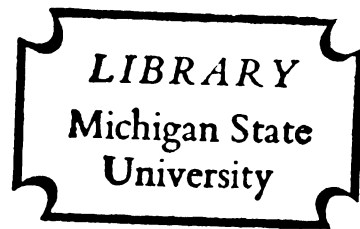


PRE-TEST OF INSTRUMENTS TO GATHER  
DEMOGRAPHIC DATA

Thesis for the Degree of M. A.  
MICHIGAN STATE UNIVERSITY  
Meredith Johnson Mead  
1965



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## ABSTRACT

### PRE-TEST OF INSTRUMENTS TO GATHER DEMOGRAPHIC DATA

by Meredith Johnson Mead

The pre-test of a four page questionnaire and cover letters was conducted during July and August of 1964 as part of a larger study designed to pre-test several questionnaires for a future study of undergraduate student marriage. The purposes of the pre-test were to discover factors in the cover letters, questionnaires and sample that appeared to be related to response rate and to investigate the effectiveness of the questionnaire items in obtaining valid and reliable responses.

A purposive, non-random sample of 156, 1958-1959 Alumni of Michigan State University whose addresses were listed as being in the Lansing-East Lansing, Michigan area was selected. These names were distributed into four categories according to sex and whether or not the person had received a Bachelors degree from Michigan State University during the 1958-1959 academic year. Sixty names were placed in each of the degree received categories, but only 23 names were available for the no degree received female category

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and 13 for the no degree received male category.

Two formats of the questionnaire, a pre-coded and a non-coded form, and three cover letters using different salutations, types of appeal and methods of affixing the signature were developed. The resulting six combinations of cover letters and questionnaire forms were randomly assigned to the names in each degree-sex category.

The cover letters, questionnaires and self-addressed stamped envelopes were mailed on July 6, 1964 and a record of responses compiled. Two letters with the same type of appeal but with different salutations were used for Follow-up 1. The cover letter for Follow-up 2 gave more information about the study and was enclosed with another questionnaire and envelope.

A sample of 21 respondents and 19 non-respondents were selected for interviews. These were designed to elicit responses concerning reasons for response or non-response, general evaluation of the questionnaire, and verbal responses to the questions that had appeared on the mailed questionnaire.

A total response of 78% was recorded. An increase in response rate occurred after each mailing and after each weekend. The largest percent return occurred during Wave I, with a decrease in response during Wave II and an increase in Wave III.

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response and of total response seemed to indicate that response rate is not related to the degree status or the sex of the sample members. However, differences in response rate did appear when response was analyzed in relation to the degree-sex categories.

Rate of response did not appear to be related to the different questionnaire formats nor to the different methods of affixing the signature to the letter.

The different letter salutation and letter appeal categories in Wave I received small response differences but only the letter receiving the highest percent return and the letter receiving the lowest percent return are considered to have exhibited differences in the solicitation of response. The limited findings concerning the relation of the letter salutation to response rate seems to indicate that the type of salutation used was not a factor in influencing response. The type of appeal in the cover letter did not appear to be related to response rate except when the appeal gave more information about the study and about who the desired respondents were. However, other factors such as the cumulative effect of repeated appeals to respond and the enclosure of another questionnaire may have been factors influencing the increase in response that occurred with this follow-up.

The check of questionnaire reliability and validity that was conducted seemed to indicate that the questionnaire items were consistently eliciting the information desired.



PRE-TEST OF INSTRUMENTS TO GATHER  
DEMOGRAPHIC DATA

By

Meredith Johnson Mead

A THESIS

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

MASTER OF ARTS

Department of Home Management and Child Development

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## ACKNOWLEDGMENTS

Appreciation is expressed to Dr. William Marshall and to Dr. Frances Magrabi for their guidance and direction in planning and conducting the study. Appreciation is also expressed to Dr. Twyla Shear for her helpful suggestions and encouragement. Gratitude is expressed to my husband, Jon, for his patience, helpfulness, and constant encouragement.

\* \* \* \* \*

This study was conducted as part of a larger study concerned with the pre-testing of two mailed questionnaires. These questionnaires will eventually be used to conduct a study of undergraduate student marriage. One of the questionnaires, Schedule A, was pre-tested to determine which factors in the cover letter, questionnaire and sample appear to influence response rate and to check questionnaire validity and reliability. This study was partially supported by the Michigan State University Agricultural Experiment Station.

\* \* \* \* \*

ACKNOWLEDGMENTS

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## CHAPTER I

### INTRODUCTION

A four page questionnaire and several cover letters were pre-tested so that information could be gathered concerning factors which appear to influence response and the validity and reliability of the answers to the questions. The findings of the pre-test will provide a basis upon which decisions concerning questionnaire and cover letter development and revision can be made in relation to those factors which appear to influence response and questionnaire validity and reliability.

One of the problems connected with the use of the mailed questionnaire as a method of data collection is the bias that can result due to the non-responding portion of the sample. Since there is no assurance that those who do respond are representative of the entire sample, it is important that the non-responding portion be small enough so that the generalizations drawn from a study will not be seriously biased. Through the process of pre-testing, using the proposed instruments and a sample similar to that to be used in the final study, those factors which may influence response rate can be identified. Adjustments can then be made in the

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data collection device in an effort to increase response rate. An investigation of the characteristics of the non-respondents and their stated reasons for non-response can provide information and suggestions for ways in which response rate may be increased.

Another problem in the use of mailed questionnaires is that of accurately obtaining the kind of information desired. Information can be gathered to evaluate the clarity of the questions through personal interviews with respondents and non-respondents. The reliability of the instrument can be checked by comparing the verbal and written responses of the respondents and some information can be gathered from the non-respondents to see if they are widely divergent from or seem to have characteristics different from the respondents, which might have influenced them not to respond.

The pre-test of Schedule A and the cover letters was conducted during July and August, 1964. It used a sample of degree and non-degree alumni of Michigan State University who left the school during the 1958-1959 academic year, and whose addresses as listed in the Michigan State University Alumni Office were in the Lansing-East Lansing, Michigan, area.

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### Purpose of the Study

The two main purposes for the pre-test of the questionnaire and cover letters were:

1. to discover factors in the cover letters, questionnaire and sample that are related to non-response or to the response rate.
2. to investigate the effectiveness of the questionnaire items in obtaining valid and reliable answers.

### Definitions of Terms

The definitions of terms as operationalized in this study were:

1. mailed questionnaire - a set of questions sent to a person by way of first class mail.
2. format of questionnaire - the general physical appearance of the questionnaire. In this study the format was varied to include coding numbers and answer blanks in the right hand margin of half of the questionnaires and answer blanks in front of some questions and no data-coding numbers on the remaining half of the questionnaires.
3. cover letter - a letter enclosed with the questionnaire which serves as an introduction to the study and an appeal to respond.

4. follow-up letter - a letter sent to those who have not responded urging them to do so. A copy of the questionnaire may or may not be enclosed with this letter.
5. rate of response or response rate - usually indicated by the number or percent of completed questionnaires returned to the investigator in relation to a specific factor such as degree or non-degree alumni status.
6. wave of response or response wave - a division of the total responses into three categories according to when they were received by the investigator and whether the response appeared to be due to the first mailing, the first follow-up letter, or the second follow-up letter with enclosed questionnaire.
7. respondent - one who returned, by mail, a completed or filled-in questionnaire.
8. non-respondent - one who did not return, by mail, a completed questionnaire.

#### Assumptions

Two assumptions underlying this study were:

1. the rate of response may, to some extent, depend upon factors within the control of the investigator.



2. the effectiveness of the questionnaire in eliciting accurate answers may, to some extent, depend upon factors within the control of the investigator.

### Hypotheses

The hypotheses investigated in relation to the factors related to response rate were that:

1. the rate of response is not related to degree-sex status.
2. the rate of response is not related to degree or non-degree alumni status.
3. the rate of response is not related to sex.
4. the rate of response is not related to the format of the questionnaire.
5. the rate of response is not related to the salutation used in the cover letter.
6. the rate of response is not related to the type of appeal made in the cover letter.
7. the rate of response is not related to the type of method used in signing the cover letter.

## CHAPTER II

### REVIEW OF THE LITERATURE

Data collection through the use of mailed questionnaires usually must take into consideration that segment of the population who do not return the questionnaire. Various factors such as the sponsorship of the questionnaire; the attractiveness of the questionnaire format; the length of the questionnaire; the nature of the accompanying letter requesting cooperation; the ease of filling out the questionnaire and mailing it back; the inducements offered to reply; and the nature of the people to whom the questionnaire is sent<sup>1</sup> are thought to influence the percent of returns. Even though returns are likely to be increased by employing those factors which seem to influence response, there is usually a non-responding portion of the population. This non-responding portion of the population creates some sample bias which if large enough and if influential upon the significant areas of the study, may bias the results of the study. Different populations seem to vary as to what factors influence response and in the type and degree of bias introduced by the non-respondents. Therefore, it is important to make

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<sup>1</sup>Claire Selltiz et al., Research Methods in Social Relations (New York: Holt, Rinehart and Winston, Inc., 1963), p. 241.

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every attempt to increase responses and if possible, to discover some characteristics of the non-responding portion of the population so that some information as to the kind and direction of the bias might be acquired.

The literature concerning factors which influence response and techniques for maximizing returns as well as comparisons of characteristics which differentiate between early and late respondents, and between respondents and non-respondents shows varied and sometimes conflicting results.

From the results of their study Edgerton et al.<sup>2</sup> concluded that

intensive and vigorous follow-up is a basic tenet in mail questionnaire research. Otherwise, the tendency will be to obtain replies from those who have a special interest in the subject under study, or who exhibit some characteristic or characteristics different from the non-respondents or from the casual or indifferent respondents.

He found that in a mailed-questionnaire study of all male contestants in the First Annual Science Talent Search, the "winner" contestants made an almost perfect return of the questionnaire for each of three successive years. The "honorable mention" contestants made the next highest percent return while the "others" or "also ran" contestants had the lowest percent of return. Thus, he concluded that "interest in the subject under investigation or ties to the

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<sup>2</sup>Norman Edgerton, Harold A. Britt, Stewart Henderson, and Ralph Norman, "Objective Differences Among Various Types of Respondents to a Mailed Questionnaire," American Sociological Review, XII (October 1947), 435-444.

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questionnaire sponsor are related to high percentage of returns on the part of the respondents."

Stanton<sup>3</sup> came to the same conclusion when the findings in his study indicated that the results of a follow-up were at variance with the findings based on replies to the original mailing. This, he concluded, "suggests that the usual responding portion of the mail survey sample is not representative of the non-returning group."

In a study which was concerned with factors which influenced questionnaire returns from former university students, Pace<sup>4</sup> reported that the comparisons between total returns and non-returns indicated that

graduation from the university and number of quarters of university work completed were both important factors influencing returns; but factors of sex, age, and year of entrance to the university were relatively unimportant.

After making comparisons among the early returns, the late returns and the non-responding portion of the sample, he concluded that the following factors appeared to operate to produce a higher selection among questionnaire respondents than was true among the original sample selected for study; for both men and women, employment at the professional levels, jobs in the same field as university specialization, and job

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<sup>3</sup>Frank Stanton, "Notes on the Validity of Mail Questionnaire Returns," Journal of Applied Psychology, XXIII (June 1939), 95-104.

<sup>4</sup>Robert C. Pace, "Factors Influencing Questionnaire Returns From Former University Students," Journal of Applied Psychology, XXIII (June 1939), 388-397.

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satisfaction; for men, economic status; and for women, cultural status. Factors of income and general adjustment showed neither significant differences nor a consistent direction of differences.

