marry, and those at N.T.S.C. planned to have an average of 3.5 children.

The twenty-four year age bracket from T.S.C.W. contained six, and of that number, two did not plan to marry; the average, at that, remained higher than 2.1, the figure recognized by some authorities as that necessary for population replacement. Another significant factor can be found at N.T.S.C. Of the two in this group, neither planned to marry, bringing the total average down to 1.750.
In the group over twenty-four, the lowest total average number of children desired is found to be 1.500. The number in this bracket from T.S.C.W. being only two, and from N.T.S.C., twelve, two of whom did not plan to marry, helps to account for the fact that the average is only 1.166, the lowest of any of the figures at N.T.S.O.

Perhaps some enlightening deductions can be drawn from this table. The highest average number of children in any of the age groups can be found in the twenty-year group at T.S.C.W. and in the twenty-two-year group at N.T.S.C. All of the more representative groups contained more than the average number of children necessary for population replacement; this number is said by some to be 2.1 and by others, 2.7. The trend in number of children desired remains fairly constant in the eighteen, nineteen, twenty and twenty-one-year age brackets.

**Question two.**—An attempt to analyze the number of children desired by their college classification is an attempt to determine whether the amount of education they receive in college has any bearing on their parental aspirations. It may be noted that the number of women interviewed in the freshman category was hardly sufficient to establish any degree of validity to the conclusion.
TABLE 2
AVERAGE NUMBER OF CHILDREN DESIRED AMONG WOMEN STUDENTS AT N.T.S.C. AND T.S.C.W. BY COLLEGE CLASSIFICATION, SUMMER, 1949

<table>
<thead>
<tr>
<th>Class</th>
<th>T.S.C.W.</th>
<th>N.T.S.C.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Average</td>
<td>Number</td>
</tr>
<tr>
<td>Freshman</td>
<td>0</td>
<td>0.000</td>
<td>8</td>
</tr>
<tr>
<td>Sophomore</td>
<td>20</td>
<td>2.800</td>
<td>24</td>
</tr>
<tr>
<td>Junior</td>
<td>40</td>
<td>3.050</td>
<td>44</td>
</tr>
<tr>
<td>Senior</td>
<td>62</td>
<td>2.871</td>
<td>58</td>
</tr>
<tr>
<td>Graduate</td>
<td>0</td>
<td>0.000</td>
<td>12</td>
</tr>
</tbody>
</table>

At N.T.S.C. the eight girls who filled out the questionnaire, oddly enough, all wanted to have three children. As there were no freshmen interviewed at T.S.C.W. that left the total average the same. It is very close to the overall average and does not reveal any special attributes.

In the sophomore classification the representation was better. A total of forty-four girls fell into this class. At N.T.S.C. the average, 3.250, was somewhat higher than the average at T.S.C.W., 3.045. The one possible explanation of this might come from the more frequent contact with the men at the co-educational institution. It has been said that the adult male as well as the helpless baby arouses the "desire to mother" in women.

The junior group, numbering eighty-four, reveals nothing except that this group still is above the average in view of the over-all totals. Two junior girls in the group from T.S.C.W. did not plan to marry, but in the aggregate of
forty this would not make too much difference.

The outstanding characteristic of the girls in the senior class was the fact that ten of them did not plan to marry at all. It is quite possible that advanced study in their major fields brings out a desire for a career rather than a desire for matrimony and children. This was an important factor in the lowered averages at both schools, but even when these women are included in the total class average, it is just barely below that of the total group.

A survey taken in Indianapolis in 1941 revealed the following variations in the fertility of educational groups per one hundred wives grouped by the highest school grade completed as follows: below eight grades--270; eight grades--194; one to three years of high school--171; four years of high school--113; one to three years of college--113; four or more years of college--88. This would seem to point out that graduation and post-graduate work in college was a great deterrent to child-bearing.

The graduate analysis would take the approximate form of the freshman analysis. The group is too small to be of great value. However, the average is nearly one child below the total group average.

The over-all trend for the total averages by classes would seem to show that the higher the educational attainment

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the fewer children desired.

Question three.—The number of children in the families of the students answering the questionnaire ranged from one to eight at T.S.C.W. and from one to nine at N.T.S.C. as shown in Table 3. In the group from T.S.C.W., the number

<table>
<thead>
<tr>
<th>No. of Children in Family</th>
<th>T.S.C.W.</th>
<th>N.T.S.C.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. in Group</td>
<td>Average</td>
<td>No. in Group</td>
</tr>
<tr>
<td>1</td>
<td>22</td>
<td>3.000</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
<td>2.840</td>
<td>48</td>
</tr>
<tr>
<td>3</td>
<td>16</td>
<td>2.500</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>3.889</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>3.000</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>1.500</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>2.250</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0.000</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0.000</td>
<td>2</td>
</tr>
</tbody>
</table>

being the only child in the family was thirty-two, and at N.T.S.C., twenty-two. The average number of children desired was practically the same at both institutions, the total average being 3.037, indicating that these women wished to have more children than were in their own families. Studies of completed families show the decline in the average number of children born. Information gained from college students on their families reveals that the grandparents' families
had an average of five children, the parents, three; and when the children were asked how many children they would wish to have in their own families, the average was three. In the grandparents' families, 48 per cent had five or more children, and 22 per cent had only one or two children. In the parents' families, 18 per cent had had five or more children, and 47 per cent had had one or two children. Only five per cent of the students said they planned to have five or more children, whereas 28 per cent planned to have one or two children. Some of the parents may not have completed their families, but most parents of college students are past or nearly past the child-bearing age.18

Those girls who were from a family of two children expressed the desire to have a total average number of 2.735 children. This category represented the largest number of students, containing ninety-eight, an almost equal number from each school. It will be noticed that these students wished to have slightly larger families than their parents. This is very near, however, to the total over-all average, irrespective of any classification which 2.903 for both colleges.

The students that came from families of three most nearly averaged the number of children their parents had with a total of 3.053 for thirty-eight persons. Each college had an average slightly above three children desired. There were two in this family size from T.S.C.W. who

18 Landis, op. cit., p. 367.
expressed no desire to marry, thus bringing the average for that school school down lower than N.T.S.C.

At N.T.S.C. those persons who were from families of four children came very close to averaging that number for their own family, 3.889. At T.S.C.W. the average was 2.889, exactly one child less than the women at the co-educational institution desired. There were the same number of participants at each college, eighteen, giving a total of thirty-six answering this question.

In the families of five children, the average fell low at both colleges, but especially at T.S.C.W., where two students in this group did not want to marry, thus bringing the average down to its lowest point for this school, 1.500. The total average for both colleges was 2.000 for twelve people answering.

In the families of six children, the average fell to its lowest point at N.T.S.C., 1.500, and at T.S.C.W. stayed up to 3.167. The fact that four of the women at N.T.S.C. who were in this category did not plan to marry tended to lower the average at that school and also the total average, which was 2.750 for both institutions.

Quite a surprising number fell in the classification of seven children in the family, especially due to the limited number the survey included. A total of twelve women in both schools fell in this group. The total average number of children desired was 2.500 with two at N.T.S.C. not planning to marry.
There were none at either school who came from families having eight children.

Only two came from families of nine children; these were at N.T.S.C.. Consequently, the desired number of children, 3,000, is hardly significant.

A related study done at the University of Mississippi in 1943 found that the average size of the parents' family, not including the parents themselves, was 2.96 for males and 3.04 for females; and for both sexes, 3.0. Thus, the number of children desired by the present generation of students is not significantly smaller than the achieved family size of the previous generation. It will be remembered that this survey found an average of 2.903 children desired as an over-all trend. If such a tendency were not rather general throughout the population, it might be concluded that the downward trend in the birth rates had almost reached a point where it would remain relatively stationary.