In a study which investigated whether readers of a certain magazine traveled by regular commercial air lines, it was reported that when the second wave of responses were returned that the first wave had over-rated the number of fliers among the readers. Rollins<sup>5</sup> concluded that those who were more interested in flying are likely to answer first and that the second wave of response provided a truer picture of the total sample. In other respects, notably age and reasons for choosing different airlines, the two waves showed reasonably close similarities.

A study which involved 2,768 dues paying members of the League of Women Voters reported a 77.3% return after two successive follow-up mailings and a personal telephone call. The telephone call was designed to raise total response rate, to provide some information about the non-respondents, and to ask questions concerning the extent of the person's participation in the organization and reasons for non-response. Donald<sup>6</sup> reported that an "analysis of response

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<sup>5</sup>Malcolm Rollins, "The Practical Use of Repeated Questionnaire Waves," Journal of Applied Psychology, XXIV (1940), 770-772.

<sup>6</sup>Marjorie Donald, "Implications of Non-Response for the Interpretation of Mail Questionnaire Data," Public Opinion Quarterly, XXIV (1960), 99-114.

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according to the number of stimuli required to induce returns of the questionnaire indicated a significant relationship between response elicitation and member involvement in the organization." Those who had not responded were reported as having a tendency to criticize the questionnaire. The main criticisms of the questionnaire which were given by the non-respondents were that it was too long and complicated, not really anonymous and too personal. Being too busy with other responsibilities or simply not wanting to answer were other reasons given for non-response. The various waves of response and the telephone responses were analyzed in relation to demographic characteristics. She reported that there were "no clear demographic trends in the waves of response . . . and no sharp changes in the nature of the population of telephone responses."<sup>7</sup>

In a study reported by Kirchner and Mousley<sup>8</sup> which compared the job performance of respondent and non-respondent salesmen to an attitude survey, it was found that respondents did differ significantly from non-respondents in terms of sales points. They concluded that there are definite, although not necessarily consistent differences between respondents and non-respondents in terms of personality, demographic data and motivation.

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<sup>7</sup>Marjorie Donald, op. cit.

<sup>8</sup>Wayne K. Kirchner and Nancy Mousley, "A Note on Job Performance: Differences Between Respondent and Non-Respondent Salesmen to an Attitude Survey," Journal of Applied Psychology, XLVII (1963), 223-224.

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Baur<sup>9</sup> attributed bias to the difference in interest in the subject of the questionnaire. He reported that those without definite plans for education or training were under-represented in the early returns and over-represented in the late returns. The results of his study seemed to indicate that demographic characteristics, such as age and having or not having children did not show a bias in time of responding.

Suchman and McCandless<sup>10</sup> reported that questionnaires were returned in a directly decreasing ratio to familiarity with the topic under investigation and education of the respondent, in a study concerning listening or not listening to a child training program broadcast. One follow-up was used and they reported that the use of the follow-up technique decreased the bias in the answering portion of the sample, and permitted an inference as to the direction in which the bias was operating plus increasing the total response.

In a study which showed an unusually high rate of return,<sup>11</sup> over 90%, the reasons for the high return were reported as being that the subject of the questionnaire was

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<sup>9</sup>Jackson E. Baur, "Response Bias In a Mail Survey," Public Opinion Quarterly, IX (1947), 594-600.

<sup>10</sup>Edward A. Suchman and Boyd McCandless, "Who Answers Questionnaires," Journal of Applied Psychology, XXIV (1940) 758-769.

<sup>11</sup>Norman Tallent and William J. Reiss, "A Note on an Unusually High Rate of Returns for a Mail Questionnaire," Public Opinion Quarterly, XXIII (1959), 579-581.

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in an area in which the sample members demonstrated much professional concern and that the sample members were identified with the sponsoring agency. Other factors related to the high response were reported as being the cover letter which was printed and addressed personally to the potential respondent and the enclosure of a self-addressed, postage-free return envelope.

Ruess<sup>12</sup> summarizes the findings of a study by concluding that

the intelligence of the questionnaire recipient, his qualities of purposefulness and initiative, his loyalty or the strength of his ties attaching him to the institution or individual sponsoring the questionnaire, and a rural background seem to be factors favorably influencing questionnaire response.

In a study of sophomore nursing students that compared personality characteristics of respondents and non-respondents<sup>13</sup> it was demonstrated that personality factors are a class of variables which operate to influence the act of responding.

Sletto<sup>14</sup> conducted a study in which questionnaire techniques were the subject of the investigation. His

<sup>12</sup>Carl S. Ruess, "Difference Between Persons Responding and Not Responding to a Mailed Questionnaire," American Sociological Review, VIII (1943), 433-438.

<sup>13</sup>Bernard Lubin, Eugene E. Levitt and Marvin Zuckerman, "Some Personality Differences Between Responders and Non-Responders to a Survey Questionnaire," Journal of Consulting Psychology, XXVI (1962), 192.

<sup>14</sup>Raymond Sletto, "Pretesting of Questionnaires," American Sociological Review, V (April 1940), 193-200.

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reason for this study was that "for most of the decisions to be made in the construction and use of the questionnaire there is no tested body of knowledge to guide the investigator in his choice." One of the problems he explored was the effect of the length of a questionnaire on the proportion of returns. His results after testing a 10 and 25 page questionnaire with 300 former university students suggest that the factor of questionnaire length is less important than it has generally been assumed to be insofar as proportion of returns is concerned. A second problem investigated, using the same sample, involved the influence of the nature of the appeals employed upon returns. Three different letters were prepared and each directed its appeal to different reasons for response. The letters received a 67%, 64% and 60% response and the letter receiving the highest percent return was used in the final study. About this selection he reports,

the difference in the proportion of returns yielded by the three letters are not large enough to yield critical ratios that are statistically significant according to conventional standards. The superiority of the first letter in producing returns was, nevertheless, consistently maintained throughout the time period of the returns. Since pretesting of questionnaires will normally involve small numbers of cases, we must expect most "true" differences to yield small critical ratios.

The third problem Sletto investigated using the same sample group was whether postal cards would be as effective as letters in producing returns in the first follow-up mailing. He reported the number of returns to the postal card and the

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letter as identical and thus concluded that postal cards were as effective as letters in return of the questionnaire in the first follow-up mailing.

In a study by Pace<sup>15</sup> the practice of comparing the early and late returns as a means of trying to discover the nature and scope of bias was investigated. He notes that this comparison assumes that the late returns are more nearly like the non-returns than are the early returns. Pace concludes that this method of comparison is not sufficiently sensitive to indicate the extent of bias, but that it does provide a simple tool for determining the probable direction of bias and could be used in judging the representativeness of returns.

Baur<sup>16</sup> pointed out the danger of the assumption commonly made that the non-respondents are like the slowest respondents. The results of his study showed that the educational level of the non-respondents was most like that of the tardiest respondent, but that other factors such as marital status was most like that of those who responded quickly.

Edgerton et al.<sup>17</sup> reported that people who reply to a questionnaire, at least without much subsequent urging, are different from those who do not reply, and that those who reply with urging differ from those who reply without

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<sup>15</sup>Robert C. Pace, op. cit., XXIII, 391.

<sup>16</sup>Jackson E. Baur, op. cit., IX, 600.

<sup>17</sup>Norman Edgerton et al., op. cit., XII, 436.

reminder, as well as from those who do not reply at all.

In a recent study<sup>18</sup> in which 2,497 questionnaires were mailed and which yielded a 48% return a 10% random subsample of respondents and non-respondents were selected for interviews. Of those selected for interview 137 had not answered the questionnaire and 122 had responded. This study investigated whether or not data collected by means of the mailed questionnaire technique can be considered representative of the universe of inquiry despite the limitation of the partial returns. The principal finding concerning methodology suggested that the data showed no statistically significant differences between the mailed questionnaire and the structured interview with respect to identical questions. The results suggested that the mail questionnaire may reveal representative responses in spite of the partial return from the sample of the universe selected. There were no significant differences between the responses of the mailed questionnaire and those of the interviewed respondents who had not answered the questionnaire.

Lundberg and Larsen<sup>19</sup> in an attempt to find out the amount of bias resulting from the hard-to-reach portion of the population used an interview procedure. They reported

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<sup>18</sup>Edward D. McDonagh and A. Leon Rosenblum, "A Comparison of Mailed Questionnaire and Subsequent Structured Interviews," Public Opinion Quarterly, XXIV (1964), 131-136.

<sup>19</sup>George A. Lundberg and Otto N. Larsen, "Characteristics of Hard-to-Reach Individuals in Field Surveys," Public Opinion Quarterly, XIII (1949), 487-494.

that the personal characteristics and responses of the hard-to-reach were not markedly different from those of the main group interviewed.

The findings of research concerning the mailed questionnaire as a methodological problem in itself or as a method of data collection in survey research have indicated that factors within the questionnaire, cover letters, mailing methodology and characteristics of the sample members seem to have an influence upon response or non-response to the questionnaire. The nature and extent of bias resulting from non-response has been studied by comparing characteristics of respondents, non-respondents, early respondents and late respondents. Some studies have reported that respondents were found to have different characteristics than non-respondents while other studies have reported that respondents and non-respondents did not seem to differ in relation to the characteristics studied. Some studies have reported differences between early and late respondents, while others have not. Further research is needed so that factors which influence response can be delineated and so that the effects of late responses or non-response upon the representativeness of the sample and upon the findings of a study can be determined and perhaps minimized by invoking responses from the hard-to-reach portion of the sample and increasing total returns.

## CHAPTER III

### METHODOLOGY

#### Instruments

##### Questionnaires

Two forms of the four page questionnaire were developed. The questions on each form had the same wording and occurred in the same sequence. The general physical appearance of the questionnaire was varied by the inclusion of data coding numbers and some of the answer blanks in the right-hand column of Questionnaire 1, the pre-coded form. The data coding numbers were omitted on Questionnaire 2, the non-coded form, and some of the answer blanks were on the left hand side of the page in front of the question (Appendix I, Questionnaire 1 and Questionnaire 2, p. 63). The inclusion of data coding numbers would facilitate the transfer of data from the questionnaire to punch cards; similarly the shifting of lines for the answers from the left side preceding the question to the right hand side of the page between the question and data coding numbers would aid in the transfer of the data.

##### Letters

Three cover letters were written using different salutations, types of appeal and methods of signing



(Appendix II, Cover Letter 1, Cover Letter 2 and Cover Letter 3, p. 72).

Cover Letter 1 with the salutation Dear Fellow Spartan, asked the person to provide information which would help others in making an important decision. The signature was mimeographed.

The salutation on Cover Letter 2 had the name of the person typed in and the appeal was slanted toward the helpfulness of the Alumni to the University and a concern about the influence of undergraduate marriage on the family. The signatures were hand written in ink.

Cover Letter 3 used the salutation Dear Alumnus, and made an appeal to the alumni status of the person and his ability to aid the university through participation in its research. The signatures were hand written in ink.

The same method of affixing the signatures was used on Cover Letters 2 and 3 because of difficulties involved in duplication processes.

#### Letter and Questionnaire Combinations

The two forms of the questionnaire and the three cover letters were combined to form the following six combinations.