An indication in this poll shows that no significant relationship existed between the size of the parents' families and the size desired by the students. Thus, it may be stated that for the group studied, the number of siblings has no influence on a person's desires for a specified size of family.

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Sanford, op. cit., p. 88.
Question four.--The classifications for the income grouping of the students' families were categorized at $1000 intervals, from zero to $6500 and over. In asking a question of this type, the validity of the answers is always doubtful, even though the women did not put their names on the questionnaires.

<table>
<thead>
<tr>
<th>Family Income</th>
<th>T.S.C.W.</th>
<th>N.T.S.C.</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. in Group</td>
<td>Average</td>
<td>No. in Group</td>
</tr>
<tr>
<td>$0-1500</td>
<td>8</td>
<td>1.500</td>
<td>0</td>
</tr>
<tr>
<td>1501-2500</td>
<td>16</td>
<td>3.000</td>
<td>10</td>
</tr>
<tr>
<td>2501-3500</td>
<td>6</td>
<td>3.000</td>
<td>28</td>
</tr>
<tr>
<td>3501-4500</td>
<td>24</td>
<td>2.833</td>
<td>34</td>
</tr>
<tr>
<td>4501-5500</td>
<td>22</td>
<td>3.091</td>
<td>32</td>
</tr>
<tr>
<td>5501-6500</td>
<td>8</td>
<td>4.500</td>
<td>18</td>
</tr>
<tr>
<td>6501 and over</td>
<td>14</td>
<td>2.428</td>
<td>10</td>
</tr>
<tr>
<td>No answer</td>
<td>24</td>
<td>3.000</td>
<td>14</td>
</tr>
</tbody>
</table>

In the first income bracket, $0-1500, there were eight women, all of them at T.S.C.W., and four did not plan to marry. This group also had the lowest average number of children desired, 1.500.

The second income bracket, $1501-2500, contained twenty-six persons. The average from both schools was 3.000 with two in this group also from T.S.C.W. stating they did not plan to marry.
Group number three, $2501-3500 contained a larger percentage answering, thirty-four. Only six persons, however, from T.S.C.W. fell in this category, with the remainder, twenty-eight, being at N.T.S.C., two of those not planning to marry. The total average was 2.529 for both colleges.

Bracket number four, $3501-4500, contained the largest number of replies, fifty eight; twenty-four were from T.S.C.W. and thirty-four from N.T.S.C. Here, the average number of children desired was slightly higher at N.T.S.C. than at T.S.C.W. The total average for both schools was 2.966, very similar to the average of the entire group which was, it is to be remembered, 2.903.

Category number five, $4501-5500, contained the largest average of all brackets at N.T.S.C., 3.500; while at T.S.C.W. it was slightly lower, 3.091, giving a total group average of 3.333. This group average is next to the highest of any in this classification. There were fifty-four participants in this group.

Bracket number six, $5501-6500, contained the largest average of all the categories at T.S.C.W., 4.500; at N.T.S.C. the average was only 2.889, giving a total group average of 3.375. This group average is the highest of any in this classification. The number who fell in this group was twenty-six.
Twenty-four women fell in the 46501 and over group. Since the survey included such a limited number, this figure seems surprisingly high. Fourteen at T.S.C.W. were in this group and ten at N.T.S.C. The average number of children the women at T.S.C.W. wished to have was somewhat higher than at N.T.S.C. It was unusual to find that all of the women who fell in this group at N.T.S.C. wished to have two children, while those at T.S.C.W. desired 2.428.

There were thirty-eight women who did not answer this question and two from each school who did not plan to marry. The number who failed to answer at T.S.C.W. was twenty-four, with an average number of 3.000 children desired. Fourteen did not answer the question at N.T.S.C., with a 2.571 average, bringing the total average for both colleges to 2.842.