1. Cover Letter 1 with Questionnaire 1
2. Cover Letter 2 with Questionnaire 1
3. Cover Letter 3 with Questionnaire 1
4. Cover Letter 1 with Questionnaire 2

5. Cover Letter 2 with Questionnaire 2
6. Cover Letter 3 with Questionnaire 2.

### Follow-Up Letters

The Follow-Up Letters 1 and 2 were designed to be a brief reminder to the non-respondent about the questionnaire and asked him to respond (Appendix II, Follow-Up 1, Letter 1 and Letter 2, p. 76). The salutation of Dear Fellow Spartan was dropped from use, but Dear Alumnus and Dear (name typed in) were retained. The type of salutation mailed to the non-respondents was the same as that mailed the first time except for those non-respondents who had received Dear Fellow Spartan letters. Half of the non-respondents who had received this salutation were mailed a letter with the Dear Alumnus salutation and the other half were mailed a letter with the Dear (name typed in) salutation. Although the bodies of the two letters were slightly different, they were not considered to have different types of appeal. Signatures were hand written in ink on all letters mailed in Follow-Up 1.

The Follow-Up 2 letters used the salutation Dear (name typed in) and were mailed to all non-respondents (Appendix II, Follow-Up 2 Letter, p. 78). This letter made an appeal to respond, gave further explanation of the study, and gave information about the sample selected and about who the desired respondents were. Signatures were hand written in ink and "Thanks for Your Help" was hand written with ink at the bottom of each letter.

### Interview Schedule

The interview schedule (Appendix III, p. 79) contained the same questions as did the questionnaire, but the questions were re-phrased, in some cases, for the oral inquiry. The same questions were included so that the verbal response could be compared with the written response of those who had responded and so that some information could be gained from the non-respondents. Additional questions were included with respect to why the person did or did not respond and whether or not certain factors such as format, type of salutation, type of signature or type of appeal had any special significance in influencing them. Other appropriate questions were added by the interviewer to obtain additional information or clarification if this seemed desirable.

### Sample

A list of 414 names and addresses of 1958-1959 Alumni of Michigan State University whose addresses were listed as being in the Lansing or East Lansing area was obtained from the Regional File in the Michigan State University Alumni Office. The names of Michigan State University Faculty, as could be determined by use of the 1963-1964 Faculty Telephone Directory and those whose address was listed as being in university operated housing were dropped from the list. This selection was made in an effort to

reduce some sample bias which might result from the use of an area close to the University and would thus make the sample somewhat more similar to that to be used in the future study.

The names were then divided according to sex and whether or not the person had received a Bachelors degree from Michigan State University during the 1958-1959 academic year. The names of those listed as withdrawn during the 1958-1959 academic year were considered as not having received a Bachelors degree from Michigan State University during that year. The split-plot design resulted in the following four sample categories:

1. degree received; male
2. degree received; female
3. no degree received; male
4. no degree received; female.

A table of random numbers was used to select a sample of names from the degree received male and degree received female lists. All of the names that were available for the no degree received male and the no degree received female categories were used. This resulted in a purposive, non-random sample of 156, 1958-1959 Alumni of Michigan State University whose addresses were listed as being in the Lansing-East Lansing, Michigan area in the Regional File of the Michigan State University Alumni Office and who were not listed in the 1963-1964 Faculty Telephone Directory or as

living in University operated housing. The 156 names were distributed among the degree-sex categories as follows:

<u>Category</u>	<u>Number</u>
Degree received; male . . . . .	60
Degree received; female . . . . .	60
No degree received; male . . . . .	13
No degree received; female . . . . .	<u>23</u>
Total . . . . .	156

### Collection of Data

#### Cover Letters and Questionnaires

The six combinations of cover letters and questionnaire forms were randomly assigned to the names in each of the degree-sex categories as listed in Table 1. After these combinations were assigned, a three digit code number was placed on two pages of the questionnaire for identification purposes. The first digit indicated the degree-sex category, the second digit the combination of cover letter and questionnaire mailed, and the third digit the person's number within the letter-questionnaire combination.

The cover letters, questionnaires and a self-addressed stamped envelope were mailed to the 156 members of the sample on July 6, 1964 and a record of the response received according to the date returned and number of the questionnaire was compiled.

TABLE 1. Assignment of Letter and Questionnaire Form Combinations to the Degree-Sex Categories

Degree Received Male		No.	Degree Received Female		No.
Letter 1; Question. 1	10	10	Letter 1; Question. 1	10	10
Letter 2; Question. 1	10	10	Letter 2; Question. 1	10	10
Letter 3; Question. 1	10	10	Letter 3; Question. 1	10	10
Letter 1; Question. 2	10	10	Letter 1; Question. 2	10	10
Letter 2; Question. 2	10	10	Letter 2; Question. 2	10	10
Letter 3; Question. 2	<u>10</u>	<u>10</u>	Letter 3; Question. 2	<u>10</u>	<u>10</u>
Total	60	60	Total	60	60
No Degree Received Male		No.	No Degree Received Female		No.
Letter 1; Question. 1	2	2	Letter 1; Question. 1	4	4
Letter 2; Question. 1	2	2	Letter 2; Question. 1	4	4
Letter 3; Question. 1	3	3	Letter 3; Question. 1	3	3
Letter 1; Question. 2	2	2	Letter 1; Question. 2	4	4
Letter 2; Question. 2	2	2	Letter 2; Question. 2	4	4
Letter 3; Question. 2	<u>2</u>	<u>2</u>	Letter 3; Question. 2	<u>4</u>	<u>4</u>
Total	13	13	Total	23	23

Follow-up 1 was mailed on July 15, 1964 to all those who had not responded by that date.

Follow-up 2 consisted of the Follow-up 2 letter, another copy of the questionnaire of the same type as was

mailed in the first mailing and another stamped self-addressed envelope. These were mailed on July 23, 1964 to all those from whom responses had not been received.

The dates for the follow-up mailings were chosen as the study was conducted so that when responses decreased rapidly the follow-up could be sent and considered to be a salient influencing agent of those responses received after a two day waiting period. The two day waiting period would allow time for delivery to the investigator of any replies mailed before the follow-up have been received by the sample members, but yet, not enough time for the follow-up to have been received and the questionnaire returned.

The responses received from July 8, 1964 to July 17, 1964 are considered to be due to the first mailing of the cover letter and questionnaire and are classed in Response Wave I. Follow-up 1 was mailed on July 15, 1964 but only those replies received between July 17, 1964 and July 25, 1964 are considered to be due to this mailing or to the cumulative effect of both mailings and are classed in Response Wave II. Follow-up 2 consisting of a cover letter, questionnaire and stamped return envelope was mailed on July 23, 1964 and those responses received from July 25, 1964 to August 13, 1964 are considered to be due to this mailing or to the cumulative effect of the three mailings and are classed in Response Wave III.

### Interview

The sample of individuals to be contacted for an interview was selected on August 13, 1964 and interviews were conducted from August 13 to September 4, 1964. One respondent and one non-respondent were selected at random from each of the six cover letter-questionnaire combination groups for both the degree received male and female categories. In the no degree received male category all of the non-respondents were selected for interviews, while a random sample of half of the respondents were selected. A random sample of five of the respondents in the no degree received female category and all of the non-respondents were selected for interviews.

Telephone numbers for about half of the sample were found in the 1964 Lansing-East Lansing Telephone Directory. Those individuals for whom a telephone number was available were contacted by telephone and interviewed over the telephone. For the other half of the interview sample, the interviewer went to the address to which the letter had been mailed and requested a personal interview. The same interview schedule (Appendix III, p. 79) was used for the telephone and personal contact interviews.

Repeated telephone calls were made until the person could be contacted or until someone at the number answered and reported that the person could not be contacted there



because he had moved and no longer lived there. The interviewer went to the address a total of six times on different days and at different times during the day before deciding the person could not be contacted. If someone answered the door and reported that the person requested did not live there an attempt was made to discover where the person lived and what had happened to the letters that had been sent to the person at that address.

The responses were recorded by the interviewer on the interview schedule while the interview was being conducted.

## CHAPTER IV

### RESULTS

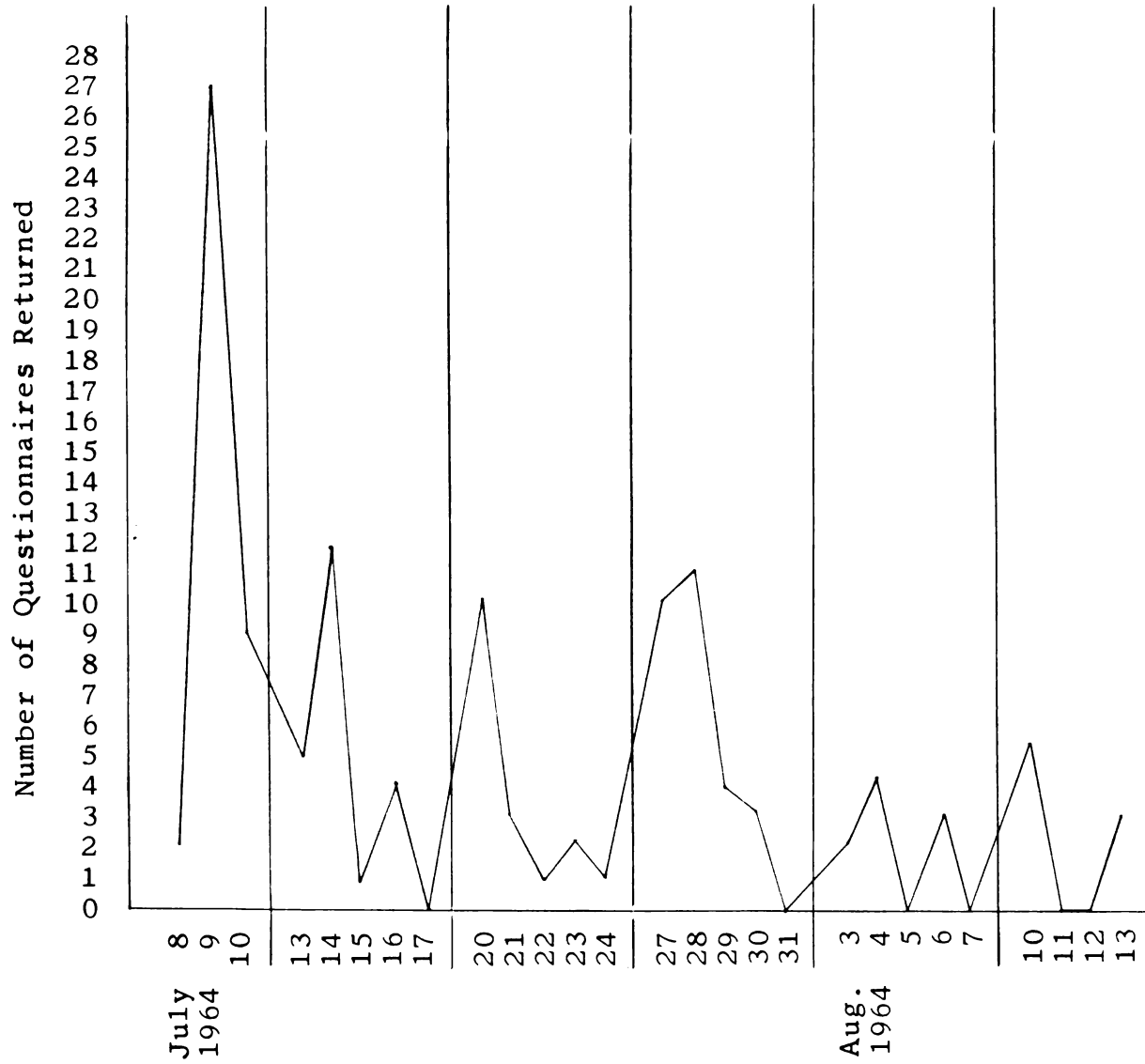
#### Mailed Questionnaire

Responses to the mailed questionnaire were analyzed according to the number of questionnaires returned each day and according to the number and percent of questionnaires returned during each of three designated response waves. This analysis was designed to indicate the magnitude of response within designated time spans and to show fluctuations in response rate over several time spans in relation to selected characteristics of the sample and in relation to selected characteristics of the letters and questionnaires mailed.