It is possible that the contrast in economic conditions between the depression thirties and the prosperity of the war and post-war years has caused young people to think differently about the desired number of children. The war years may also have brought about a shifting of values, so that children seem more essential to happiness. The birth rate has risen during the same period, but whether this is permanent trend or a temporary increase due to prosperity, war psychology, and the increased marriage rate,
cannot be stated positively. Population authorities have predicted a leveling off of the birth rate after the war years. 20

W. F. Ogburn says that the relation of income to marriage is complex and that business prosperity greatly increases marriage. The more rapidly growing cities have slightly larger percentages married. Cities with larger percentages making income tax returns have, on the average, slightly smaller percentages married. 21

It will be noted from Table 4 that the income and the number of children the women wish to have reach their peak for T.S.C.W. in the $5501-6500 bracket, and at N.T.S.C. the peak is attained in the $4501-5500 bracket. This gives a somewhat higher income picture than what was expected.

Question five.--At T.S.C.W. and N.T.S.C. the question of marital status of the students' parents revealed that a great majority of their parents were living together, a total number of two hundred and twenty-four out of the entire two hundred and sixty-eight questioned. In this group there were four at each school who expressed no desire to marry, which did not alter the averages significantly. The averages at both colleges were nearly the same. At

20 Landis, op. cit., p. 368.

T.S.C.W., 3.0, and at N.T.S.C., 2.968, giving a total average from both institutions of 2.982, was again very near the total, 2.903, the number of children desired when averaged not on the basis of question by question.

**TABLE 5**

AVERAGE NUMBER OF CHILDREN DESIRED AMONG WOMEN STUDENTS AT N.T.S.C. AND T.S.C.W. BY MARITAL STATUS OF THEIR PARENTS

**SUMMER SESSION, 1949**

<table>
<thead>
<tr>
<th>Marital Status of Parents</th>
<th>T.S.C.W</th>
<th>N.T.S.C.</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. in Group</td>
<td>Average</td>
<td>No. in Group</td>
</tr>
<tr>
<td>Living together ...</td>
<td>100</td>
<td>3.000</td>
<td>124</td>
</tr>
<tr>
<td>Divorced ....</td>
<td>4</td>
<td>2.000</td>
<td>2</td>
</tr>
<tr>
<td>Separated ...</td>
<td>0</td>
<td>0.000</td>
<td>2</td>
</tr>
<tr>
<td>Father dead .</td>
<td>12</td>
<td>2.667</td>
<td>14</td>
</tr>
<tr>
<td>Mother dead .</td>
<td>2</td>
<td>3.000</td>
<td>2</td>
</tr>
<tr>
<td>Father remarried .</td>
<td>4</td>
<td>2.500</td>
<td>2</td>
</tr>
</tbody>
</table>

There were four women at T.S.C.W. whose parents were divorced, and two of these women did not plan to marry. This might possibly be significant if there were more who fell in this group, but since there was such a small number, no deductions can accurately be made. There were only two at N.T.S.C. whose parents were divorced. The total average number of children desired was 2.000.

An even less accurate account could be made of the fact that only two at N.T.S.C. had parents who were separated, and no such conditions were found at T.S.C.W. The
total average here was, again, 2.000, for the number of children desired.

Quite a large number of women had families in which the father was dead, a total of twenty-four from both institutions. They were practically equally divided with an over-all average for both schools of 2.538.

There was only a total of four from both colleges whose mothers were dead, and in each case the desired number of children was 3.000.

In six cases it was found that the father had re-married; again the number is not significant enough to bear close examining. The total average in this category was 2.667 children desired.

Due to the fact that such a small number fell in any other group than that of the parents living together, no definite conclusions can be drawn or no trends observed. As would be obvious, the totals from the first group more closely represent the over-all average, irrespective of questions.

As has been previously mentioned, the effect of broken homes on the attitudes of young people is sometimes detrimental to their future happiness in their own homes, but in this survey even those attitudes do not appear obvious.

**Question six**.--The consideration of the effect of age at marriage on the birth rate is given very adequate summation in the following quotation:
It is obvious that the age at marriage has a direct influence on the birth rate. Data selected from twenty-two states and the District of Columbia, giving the situation in 1940, disclosed that among the whites half the babies born had mothers younger than twenty-six and only one tenth had mothers older than thirty-five. The marriage rate for women reaches its peak in the twenty to twenty-four year period. These constitute about one-fifth of all those who married in the course of the year, while from the same group come only a little more than one ninth of the men who marry.  

<table>
<thead>
<tr>
<th>Age at Marriage</th>
<th>T.S.C.W.</th>
<th>N.T.S.C.</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. in Group</td>
<td>Average</td>
<td>No. in Group</td>
</tr>
<tr>
<td>18-20 ...</td>
<td>12</td>
<td>2.667</td>
<td>18</td>
</tr>
<tr>
<td>20-22 ...</td>
<td>36</td>
<td>3.056</td>
<td>54</td>
</tr>
<tr>
<td>22-24 ...</td>
<td>52</td>
<td>3.307</td>
<td>52</td>
</tr>
<tr>
<td>24 and over ..</td>
<td>14</td>
<td>3.000</td>
<td>18</td>
</tr>
<tr>
<td>Do not plan to</td>
<td>8</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>marry .</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The correlation between the ages at which the girls plan to marry and the number of children that they plan to have would seem to be based on the years of fertility left at the time of marriage. An article on this subject appeared recently stating:

22 Groves, op. cit., p. 355.
For the American girl books and babies don't mix. Long ago scientists concluded that the American families' reproduction rate is in inverse ratio to the educational attainments of the parents. Now, analyzing facts collected for the first time in the 1940 Census, they have discovered that it is the higher educated wife, rather than the husband, who brings down the birth rate....

Last week Guy Irving Burch, director of the Population Reference Bureau in Washington, D. C. disclosed that native white women, aged 45-49, with four or more years of college had given birth to slightly less than one and one-quarter children each, a population replacement of only forty-five per cent. (Making allowances for early death and other factors, actuaries roughly estimate 2.7 children as one hundred per cent replacement).

Studying the same age group, Burch learned that women with high school education had one and three-quarters children, a replacement failure of 31 per cent; those who had completed only one to four years of grade school had borne four and one-third children, and over-replacement of 95 per cent.

Educators protesting the conclusions pointed out that college women have fewer children because they are attending classes during their most productive years.23

In the questionnaire, the age groups were in intervals of two years between eighteen and twenty-four and over. In the first age group, 18-20, the number of children desired was quite high, comparatively. At N.T.S.C. the eighteen girls in this class wanted nearly one child more than the total average of 2.903. At T.S.C.W. the average wanted was below that of the co-educational school by over one child per girl. The total at both schools for this question was nearly one-half child per person over the total average.

The 20-22 age category was nearly representative of the complete survey as to their desired parenthood with a composite average of 3.022.

The next classification, 22-24, was the largest of the age groups with one hundred and four girls. The total average at both schools, 3.115, is somewhat above that of the previous class but could not be considered as a departure from the norm in this study.

In the 24 and over group, the average was 2.563, which could be interpreted as quite low when consideration is given to the fact that all of the girls who do not plan to marry are not averaged in this particular question. These twelve girls would lower the average appreciably if they had been included.

**Question seven.**--This question, the number of children the women planned to have when they married, was the key question in the survey. All of the variable factors were correlated with information obtained in this question to determine the degree of divergence from the over-all average caused by each one. Table 7 gives these over-all summations and averages.

It will be noticed that of the total two hundred and sixty-eight answering the questionnaire at both colleges, twelve did not plan to marry. The reasons for this decision could arise from many factors. Some people are afraid to enter into marriage because of previous experiences in their home life; they are afraid their marriages will turn out like so many they have seen. Many women in college
make the decision not to marry because they feel that when they finish their educations they want the glamour of a career, and they feel that marriages and careers do not mix. This may prove to be a temporary feeling, and a change in attitudes takes place so that later the person does decide to marry. This could easily prove to be the case of those women at T.S.C.W. because four of the eight at that school who stated they did not plan to marry were twenty-one or younger. The remainder, and those at N.T.S.C., were in the older age groups, so it might be concluded that their decisions were well thought-out and had not been formed on the spur of the moment.