#### Daily Response Rate

Graph 1 indicates the number of questionnaires returned on weekdays from July 8, 1964, to August 13, 1964. The largest number of questionnaires returned on any one day occurred on July 9, three days after the initial mailing. Mailing II occurred on July 15 and its influence was observed by July 20. Mailing III occurred on July 23 and its influence was noted in responses received from July 25 to August 13. Each mailing was followed by an increase in the number of responses.

Graph 1. Daily Response Rate for Mailed Questionnaire



However, another influence seems to have been present in relation to the number of questionnaires returned. From July 13 to August 13 three days each week show larger numbers of responses than other days. The highest number of returns were received on Monday or Tuesday of each week. Returns declined on Wednesday, and a second peak of responses occurred on Thursday in all but one week, with a decline again on Friday. How many responses on July 20 and July 27 and 28 were due to the urges to respond and how many were due to people taking time over the weekend to answer, mail, and fill in the questionnaire is not known. The general pattern of response seems to indicate that the larger number of returns came during the beginning of the week on Monday or Tuesday. Therefore, it would seem advisable to time the mailing of a questionnaire so that it would be received before the weekend, and thus provide a stimulus to respond as close as possible to the time when the response will generally take place.

#### Response by Degree-Sex Categories

Questionnaires were mailed to a sample of 156 individuals. A total of 122 questionnaires were filled-in and returned yielding a 78% response. The largest number of responses were received during Wave I and the smallest number of responses were received during Wave II. Wave III showed an increase in the number of responses over Wave II but was less than Wave I (Table 2).

TABLE 2. Respondents to Questionnaire in Degree-Sex Categories Over Three Waves of Response

Category	No. Mailed	Wave I No. Ret.	Wave II No. Ret.	Wave III No. Ret.	Total No. Ret.	% Return
Degree received; male	60	24	6	19	49	82
Degree received; female	60	25	5	14	44	73
No degree received; male	13	1	2	5	8	62
No degree received; female	23	10	4	7	21	91
Total	156	60	17	45	122	78

The responses in the degree-sex categories followed the same pattern of high response in Wave I, a decrease in response during Wave II and an increase in response during Wave III, except for the no degree received male category. This group exhibited a small increase in responses from Wave I to Wave II and a larger increase from Wave II to Wave III.

The highest percent return occurred in the no degree received female category with a final percent return of 91%. The no degree received male category exhibited the lowest percent return.

By the end of Wave II the total cumulative number of respondents was 77 which is almost half of the sample (Table 3). In the degree-sex categories half (50%) of the individuals in the degree received male and degree received female categories had responded by the end of Wave II whereas in the no degree received male category 23% had responded and 61% had responded in the no degree received female category.

TABLE 3. Cumulative Number and Percent\* of Respondents in Degree-Sex Categories Over Three Waves of Response

Category	No. Mailed	Wave I		Wave II		Wave III	
		No. Ret.	%	Cum. No. Ret.	Cum.* %	Cum. No. Ret.	Cum.* %
Degree received; male	60	24	40	30	50	49	82
Degree received; female	60	25	42	30	50	44	73
No degree received; male	13	1	8	3	23	8	62
No degree received; female	23	10	43	14	61	21	91
<b>Total</b>	<b>156</b>	<b>60</b>	<b>38</b>	<b>77</b>	<b>49</b>	<b>122</b>	<b>78</b>

\*Percent based on number of questionnaires in initial mailing.

Although the degree received male and female categories had an equal number and percent return at the end of Wave II, at the end of Wave III the degree received male category had returned five more questionnaires than had the degree received female category giving the degree received male category the higher response.

The cumulative percent return in each response wave for the no degree received female category is consistently higher than for any of the other categories and thus showed an earlier response and a larger percent response (Table 3).

The increase in response in the no degree received male category from Wave II to Wave III is 39%, the largest increase among the degree-sex categories between these two waves of response (Table 3).

Table 4 is included so that each wave of response can be examined separately in terms of number of questionnaires mailed at the beginning of each wave, the number of questionnaires returned during each wave and the percent return in each wave in each of the degree-sex categories. In Wave I the percent return is about the same in all degree-sex categories except for the no degree received male category which shows the lowest percent return. In Wave II the pattern changes and a fairly even percent return occurred among all groups except the degree received female category which shows the lowest percent return and in the no degree received female category which shows the highest percent

return. The no degree received female category continued to have the highest percent response in Wave III.

Wave III differs from the other waves in that about half or more of those who had not responded up to that time did respond during that wave. The percent return during Wave III is higher in all degree-sex categories than in any of the other response wave (Table 4).

TABLE 4. Number and Percent\* of Respondents in Degree-Sex Categories According to Number of Questionnaires Mailed Before Each Response Wave

Category	Wave I			Wave II			Wave III		
	Number Mailed	Number Returned	% Returned*	Number Mailed	Number Returned	% Returned*	Number Mailed	Number Returned	% Returned*
Degree received; male	60	24	40	36	6	17	30	19	63
Degree received; female	60	25	42	35	5	14	30	14	47
No degree received; male	13	1	8	12	2	17	10	5	50
No degree received; female	23	10	43	13	4	31	9	7	78
Total	156	60	38	96	17	18	79	45	57

\*Percent based on the number of letters and/or letter questionnaire combinations mailed immediately before each response wave.



Of the 122 respondents almost half of them had responded by the end of Wave I. The responses in Wave II accounted for only 14% of the total responses and a total of 63% of the respondents had responded by this time. During Wave III, 37% of the total responses were received. The pattern of largest percent response, lowest percent response and then an increase in percent response is evident in all categories except the no degree received male category. This category exhibited a consistent increase in percent response and differs from the other groups in that in Wave III over half of total responses for this group were received, while about one-third of the total responses for the other groups were received in this wave (Table 5).

TABLE 5. Percent of Total Respondents for Each Degree-Sex Category Responding in One of Three Waves of Response

	Total No. Ret.	Wave I % Ret.	Wave II % Ret.	Wave III % Ret.	Total %
Degree received; male	49	49	12	39	100
Degree received; female	44	57	11	32	100
No degree received; male	8	13	25	62	100
No degree received; female	21	48	19	33	100
Total Respond.	122	49	14	37	100

Response in Degree Status  
Categories

The final percent return at the end of Wave III for the degree received category and no degree received category was about equal. In Wave I, the degree received category had a higher percent return, but by Wave II the cumulative percent return was almost the same (Table 6).

TABLE 6. Respondents to Questionnaire in Degree Status Categories Over Three Waves of Response

Category	Wave I			Wave II			Wave III		
	Number Mailed	No. Returned	% Returned	No. Returned	Cum. No. Ret.	Cum. % Ret.*	No. Returned	Cum. No. Ret.	Cum. % Ret.*
Degree received	120	49	41	11	60	50	33	93	78
No degree received	36	11	31	6	17	47	12	29	81
Total	156	60	38	17	77	49	45	122	78

\* Percent based on number of questionnaires in initial mailing.

Thus, degree status seemed to have little influence upon the final percent return and the rate of response over the three waves varied slightly between the two groups.

The pattern of response shown in Table 7 is based on the number of letters or letter questionnaire combinations mailed immediately before each response wave.

TABLE 7. Number and Percent\* of Respondents in Degree Status Categories According to Number of Questionnaires Mailed Before Each Response Wave

	Wave I			Wave II			Wave III		
	Number Mailed	Number Returned	% Ret.*	Number Mailed	Number Returned	% Ret.*	Number Mailed	Number Returned	% Ret.*
Degree received	120	49	41	71	11	15	60	33	55
No degree received	36	11	31	25	6	24	19	12	63
Total	156	60	38	96	17	18	79	45	57

\*Percent based on the number of letters or letter questionnaire combinations mailed immediately before each response wave.

During Wave I a higher percent return for the degree received category was exhibited while in Wave II the no degree received category had a higher percent return. This latter trend carried over into Wave III with a 63% return in the no degree received category and a 55% return in the degree received category. The continued urgings seemed to have a somewhat

greater influence upon the individuals in the no degree received category than in the degree received category (Table 7).

#### Response in Sex Categories

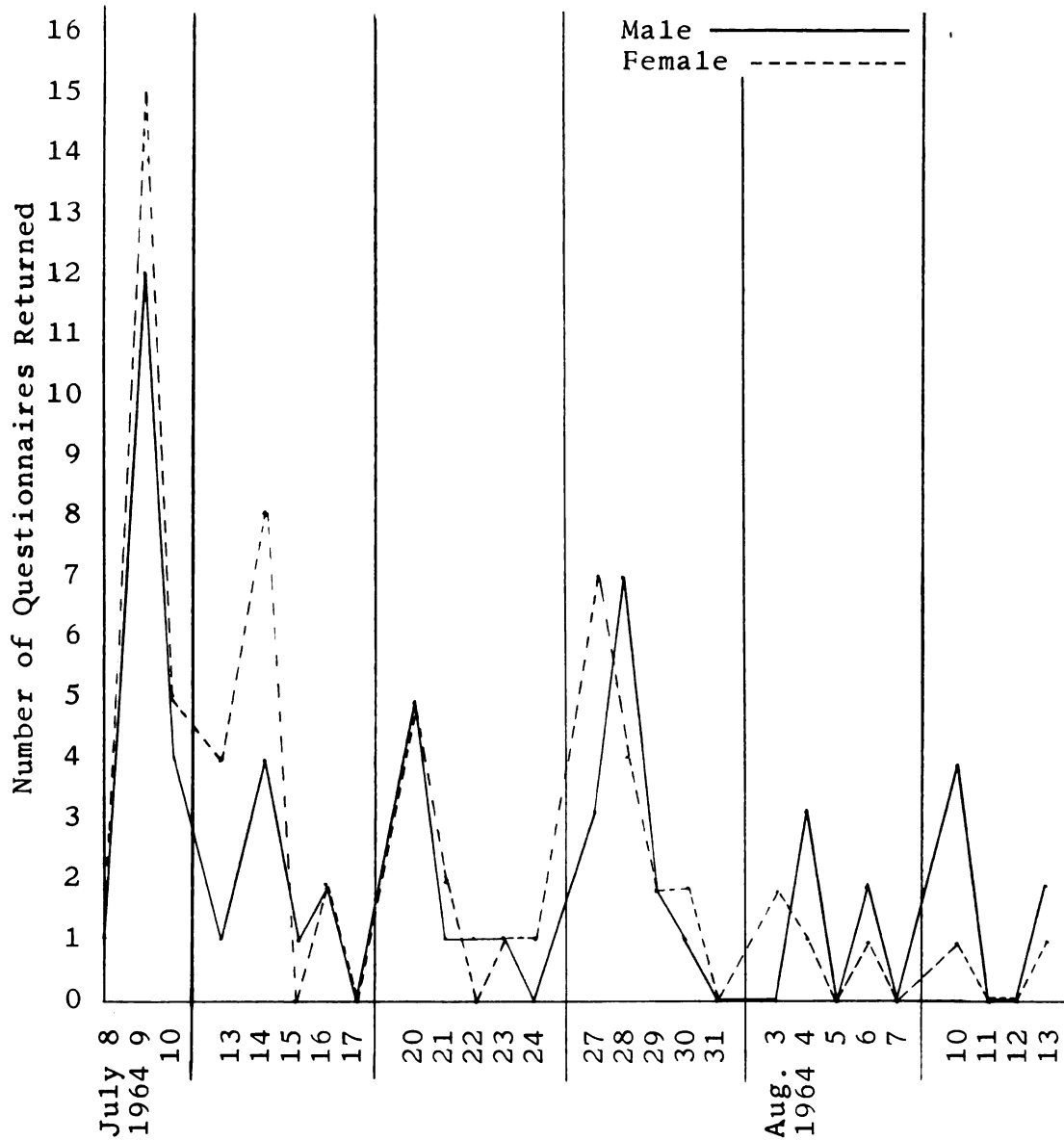
The daily response rate followed the same general pattern for the male and female categories. Both groups exhibited increases and declines in response on or near the same day (Graph 2).

The final percent return at the end of Wave III was 78% in both the male and female categories (Table 8). This seems to indicate that percent return is not related to the sex of the individuals asked to respond.

TABLE 8. Respondents to Questionnaire in Sex Categories Over Three Waves of Responses

Category	Wave I			Wave II			Wave III		
	Number Mailed	No. Ret.	% Ret.	Number Returned	Cum. No. Returned	% Ret.	Number Returned	Cum. No. Returned	% Ret.
Male	73	25	34	8	33	45	24	57	78
Female	83	35	42	9	44	53	21	65	78
Total	156	60	39	17	77	49	45	122	78

Graph 2. Daily Response Rate in Relation to the Sex of the Respondent\*



\*The number mailed in each category was different;  
male = 73, female = 83.

Of the total respondents to the questionnaire 10% more women than men responded in Wave I. Fourteen percent of the total responses for both groups were returned in Wave II. Forty-two percent of the men who responded did so during Wave III, while 32% of the women who responded did so during that wave (Table 9).

TABLE 9. Percent of Total Respondents in Each Sex Category Responding in Each of Three Waves of Response

	Total Number Returned	Wave I % of Return	Wave II % of Return	Wave III % of Return	Total
Male	57	44	14	42	100
Female	65	54	14	32	100
Total Res.	122	49	14	37	100

#### Respondents in Questionnaire Format Categories

Questionnaire 1 had the blanks for recording answers at the end of the questions followed by data coding numbers. Questionnaire 2 did not have any coding numbers and the answer blanks were placed in front of the questions where appropriate.

The cumulative percent return at the end of Wave III was 77% for Questionnaire 1 and 79% for Questionnaire 2. The cumulative percent return in each wave varied from two

to four percent between the two questionnaires. The small differences exhibited in total percent return and response rate over the three waves seemed to indicate that different questionnaire formats did not have different effects upon response (Table 10).

TABLE 10. Respondents in Questionnaire Format Categories Over Three Waves of Response

	Wave I			Wave II			Wave III		
	Number Mailed	Number Ret.	% Ret.	Number Ret.	Cum. No. Ret.	% Cum. Ret.	Number Ret.	Cum. No. Ret.	% Cum. Ret.
Questionnaire 1	78	31	40	6	37	47	23	60	77
Questionnaire 2	78	29	37	11	40	51	22	62	79
Total	156	60	38	17	77	49	45	122	78

Respondents in Relation to Letter Salutation and Letter Appeal Categories

Three different cover letters which varied in the type of salutation used and the type of appeal used to urge people to respond were mailed at the beginning of Wave I.

Of the 52 individuals who had been mailed the Dear Alumnus letter with the questionnaire enclosed, 23 responded, while 17 of the 52 who had been mailed the Dear (name typed in) letter responded in Wave I. This resulted in a 11%

difference in response for the two groups. Twenty individuals or 38% of those who received the Dear Fellow Spartan letter responded. This percent response was 6% less than that for the Dear Alumnus letter and 5% more than that for the Dear (name typed in) letter (Table 11).

TABLE 11. Respondents to Questionnaire in Letter Salutation and Letter Appeal Categories for Response Wave I

Letter Salutation and Letter Appeal Categories	No. Mailed	No. Ret.	% Ret.
1. Dear Fellow Spartan; information which would help others make an important decision	52	20	38
2. Dear (name typed in); helpfulness of Alumni and concern about undergraduate marriages	52	17	33
3. Dear Alumnus; alumni status and their ability to aid university in its research	52	23	44
Total	156	60	38

In the letters mailed at the beginning of Wave II, the letter salutations were varied and the letter appeals were essentially the same (Table 12).



TABLE 12. Respondents to Questionnaire in Letter Salutation Categories in Wave II

Category	Wave II		
	Number Mailed	Number Returned	% Return
1. Dear (name typed in)	52	9	17
2. Dear Alumnus	44	8	18
Total	96	17	18

The percent return was almost the same for each group, Dear (name typed in) received 17% return and the Dear Alumnus category received an 18% return in relation to the number of letters mailed at the beginning of Wave II (Table 12).

The Dear (name typed in) salutation was used on all letters mailed at the beginning of Wave III and the appeal was the same for all the letters but varied from the other appeals in the previous mailings in that it gave more information about the type of sample selected and who the desired respondents were. Wave III exhibited an increase in returns over Wave II (Tables 2 and 3) and accounted for 37% of the total responses (Table 5). It is not known if this increase in response is due to the type of appeal used, the enclosure of another copy of the questionnaire with this letter, the hand written in ink "thanks for your help" note at the

bottom of each letter or to the cumulative influence of the continued urgings to respond.

Responses in Relation to Signatures  
Used

Different methods of affixing the signature on the letters were used in Wave I.

The percent return at the end of Wave I for the mimeographed method and the hand written in ink method of affixing signatures to the letters were the same (Table 13).

Difficulty with various duplication processes made it necessary to have an unequal number of letters mailed with each type of signature in Wave I and this portion of the study was abandoned in Waves II and III. In these two waves the signatures were hand written in ink.

TABLE 13. Respondents to Questionnaire in Signature Categories for Response Wave I

Category	Number Mailed	Number Returned	% Return
Mimeographed signature	52	20	38
Hand written ink signature	104	40	38
Total	156	60	38

Interview Results

Twenty-one of the individuals selected for interviews had responded to the questionnaire and 19 had not. Of the total group, 25, or 63% were contacted and asked for an interview. Fifteen or 37% could not be contacted (Table 14).

TABLE 14. Success of Attempts to Contact People for an Interview by Degree-Sex Categories of Respondents and Non-Respondents

Category	Number Attempted	Number Contacted	Number Not Contacted
<u>Respondents:</u>			
Degree received; male	6	4	2
Degree received; female	6	6	0
No degree received; male	4	2	2
No degree received; female	5	5	0
<b>Total Respondents</b>	<b>21</b>	<b>17</b>	<b>4</b>
<u>Non-Respondents:</u>			
Degree received; male	6	3	3
Degree received; female	6	2	4
No degree received; male	5	3	2
No degree received; female	2	0	2
<b>Total Non-Respondents</b>	<b>19</b>	<b>8</b>	<b>11</b>
<b>Total Respondents and Non-Respondents</b>	<b>40</b>	<b>25</b>	<b>15</b>

Over half of the non-respondents could not be contacted at the address to which the letters had been mailed. Nine of the 11 were reported as having moved and not living at that address when the interviewer called on the telephone or went to the address. All the people reporting this information also reported having received letters addressed to the person from the Department of Home Management and Child Development. Answers to the inquiry of what happened to the letters fell into one of the following categories of:

1. had not forwarded the mail yet.
2. did not know a forwarding address and ignored the mail.
3. threw all the mail from the university and advertisers away and forwarded the rest.
4. were saving the mail to take with them when they went to visit the person or when the person came to visit them.

Thus, 11 or 7% of the total number of 156 letters and questionnaires mailed in the first mailing had not reached the individuals by August 13, 1964, nor had they been returned to the sender.

One of the non-respondents in the degree received female category reported never having received the questionnaire or the follow-up letters. She reported having moved recently and the mail must not have been forwarded.

Those who had responded to the questionnaire but could not be contacted for an interview were reported as being either at a military summer camp or as having moved within the preceding two weeks to another area in Michigan or to another state.

Of the twenty-five people contacted and asked for an interview, 22 agreed and 3 refused. Of the 22 people who were interviewed, 16 had responded and 6 had not responded to the questionnaire.

All of those interviewed reported accurately as to whether or not they had responded and when they had responded in relation to materials that had been mailed to them. The main reasons for responding to the questionnaire were reported as being one of the following:

1. it was connected with the university and I usually try to answer things sent from the university.
2. the study sounded interesting and important.
3. wanted to help in the study.
4. kept getting letters so finally decided to respond.
5. the third letter (Follow-up 2 Letter) explained more about the study and had another questionnaire enclosed.

The questions reported as being misunderstood by four or more of the people who had responded were those related to spouse's education (questions 6b and 9d and e). Several people reported that it was hard for them to answer accurately the question about the amount of support they had received from various sources when they were undergraduates (question 7). All of the people interviewed commented on the number of questions about previous marriages and most of them indicated that they thought one question about it would be enough to take care of most cases.

When the answers given during the interviews were checked against the answers on the written questionnaire some differences were found. The largest number of differences occurred in questions which asked for dates such as, the years in college, year of marriage, and year of child's birth. Some of these year differences would have changed the answer the person would give to whether or not he was married as an undergraduate, but in only one case was the answer to this question different in the oral response than in the written response.

The misunderstandings on the questions about the wife's education resulted in an incorrect response on the written questionnaire in three cases.

Although some people reported having difficulty accurately stating the amount of support they had received from various sources there was only one amount reported

differently orally than in the written response.

The answers reported by the non-respondents did not differ from those received by the respondents except that there were three single people in the non-responding interview and only one in the responding interview sample.

Those who had not responded to the questionnaire reported the following reasons for non-response:

1. didn't think it was very important.
2. thought it was only for people who were married or had been married as undergraduates.
3. the questions were too personal.
4. had just arrived home the day before and hadn't had time to return the questionnaire.

The main difference between the responding and non-responding portion of the sample was that more of the non-respondents had not received their letters and could not be contacted for interview than the respondents.

#### Limitations of the Study

The unavailability of names of those people who had left the University during the 1958-1959 academic year without receiving a Bachelors degree limited the comparisons which could be made between the various categories. The no degree received male category was so small that any conclusion drawn about this group must be highly tentative.

The use of a purposive non-random sample limits the applicability of the generalizations drawn to only the group studied and does not allow for the generalization of these findings to other populations.

Testing of the relation of different methods of affixing the signature to the letter was dropped at the end of Wave I, due to duplication problems. Therefore, this hypothesis was not thoroughly tested over the various waves of response.

During the process of contacting people for an interview it was discovered that out of the 40 people selected, 11 had not received their questionnaires. How many other members of the original sample did not receive their questionnaires is not known, but at least 7% had not received their questionnaires, nor were their letters returned to the sender. Part of this was due to the mailing list which was not up-to-date, and some was due to the fact that mail had not been forwarded to the person. What degree of non-response was due to not having received the questionnaire is not known.

The necessity of forwarding mail would have taken longer for responses to be returned. Therefore, even though a response came after a certain mailing, it does not mean that the current mailing prompted the response. A very limited check of when people responded with their verbal report of when they responded seemed to indicate that when



the questionnaire was received was an indicator of which mailing had influenced the respondent to respond. But, that portion of the population which was interviewed were those who were reasonably accessible and not necessarily representative of the total population.

Conducting the study during the summer might have had some influence upon the response, but the extent of this is not known.

The reasons for, or the factors influencing, the daily response rate and total response cannot be determined in a direct relationship because of the various number of variables involved in any one case of response or non-response. Because one factor and one result occurred at the same time does not necessarily mean that one is the cause of the other. It can only be stated that they did occur together and suggest that there may be some relationship between the two.