Six girls planned to marry but did not wish to have any children. Such an attitude could have developed from a fear of childbirth. Others, because of ambition,
professional or social, do not want to run the risk of losing their success by assuming the liability of children. For the most part, the chief reason not to have children has been said to be the desire to have the pleasure, com-
radeship and sex without undertaking the social task nature, in the past, so often thrust upon women as a con-
sequence of their entering the intimate relationship of marriage.

Thus, we find 2.7 per cent of the women at N.T.S.C. who plan to marry but have no children; this figure was 1.6 per cent at T.S.C.W..

There were 6.6 per cent at T.S.C.W. who did not plan to marry, giving a total percentage of 91.8 who planned to marry and have children. At N.T.S.C. this percentage was somewhat higher, 2.7 per cent who did not plan to marry, giving a total of 96.6 per cent who did plan to marry and have children.

The individual averages in number of children desired was 2.918 at T.S.C.W. and 2.890 at N.T.S.C., giving a total over-all average of 2.903.

The total number of children desired was quite a bit higher at N.T.S.C., 422, but this derived from the obvious fact that more women were polled at this college; even so, their average number of children desired was lower than the figure at T.S.C.W.
The total number of children the girls at T.S.C.W. wished to have was three hundred fifty-six, and considering the fact that there were more at that school who did not plan to marry and less who did not desire any children, this figure is still higher than at N.T.S.C., actually showing that these women wished to have more children than those at N.T.S.C.

**Question eight.**—The last question in the questionnaire dealt with the decision on the part of the student to use birth control when they married. Of the total two hundred and sixty-eight polled, two hundred and ten planned to use some form of contraception when they married. One hundred and twenty at N.T.S.C. with an average number of 2.934 children desired as against an average of 3.044 at T.S.C.W., giving a total average of 2.981.

<table>
<thead>
<tr>
<th>Practice Birth Control</th>
<th>T.S.C.W.</th>
<th>N.T.S.C.</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. in Group</td>
<td>Average</td>
<td>No. in Group</td>
</tr>
<tr>
<td>Yes.........</td>
<td>90</td>
<td>3.044</td>
<td>120</td>
</tr>
<tr>
<td>No...........</td>
<td>16</td>
<td>3.250</td>
<td>12</td>
</tr>
<tr>
<td>Under conditions? ......</td>
<td>6</td>
<td>4.000</td>
<td>10</td>
</tr>
<tr>
<td>?...........</td>
<td>2</td>
<td>3.000</td>
<td>0</td>
</tr>
<tr>
<td>Do not plan to marry...</td>
<td>8</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>
There were twenty-eight who did not plan to practice birth control when they married, twelve at N.T.S.C. and sixteen at T.S.C.W.. It is quite significant to notice in Table 8, in the case of the women who do not plan to practice birth control, the average number of children desired was only slightly higher than it was for those who plan to use some form of contraception. The average at N.T.S.C. was 2.666 and at T.S.C.W., 3.250, giving an average of 3.0.

There were sixteen women who said they planned to practice birth control under certain conditions. Here is found the highest average number of children, with 3.8 at N.T.S.C. and 4.0 at T.S.C.W. and a total average from both colleges of 3.875. Some of the women gave the conditions under which they planned to practice birth control. Some of the more informative were: "Only to keep the children from coming too close together, no birth control before the first child," "I want my children two to three years apart, and after I've had them, I don't want any more, so..." These answers came from women at N.T.S.C.. Those at T.S.C.W. gave as reasons for practicing birth control, "Until such time as we are able to support a family," and "Dependent on ability to support or inability to bear children." Others who checked "under certain conditions" did not give their reasons.
Two of the questionnaires that were filled out at T.S.C.W. evidently were completed by students who did not understand the question or did not know what birth control was because they put a question mark by this question; they did say, however, that they wanted an average of 3.0 children.