## CHAPTER V

### CONCLUSIONS AND IMPLICATIONS

#### Response Rate

One hundred and fifty-six questionnaires were mailed and 122 or 78% were returned. Two follow-up procedures were used and these appeared to have some influence in increasing the total response.

The largest number of responses were received during the first response wave. The mailing of the first follow-up was the beginning of the second response wave which received the smallest number of responses of any of the three waves of response. The mailing of another follow-up marked the beginning of the third response wave. The number of returns in this wave was larger than in the second response wave, but less than in the first response wave. The pattern of a high return followed by a low number returned and then an increase in the number returned appeared.

Each mailing was followed by an increase in the number of responses. The beginning of each week also exhibited an increase in the number of questionnaires returned. These findings seem to indicate that the repeated mailings did have some influence upon response, but that the weekend

intervals might also have been a factor in influencing the daily response rate.

About 50% of the total sample had responded by the end of the second wave of response. An increase of 28% occurred after the mailing of the second and last follow-up. This last response wave accounted for 37%, or over one-third of the total respondents. Continued follow-ups greatly increased the total returns and thus would have had some influence upon decreasing response bias.

The percent return for the degree received and no degree received categories was almost equal. Degree status did not seem to be related to total percent returns or to the rate of response over the three waves. However, the continued urgings were followed by a larger percent increase in returns for the no degree received than for the degree received category. This suggests that there may be some differences in the two groups in relation to rate of response and the amount of urging required before responding, but that this difference was not great enough to influence total response.

The male and female categories exhibited the same daily response pattern and the final percent return was equal. Sex did not seem to be a factor influencing total response, although the men seemed to respond later than did the women.

The differences observed between the male and female and between the degree received and no degree received categories were small, but further testing is needed before any conclusions concerning them can be drawn. The results of this study do indicate, however, that in terms of total returns that degree received and no degree received status and that male or female status does not seem to influence total response.

Some differences were exhibited among the degree-sex categories that had not appeared in the responses when they were classified in the single degree or sex category.

The pattern of response was the same as that for the total group for all degree-sex categories except the no degree received male category. This category showed an increasing instead of fluctuating response pattern over the three waves of response.

The no degree received male category had the lowest response and responded later than the other groups with over half of their responses being returned during the final response wave. The small number of names in the original sample for this group may have been a factor in influencing these differences. In this study the no degree received male exhibited differences from the other groups in response rate over the three waves and in total returns. Another study using equal numbers in the split-plot experimental design would reduce the possibility of sample bias which could

have resulted because of the small number of cases in this category in the present study.

The no degree received female category had the highest response and tended to respond quicker than did the other degree-sex categories. The number in the original sample was small for this group, as it was for the no degree received male category, but, a very different and opposite response rate over the three waves and total response was exhibited.

Further study is needed using equal numbers and up-to-date mailing lists before the differences among the degree-sex categories can be adequately tested.

Those who responded during the final response wave exhibited different characteristics from those who had responded during the first two response waves in relation to the factors of sex and having or not having received a Bachelors degree. Failure to have included the last follow-up would have resulted in a biased sample. The low percent return in the no degree received male category would seem to indicate the possible direction of a bias, but problems related to sampling and to the delivery of the mail to the person may have been an influencing factor in this trend.

The total percent of response returned in each of the questionnaire format categories seems to suggest that the different questionnaire formats did not have different effects upon the respondents in terms of soliciting their

response.

Although the letter salutation and letter appeal categories did receive different numbers of responses, the differences among the three do not seem to be large enough to warrant any conclusion concerning the superiority of any one letter in soliciting responses. However, the difference in response between the letter receiving the highest return and the letter receiving the lowest return suggests that there might have been some differences in the appeals to respond between these two letters.

When the salutation of the letter was the main variable in the instruments mailed, as it was during response wave II, the results seemed to indicate that different salutations were not a factor in influencing responses. However, the small number of questionnaires returned during that wave do not provide a large enough sample upon which to base a conclusion.

The testing of any relation between the method of affixing the signature and response was discontinued after the first wave of response. For the two methods used during Wave I there was an unequal number in each signature category because of problems encountered in duplication processes. From the limited testing, the kind of method used in signing the letter did not appear to be related to response.

Interview

The results of the attempts to contact people for an interview seem to indicate that there might be some differences between the respondents and non-respondents in ease of contact. The non-responding portion of the population were very hard to contact for an interview mainly because they were no longer living at the address to which the letters had been mailed. Thus, it is not possible to draw any conclusions concerning the non-respondents or even make any suggestions concerning the bias their non-response may have introduced because it is not known how many of these were true non-respondents or how many had not received the questionnaire. Neither, for the same reasons, is it possible to compare the characteristics of the later respondents with those of the early respondents in an attempt to discover sample bias due to non-response.

In general, the answers given to the questions were not different when the interview results for the respondents and the non-respondents were compared, except that the non-respondent category contained a few more single people than did the respondent category. The two groups did not seem to differ in the kind of answers given to the questions, thus no differences between the non-responding portion and the responding portion of the population were discovered.

When the written answers were compared with the oral answers obtained during the interviews, most of the information was in agreement. The largest number of differences in the information given from the same person occurred in the statement of the year in which various things were to have happened. Thus the greatest amount of unreliability seemed to be in the statement of dates, especially the year. However, as a whole the reliability of the instrument was upheld by the large number of identical answers reported in the two situations. The misinterpretation of a few questions may influence the validity and reliability of the questionnaire, but misinterpretation of the questions was rare and would not have been enough to influence results a great deal.

### Summary

Response to the questionnaire did not appear to be related to the degree status of the sample members or to the sex of the sample members. However, when the factors of degree status and sex were combined into degree-sex categories distinct differences in response rate and total response did appear among the categories.

The factors of different questionnaire formats and methods of affixing the signature to the letter did not appear to be related to response rate or to total response.

The three letter salutation and letter appeal categories used in the first mailing exhibited small differences



in response. However, only the Dear Alumnus letter which received the largest percent return and the Dear (name typed in) letter which received the smallest percent return are considered to have exhibited differences in the solicitation of responses. The limited findings concerning the relation of the letter salutation to response seem to indicate that the type of salutation used was not a factor in influencing response. The increase in responses during the final wave of response might have been due to the appeal in the cover letter because this appeal was different from that in any of the previous letters in that it gave further information about the study and about who the desired respondents were. However, other factors such as the cumulative influence of repeated mailings and the enclosure of another questionnaire also seemed to be operating to increase the response during this wave.

Generally, the questionnaire items elicited the type of information desired and when oral responses obtained through an interview were checked against those written on the returned questionnaire very few differences in information occurred. Therefore, the questionnaire seemed to be effective in eliciting valid and reliable responses.

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## APPENDICES

APPENDIX I

Questionnaire 1

Questionnaire 2

Michigan State University  
July, 1964

DO NOT WRITE IN THIS SPACE

Schedule number \_\_\_\_\_ 1-5  
Study number \_\_\_\_\_ 6-8  
Card number \_\_\_\_\_ 9

Please fill in the following information.

If your spouse has also received one of these questionnaires, please check here \_\_\_\_\_. Then please fill in the questionnaire and return. It is VERY IMPORTANT that you each return the questionnaire.

1. Sex: Male 1. \_\_\_\_\_ 10  
Female 2. \_\_\_\_\_
2. Birthdate: \_\_\_\_\_ 11-14  
Month Year
3. Occupation (Describe the work you do): \_\_\_\_\_ 15-16
- 

4. Your education:

Name of College or University	Major	Dates attended		Degree(s)	Year Obtained
		Mo., Yr.	Mo., Yr.		
_____	_____	_____	_____	_____	17-29
_____	_____	_____	_____	_____	30-42
_____	_____	_____	_____	_____	43-55
_____	_____	_____	_____	_____	56-68

5. Were you married during at least one academic term while enrolled as an undergraduate student at Michigan State University Yes 1. \_\_\_\_\_ 69  
No 2. \_\_\_\_\_
6. If YES, during the period in your marriage when you were enrolled in Michigan State University:
- a) Was your spouse living with you? (That is, did the two of you reside in the same apartment or house?) 70  
 Yes, during the entire period 0. \_\_\_\_\_  
 Yes, for at least one academic term 1. \_\_\_\_\_  
 No 2. \_\_\_\_\_
- b) Was your spouse also a student during at least part of that period? If yes, check all that apply; if no, check one: 71-72  
 Yes, spouse was an undergraduate at MSU 0. \_\_\_\_\_  
 Yes, spouse was a graduate student at MSU 1. \_\_\_\_\_  
 Yes, spouse was a student in some school other than MSU 2. \_\_\_\_\_  
 No, spouse had already graduated from college 3. \_\_\_\_\_  
 No, spouse had started college but dropped out 4. \_\_\_\_\_  
 No, spouse never attended college 5. \_\_\_\_\_

The first part of the report deals with the general situation in the country. It is noted that the economy is still in a state of depression, and that the government is struggling to maintain its financial stability. The report also mentions the need for further reforms in the financial system.

In the second part, the report discusses the progress of the various departments. It is noted that the Ministry of Finance has made significant progress in reducing the budget deficit, and that the Ministry of Education has implemented several important reforms.

The third part of the report deals with the social and economic conditions of the population. It is noted that the standard of living is still low, and that there is a need for further social reforms. The report also mentions the need for further investment in infrastructure and social services.

In the fourth part, the report discusses the foreign relations of the country. It is noted that the country has maintained a policy of neutrality, and that it has established friendly relations with several major powers. The report also mentions the need for further international cooperation.

The fifth part of the report deals with the military situation. It is noted that the country has a strong and modern military, and that it is well-equipped to defend itself against any potential threats. The report also mentions the need for further military reforms.

Finally, the report concludes with a summary of the main findings and recommendations. It is noted that the country has made significant progress in several key areas, but that there is still a need for further reforms and investment. The report also mentions the need for continued international cooperation and support.





1. The first part of the document is a list of names and addresses. The names are listed in the left margin, and the addresses are listed in the right margin. The names are:

- Mr. J. H. Smith
- Mr. W. B. Jones
- Mr. C. D. Brown
- Mr. E. F. Green
- Mr. G. H. White
- Mr. I. J. Black
- Mr. K. L. Gray
- Mr. M. N. Blue
- Mr. O. P. Red
- Mr. Q. R. Purple
- Mr. S. T. Yellow
- Mr. U. V. Orange
- Mr. W. X. Pink
- Mr. Y. Z. Brown

2. The second part of the document is a list of names and addresses. The names are listed in the left margin, and the addresses are listed in the right margin. The names are:

- Mr. A. B. Green
- Mr. C. D. Blue
- Mr. E. F. Red
- Mr. G. H. Purple
- Mr. I. J. Yellow
- Mr. K. L. Orange
- Mr. M. N. Pink
- Mr. O. P. Brown
- Mr. Q. R. Blue
- Mr. S. T. Red
- Mr. U. V. Purple
- Mr. W. X. Yellow
- Mr. Y. Z. Orange
- Mr. A. B. Pink
- Mr. C. D. Brown

3. The third part of the document is a list of names and addresses. The names are listed in the left margin, and the addresses are listed in the right margin. The names are:

- Mr. P. Q. Green
- Mr. R. S. Blue
- Mr. T. U. Red
- Mr. V. W. Purple
- Mr. X. Y. Yellow
- Mr. Z. A. Orange
- Mr. B. C. Pink
- Mr. D. E. Brown
- Mr. F. G. Blue
- Mr. H. I. Red
- Mr. J. K. Purple
- Mr. L. M. Yellow
- Mr. N. O. Orange
- Mr. P. Q. Pink
- Mr. R. S. Brown

4. The fourth part of the document is a list of names and addresses. The names are listed in the left margin, and the addresses are listed in the right margin. The names are:

- Mr. T. U. Green
- Mr. V. W. Blue
- Mr. X. Y. Red
- Mr. Z. A. Purple
- Mr. B. C. Yellow
- Mr. D. E. Orange
- Mr. F. G. Pink
- Mr. H. I. Brown
- Mr. J. K. Blue
- Mr. L. M. Red
- Mr. N. O. Purple
- Mr. P. Q. Yellow
- Mr. R. S. Orange
- Mr. T. U. Pink
- Mr. V. W. Brown

5. The fifth part of the document is a list of names and addresses. The names are listed in the left margin, and the addresses are listed in the right margin. The names are:

- Mr. X. Y. Green
- Mr. Z. A. Blue
- Mr. B. C. Red
- Mr. D. E. Purple
- Mr. F. G. Yellow
- Mr. H. I. Orange
- Mr. J. K. Pink
- Mr. L. M. Brown
- Mr. N. O. Blue
- Mr. P. Q. Red
- Mr. R. S. Purple
- Mr. T. U. Yellow
- Mr. V. W. Orange
- Mr. X. Y. Pink
- Mr. Z. A. Brown

10. If you have been married at any time, please fill in the following if applicable:

a) First marriage (if other than current marriage described above):

Date: \_\_\_\_\_ 43-46  
                   Month                    Year

Terminated: \_\_\_\_\_ 47-50  
                   Month                    Year

Terminated by: 51

                  Death 1. \_\_\_\_\_  
                   Divorce 2. \_\_\_\_\_  
                   Legal separation 3. \_\_\_\_\_  
                   Annulment 4. \_\_\_\_\_  
 Other (Please specify) \_\_\_\_\_

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b) Second marriage (if other than current marriage):

Date: \_\_\_\_\_ 52-55  
                   Month                    Year

Terminated: \_\_\_\_\_ 56-59  
                   Month                    Year

Terminated by: 60

                  Death 1. \_\_\_\_\_  
                   Divorce 2. \_\_\_\_\_  
                   Legal separation 3. \_\_\_\_\_  
                   Annulment 4. \_\_\_\_\_  
 Other (Please specify) \_\_\_\_\_

---

c) Third marriage (if other than current marriage):

Date: \_\_\_\_\_ 61-64  
                   Month                    Year

Terminated: \_\_\_\_\_ 65-68  
                   Month                    Year

Terminated by: 69

                  Death 1. \_\_\_\_\_  
                   Divorce 2. \_\_\_\_\_  
                   Legal separation 3. \_\_\_\_\_  
                   Annulment 4. \_\_\_\_\_  
 Other (Please specify) \_\_\_\_\_

---

d) Have you been married more than three times in addition to your current marriage?

Yes 1. \_\_\_\_\_  
 No 2. \_\_\_\_\_

70

It may be that the following is a more accurate representation of the situation.

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11. Children by PRESENT marriage:

Name	Sex	Birth date Month-Year
_____	_____	_____ 10-14
_____	_____	_____ 15-19
_____	_____	_____ 20-24
_____	_____	_____ 25-29
_____	_____	_____ 30-34

12. Children by your PREVIOUS marriage(s):

Name	Sex	Birth date Month-Year
_____	_____	_____ 35-39
_____	_____	_____ 40-44
_____	_____	_____ 45-49
_____	_____	_____ 50-54
_____	_____	_____ 55-59

13. If you have NOT graduated from college, please check all the following statements which are applicable.

Dropped out because I was uncertain about my goals. .0.	_____	60-63
Was not interested in school work . . . . .	.1. _____	
Wanted to go to work right away . . . . .	.2. _____	
Did not have the ability. . . . .	.3. _____	
Got married, or planned to marry shortly. . . . .	.4. _____	
Was needed at home. . . . .	.5. _____	
It seemed financially impossible to continue. . . . .	.6. _____	
Parents did not encourage my continuing . . . . .	.7. _____	
Personal illness. . . . .	.8. _____	
Decided to go to technical, business or proprietary school. . . . .	.9. _____	
Decided to join the armed services. . . . .	10. _____	
Other (Please specify)	_____	

## 14. Which reason was the most important? Please indicate by number. \_\_\_\_\_ 64-65

THANK YOU FOR YOUR HELPFULNESS



Michigan State University  
July, 1964

Please fill in the following information.

If your spouse has also received one of these questionnaires, please check here \_\_\_\_\_. Then please fill in the questionnaire and return. It is VERY IMPORTANT that you each return the questionnaire.

1. Sex: \_\_\_\_\_ Male  
 \_\_\_\_\_ Female
2. Birthdate: \_\_\_\_\_  
 Month Year
3. Occupation (Describe the work you do): \_\_\_\_\_  
 \_\_\_\_\_

4. Your education:

Name of College or University	Major	Dates attended		Degree(s)	Year Obtained
		Mo., Yr.	Mo., Yr.		
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

5. Were you married during at least one academic term while enrolled as an undergraduate student at Michigan State University? \_\_\_\_\_ Yes  
 \_\_\_\_\_ No

6. If YES, during the period in your marriage when you were enrolled in Michigan State University:

- a) Was your spouse living with you? (That is, did the two of you reside in the same apartment or house?)
- \_\_\_\_\_ Yes, during the entire period.  
 \_\_\_\_\_ Yes, for at least one academic term.  
 \_\_\_\_\_ No.
- b) Was your spouse also a student during at least part of that period? If yes, check all that apply; if no, check one:
- \_\_\_\_\_ Yes, spouse was an undergraduate at M.S.U.  
 \_\_\_\_\_ Yes, spouse was a graduate student at M.S.U.  
 \_\_\_\_\_ Yes, spouse was a student in some school other than M.S.U.
- \_\_\_\_\_ No, spouse had already graduate from college.  
 \_\_\_\_\_ No, spouse had started college but dropped out.  
 \_\_\_\_\_ No, spouse never attended college.









1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to support effective decision-making.

3. The third part of the document focuses on the role of technology in data management and analysis. It discusses how modern software solutions can streamline data collection, storage, and reporting, thereby improving efficiency and accuracy.

4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and integration. It provides strategies to overcome these challenges and ensure that the data is reliable and secure.

5. The fifth part of the document discusses the importance of data governance and the role of leadership in ensuring that data is used ethically and responsibly. It emphasizes the need for clear policies and procedures to guide data management practices.

6. The sixth part of the document explores the benefits of data-driven decision-making and how it can lead to improved performance and innovation. It provides examples of how data has been used successfully in various industries.

7. The seventh part of the document discusses the future of data management and the emerging trends in the field. It highlights the potential of artificial intelligence and machine learning to revolutionize data analysis and insights.

8. The eighth part of the document provides a summary of the key points discussed and offers recommendations for organizations looking to optimize their data management practices. It emphasizes the need for a holistic approach to data management.

9. The ninth part of the document discusses the importance of data literacy and the need for organizations to invest in training and development to ensure that their employees are equipped with the skills needed to work with data effectively.

10. The tenth part of the document concludes by reiterating the importance of data in driving organizational success and the need for continuous improvement in data management practices. It encourages organizations to embrace a data-driven culture and to stay up-to-date with the latest developments in the field.

11. The final part of the document provides a list of resources and references for further reading and research. It includes books, articles, and online resources that provide more in-depth information on the topics discussed in the document.

11. Children by PRESENT marriage:

Name	Sex	Birth date Month-Year
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

12. Children by your PREVIOUS marriage(s):

Name	Sex	Birth date Month-Year
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

13. If you have NOT graduated from college, please check all the following statements which are applicable.

- Dropped out because I was uncertain about my goals.
- Was not interested in school work.
- Wanted to go to work right away.
- Did not have the ability.
- Got married, or planned to marry shortly.
- Was needed at home.
- It seemed financially impossible to continue.
- Parents did not encourage my continuing.
- Decided to go to technical, business or proprietary school.
- Decided to join the armed services.
- Other (Please specify)

\_\_\_\_\_

\_\_\_\_\_

14. Please circle the reason which was the most important.

THANK YOU FOR YOUR HELPFULNESS.

APPENDIX II

Cover Letter 1

Cover Letter 2

Cover Letter 3

Follow-up 1, Letter 1

Follow-up 1, Letter 2

Follow-up 2 Letter

**MICHIGAN STATE UNIVERSITY East Lansing**

---

**College of Home Economics • Department of Home Management & Child Development**

July 6, 1964

Dear Fellow Spartan:

With more and more college students marrying at an earlier age, thus combining marriage with the pursuit of higher education, there is an increasing concern about the influence of undergraduate marriage on the family. Many of today's students are seeking information about undergraduate marriage so that they can better assess the many alternatives open to them as they make the decisions which will be important in their lives.

The enclosed questionnaire is a preliminary survey which will help lay the groundwork for a study of the "Effects of Undergraduate Marriage after Eight to Ten Years." Your answers are very important to this future study and will be kept confidential. We appreciate your helpfulness in gathering this information. Thank you for being a part of our study.

Sincerely,

*Frances Magrabi*

Frances M. Magrabi  
Associate Professor of  
Home Management

*Bill Marshall*

William H. Marshall  
Associate Professor of  
Child Development

WM/ra

CONFIDENTIAL

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## Cover Letter 2

**MICHIGAN STATE UNIVERSITY East Lansing**

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**College of Home Economics • Department of Home Management & Child Development**

July 6, 1964

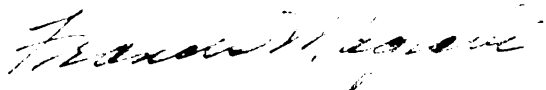
Dear

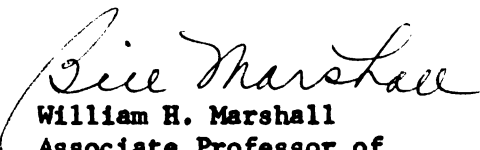
Alumni of Michigan State University are known for their concern about their school and their helpfulness in many ways to the University. One of the ways alumni help is through giving a few moments of their time to answer questionnaires connected with University research.

During the time when you were attending Michigan State University many undergraduate students were married. We are interested in the influence undergraduate marriage has on the family. You can help us by answering the enclosed questionnaire and returning it in the enclosed envelope. Your answers will be confidential and will help lay the groundwork for a much larger study of the "Effects of Undergraduate Marriage after Eight to Ten Years."

Thank you for your helpfulness in filling in the questionnaire and being a part of our study.

Sincerely,

  
Frances M. Magrabi  
Associate Professor of  
Home Management

  
William H. Marshall  
Associate Professor of  
Child Development

MM/ra



1. The first part of the text discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability, particularly in financial reporting and auditing. The text also mentions that proper record-keeping helps in identifying trends and anomalies, which can be useful for decision-making and risk management.

2. The second part of the text focuses on the role of technology in modern record-keeping. It highlights how digital tools and software solutions have revolutionized the way data is stored, accessed, and analyzed. The text notes that while technology offers significant benefits, it also introduces new challenges, such as data security and privacy concerns, which must be carefully managed.

3. The third part of the text discusses the importance of training and education in ensuring that staff are equipped to handle the complexities of modern record-keeping. It suggests that ongoing training and professional development are essential for keeping up with the latest industry standards and technological advancements. The text also mentions that a strong foundation in accounting principles and practices is necessary for effective record-keeping.

4. The fourth part of the text addresses the issue of data integrity and the need for robust backup and recovery procedures. It stresses that regular backups and testing of recovery processes are critical to protecting against data loss and ensuring business continuity. The text also discusses the importance of maintaining accurate and up-to-date records of all data changes and access.