It will be remembered that there were twelve women who did not plan to marry. They were not included in the averages of this question because they naturally gave no reply to this question.

It is necessary to examine the term "birth control" and its origin. This term was introduced to the American vocabulary by Margaret Sanger during the second decade of the twentieth century. The expression is misleading and is gradually being superseded by the word "contraception" which more accurately expresses what is meant. Francis Place (1774-1854), who is generally regarded as the founder of the modern contraceptive movement, had used the term "family limitation." As a result of the agitation pioneered by Mrs. Sanger and the popularizing of interest in contraception, this term was replaced by "birth control," and now, through a shifting of emphasis, it is being used again to describe the term "planned parenthood," the object of the voluntary motherhood movement. The voluntary, arrested family has become possible through the development of modern contraceptive methods and the diffusion of knowledge concerning them.²⁴

²⁴Groves, op. cit., p. 385.
The organized effort to popularize contraceptive methods in this country was started during the period 1828-1832 by Robert Dale Owen and Charles Knowlton. Owen wrote *Moral Physiology*, a brief and plain treatise on population, and it was published in 1830. By the time of the author's death in 1877, seventy-five thousand copies had been sold. Knowlton, a Massachusetts physician, brought out anonymously, *Fruits of Philosophy* in 1832. The immediate popularity of these books demonstrates that already there was in this country an organized interest in attempts at contraceptive practices, the knowledge of which has been given through person-to-person communication, on the folkway level, and by 1800 these had become widespread in western culture.²⁵

A study by Raymond Pearl during the years 1931 and 1932 of interviews with 30,000 women during these years after their confinement in urban hospitals, shows that approximately 80 per cent of women having their first baby practice some form of contraception, whereas of the lowest income groups only 25 per cent practice contraception. The same study shows that the effectiveness of contraception increases with the increase in economic status among both white and Negro women. Educated women are not only more likely to know about contraception, but their birth rate

is lower because they tend to marry at a later age, thus having fewer years for child-bearing. 26

26 Raymond S. Pearl, The Natural History of Population, pp. 234-244.
CHAPTER IV

SUMMARY AND CONCLUSIONS

This study has tried to point out some of the pre-marital environmental factors which influence marriage and birth expectancy. The questionnaire upon which the study was based was given to two hundred and sixty-eight college women. One hundred and twenty-two were women at T.S.C.W., and one hundred and forty-six were women at N.T.S.T.C. The total average number of children the group planned to have was 2.903. There was an average of 96.6 per cent at N.T.S.C. who planned to marry and have children and an average of 91.8 per cent at T.S.C.W. who expressed the same desires.

There were six students who planned to marry but have no children, a total percentage at both colleges of 2.2.

Twelve girls did not plan to marry, a percentage of 4.4.

From the viewpoint of society, the chief function of marriage is to perpetuate the race by producing and nurturing the offspring; yet many present-day couples, by choice, have no children. This represents an extreme change in attitude toward marriage. Throughout history, couples
who married expected to have children; if no children came, the marriage could be dissolved. Such marriages can still be dissolved in some countries, and in two states in the Union, Pennsylvania and Tennessee, inability to have children is a legal reason for divorce.

It is impossible to know what proportion of sterile marriages are due to biological causes and what proportion are due to contraception. It has been estimated that from 6 to 15 per cent of marriages today are sterile from biological causes. Not only are there more couples today who have no children, but the tendency is toward smaller families among those who do have children. This is especially true of college graduates and leads one source to make the statement that in the make-up of the future population, women with a bachelor's degree will have one grandchild, her contemporary with less than a grammar-school diploma will have nine. Geneticists state flatly that, "there is danger of outright decline in the physical and mental make-up of our population. We are not reproducing the best of ourselves." In the geneticist's dictionary, "the best" is not a term of social snobbery, but a matter of scientific evidence that children of college educated parents have a higher average intelligence than children born into non-educated homes. Thus, our educated women, potentially

mothers of children with greater native ability are guilty of squandering their genetic inheritance. Unthinkingly they are lowering the standard of future generations.\textsuperscript{28}

In order to draw conclusions with sound foundations, it would be necessary to poll an adequate sample of students from many colleges and universities throughout the nation, being careful to include all types of institutions, in all of the regions. Such a study would have value for the populationist who wished to predict future trends to explain the probable future decline of the population. It is obvious that the number of children desired by the students and the actual achievement of that desire by the time the child-bearing period is completed are two different things. Achievement may be thwarted by many factors not realized or expected by the student. But research to determine this relationship would be almost impossible because of the necessity of following each student through a period of from twenty to thirty years. There are, however, many theoretical factors that can be considered.

It has been seen in this pre-marital survey that none of the factors caused sufficient deviation in the desired number of children to merit too much further investigation. Collectively these factors that have been considered as variables have proven not important enough to lower the

\textsuperscript{28}"Are You Too Educated to Be a Mother?", \textit{Ladies Home Journal}, LXIII (June, 1946), 6.
birth expectancy below the reproduction rate. It would seem, by simple deduction, that the causes of the falling birth rate must lie in the realm of post-marital environment.

Many theorists are inclined to believe that the greatest deterrent to having children is the expense incurred, not only the original costs, but also the cost of rearing the offspring. Young people sometimes feel that, in fairness to themselves and to their children, they should be out of debt, should have a home, and should be established economically before they have children. Standards of what constitutes the required economic conditions differ. Many couples who postpone having children for economic reasons learn that their standards change; they raise their standards of living to keep pace with increased income, so that after a few years of marriage, they do not feel any more able to afford children than at the beginning. Landis says, however, that although financial stability is not to be minimized as a factor in successful family life, it is one of the more minor considerations. He believes that emotional maturity on the part of the couple is the chief determinant of whether a couple is ready for parenthood. This writer feels that this is important, sociologically, but in the institutional vein, she would consider status as a much more important factor.

If the society in which we live would place mothers on a pedestal, with the height of the pedestal proportionate to the number of children that she has borne, we would not have to worry about a declining birth rate on any level. Many countries have tried to raise their birth rates by outright grants of money for each child born, but this was not enough. The institutional barriers were too strong. The emancipation of women in most of the countries has given them more individuality, and they have become free-choosing and free-thinking. They evaluate their physical well-being in relation to motherhood. They count the cost in time and money as well as reserving the right to choose motherhood or a career. This is especially true in the case of the well-educated women. This right to choose a career over motherhood is basically a status problem. The desire for equality and independence necessitates a creation of new values, if properly seasoned with status recognition for motherhood among the upper classes, would sift down through the income strata quickly and easily. It is these people with large incomes, usually the better educated portion of our society, who must be imbued with something a lot stronger than the old maternal instinct line.

Even as a nation of avowed individualists we will have to take the future into account, as well as a whim of the moment. We must learn to take our babies more
seriously and less sentimentally. We must learn that our educational opportunities are not an outright gift, to be misspent. We must learn that we are not too educated to be parents; we must learn that we are too educated **not** to be parents.
APPENDIX I

Questionnaire for College Women

1. Your age ________

2. Your college classification, check one:
   ______ Freshman
   ______ Sophomore
   ______ Junior
   ______ Senior
   ______ Graduate

3. How many children, including yourself, did your parents have? ________

4. Approximate yearly income of your family, check one:
   ______ 0-$1500
   ______ $1501-2500
   ______ $2501-3500
   ______ $3501-4500
   ______ $4501-5500
   ______ $5501-6500
   ______ $6500-over

5. Marital status of your parents:
   ______ Living together
   ______ Divorced
   ______ Separated
6. Age at which you plan to marry, check one:
   - 18-20
   - 20-22
   - 22-24
   - 24-over
   - Do not plan to marry

7. If you marry, how many children do you plan to have? __

8. Do you plan to practice birth control when you marry?
   - Yes
   - No
   - Under certain conditions; what conditions?
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