5. The fifth part of the text discusses the importance of compliance with relevant laws and regulations. It notes that record-keeping practices must be designed to meet the requirements of various regulatory bodies and industry standards. The text also mentions that staying up-to-date on regulatory changes is essential for avoiding penalties and ensuring the organization's long-term success.

6. The sixth part of the text discusses the importance of collaboration and communication between different departments and stakeholders. It suggests that clear lines of responsibility and regular communication are essential for ensuring that all parties are aware of their roles and responsibilities in the record-keeping process. The text also mentions that a strong culture of transparency and accountability is necessary for effective record-keeping.

7. The seventh part of the text discusses the importance of regular audits and reviews of record-keeping practices. It suggests that periodic audits can help identify areas for improvement and ensure that the organization is meeting its goals and objectives. The text also mentions that a strong internal control system is necessary for effective record-keeping.

8. The eighth part of the text discusses the importance of maintaining accurate and up-to-date records of all data changes and access. It suggests that a strong audit trail is essential for ensuring the integrity and reliability of the data. The text also mentions that a clear and consistent naming convention for files and folders is necessary for effective record-keeping.

9. The ninth part of the text discusses the importance of maintaining accurate and up-to-date records of all data changes and access. It suggests that a strong audit trail is essential for ensuring the integrity and reliability of the data. The text also mentions that a clear and consistent naming convention for files and folders is necessary for effective record-keeping.

10. The tenth part of the text discusses the importance of maintaining accurate and up-to-date records of all data changes and access. It suggests that a strong audit trail is essential for ensuring the integrity and reliability of the data. The text also mentions that a clear and consistent naming convention for files and folders is necessary for effective record-keeping.

**MICHIGAN STATE UNIVERSITY East Lansing**

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**College of Home Economics • Department of Home Management & Child Development**

July 6, 1964

Dear Alumnus:

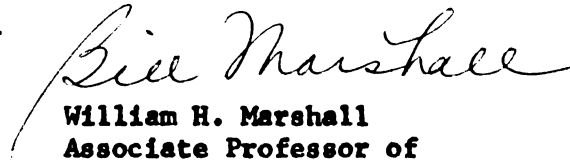
RESEARCH is an important word in present day America and at Michigan State University. YOU can help Michigan State University maintain its reputation as a leader by participating in its research. A few moments of your time spent in filling out the enclosed form and returning it will help a great deal. The information you supply will be kept confidential; only summaries of returns will be published. These will be used to help lay the groundwork for a much larger study of the "Effects of Undergraduate Marriage after Eight to Ten Years."

As an alumni of Michigan State University you have this opportunity to join the efforts for the advancement of knowledge through research sponsored by Your University. Thank you for your helpfulness.

Sincerely,



**Frances M. Magrabi**  
Associate Professor of  
Home Management



**William H. Marshall**  
Associate Professor of  
Child Development

MM/ra

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Follow-up 1, Letter 1

**MICHIGAN STATE UNIVERSITY East Lansing**

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**College of Home Economics • Department of Home Management & Child Development**

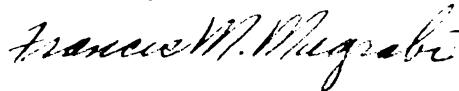
July 16, 1964

Dear

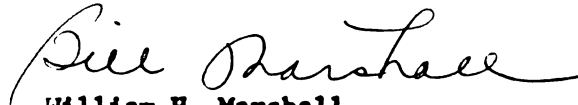
We have not yet received your questionnaire response to our study of the "Effects of Undergraduate Marriage after Eight to Ten Years." Your reply to this questionnaire is very important because it will help in the formulation of the future study which will involve over 6,000 people. Won't you please return your completed questionnaire today? Your answers will be confidential and will help make our study complete.

Thank you very much.

Sincerely,



**Frances M. Magrabi**  
Associate Professor of  
Home Management



**William H. Marshall**  
Associate Professor of  
Child Development

MM/ra

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Follow-up 1, Letter 2

**MICHIGAN STATE UNIVERSITY East Lansing****College of Home Economics • Department of Home Management & Child Development**

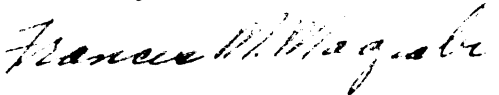
July 16, 1964

Dear Alumnus:

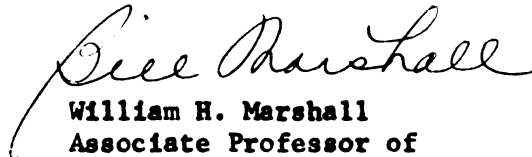
We have not received your response to the questionnaire we mailed you last week. It will lay the groundwork for a future study of the "Effects of Undergraduate Marriage after Eight to Ten Years." If you have not returned the questionnaire, we urge that you do so. We know that Michigan State University Alumni can be counted on for a 100% response. Your answers will be confidential and will give us direction and suggestions as we formulate our future study.

Thank you for your helpfulness.

Sincerely,



Frances M. Magrabi  
Associate Professor of  
Home Management



William H. Marshall  
Associate Professor of  
Child Development

MM/ra

]

1. The first part of the document discusses the importance of maintaining accurate records of all transactions.

2. It then goes on to describe the various methods used to collect and analyze data.

3. The next section details the results of the study, showing a clear trend in the data.

4. Finally, the document concludes with a summary of the findings and some suggestions for future research.

5. The overall conclusion is that the data supports the hypothesis that there is a significant correlation between the variables studied.

6. It is important to note that the study was limited to a specific population and time period.

7. Further research is needed to confirm these findings and explore the underlying mechanisms.

8. The authors would like to thank the funding agency for their support of this research.

9. This document is a preliminary report and should not be used for legal or financial purposes.

## Follow-up 2 Letter

MICHIGAN STATE UNIVERSITY East Lansing

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College of Home Economics · Department of Home Management &  
Child Development

July 23, 1965

Dear

We notice that your response to our questionnaire has been delayed. A further explanation of our study will perhaps indicate the importance of your reply.

One question you might be asking is "Why was this questionnaire sent to me?" Our sample for this preliminary study includes the graduates and non-graduates of Michigan State University during the years of 1958 and 1959 whose current addresses, as listed in the Michigan State University Alumni Records Office, are in the Greater Lansing area. In order to formulate our future study of undergraduate marriages we need to have some information about people who are now married or unmarried, including those who were married before, during or after they were undergraduates at Michigan State University. This future study will concern about 6,000 people who were undergraduates at Michigan State University eight to ten years ago. Your reply will give us direction for the formulation of the future study and will give us some insight into the questions that will be appropriate to use with this larger sample.

We are enclosing another questionnaire and self-addressed stamped envelope; we hope we can depend upon receiving your reply soon.

Sincerely,

Frances M. Magrabi  
Associate Professor  
Home Management

William H. Marshall  
Associate Professor  
Child Development

MM/ra



APPENDIX III

Interview Schedule

Michigan State University  
July, 1964

## INTERVIEW SCHEDULE

NAME \_\_\_\_\_ DATE \_\_\_\_\_  
ADDRESS \_\_\_\_\_ INTERVIEWER \_\_\_\_\_  
PHONE \_\_\_\_\_

Introduction with explanation of the study and a request for an interview.

1. Did you respond to the questionnaire? Yes \_\_\_\_\_  
No \_\_\_\_\_
2. Why did you (or didn't you) respond? (What was there about the questionnaire or cover letter that prompted you to respond (or not respond) to the questionnaire?)
3. When did you respond?  
 \_\_\_\_\_ when first received the letter and questionnaire  
 \_\_\_\_\_ after Follow-up 1 (letter)  
 \_\_\_\_\_ after receiving Follow-up 2 (letter & questionnaire)
4. Cover letter:
  - a. Did the letter look attractive to you?
  - b. Do you remember the reason the letter gave for requesting your response? What was it?
  - c. Do you remember anything about the letter that you liked or did not like? What was it?
  - d. Did the letter explain what the study was about clearly or was it confusing to you?
  - e. Did you mind receiving the letter and questionnaire?
5. Questionnaire:
  - a. Did the questionnaire look attractive to you?
  - b. Do you remember anything that you did or did not like about the questionnaire? What was it?

- c. Were there any questions you did not understand?  
Or that you did not know how to answer? Which ones?
- d. Were there any questions you did not like, or did not care to answer?
- e. Were there any numbers in the right-hand column of the questionnaire?

\_\_\_\_\_ Yes, (Did these bother you in any way? Did you wonder why they were there?)  
 \_\_\_\_\_ No.

f. What is your frank evaluation of the questionnaire?

6. Follow-up (if appropriate)

- a. Did you receive any letters reminding you that you had not responded and asking you to do so?  
If yes, what was it you received?
- b. Do you remember anything about the letters that you liked or did not like? What was it?
- c. Did these letters help clarify the study?
- d. Did you mind receiving successive letters?

Make the transition to asking the same questions that appeared on the questionnaire.

1. Sex: \_\_\_\_\_ Male  
 \_\_\_\_\_ Female

2. What is your birthdate? \_\_\_\_\_  
 Month Year

3. What is your occupation? What kind of work do you do?

4. Your education:

Name of College or University	Major	Dates Attended		Year Degree(s) Obtained
		Mo. Yr.,	Mo. Yr.	
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

5. Were you married during at least one academic term while enrolled as an undergraduate student at Michigan State University?

\_\_\_\_\_ Yes  
 \_\_\_\_\_ No

6. If Yes, during the period in your marriage when you were enrolled in Michigan State University:

- a. Was your spouse living with you? (Did the two of you reside in the same apartment or house?)

\_\_\_\_\_ Yes, during the entire period.  
 \_\_\_\_\_ Yes, for at least one academic term.  
 \_\_\_\_\_ No.

- b. Was your spouse also a student during at least part of the period?

\_\_\_\_\_ Yes, spouse was an undergraduate at M.S.U.  
 \_\_\_\_\_ Yes, spouse was a graduate student at M.S.U.  
 \_\_\_\_\_ Yes, spouse was a student in some school other than M.S.U.  
 \_\_\_\_\_ No, spouse had already graduated from college.  
 \_\_\_\_\_ No, spouse had started college but dropped out.  
 \_\_\_\_\_ No, spouse never attended college.

7. To your best recollection, what percent of your support while in college came from each of the following sources? (I will read the various sources possible.)

\_\_\_\_\_ % Parental support (including loans)  
 \_\_\_\_\_ % Self-employment  
 \_\_\_\_\_ % Savings  
 \_\_\_\_\_ % Other loans  
 \_\_\_\_\_ % Working wife or husband  
 \_\_\_\_\_ % Scholarship  
 \_\_\_\_\_ % Other (Please specify)  
 \_\_\_\_\_ 100 % Total

8. What is your current marital status?

\_\_\_\_\_ Single  
 \_\_\_\_\_ Married  
 \_\_\_\_\_ Divorced  
 \_\_\_\_\_ Widowed  
 \_\_\_\_\_ Separated  
 \_\_\_\_\_ Other (specify)

## 9. If presently married:

Did your spouse receive a questionnaire?  Yes  
 No

If yes, did he/she respond?  Yes  
 No

a. What is the date of your present marriage? \_\_\_\_\_  
 Mo. Year

b. What is your wife/husband's age? \_\_\_\_\_

c. What kind of work does your wife/husband do? What  
 is their occupation? \_\_\_\_\_

d. Spouse's education  Grade school only  
 High school only  
 Trade or vocational school  
 (beyond high school)  
 College or University

e. If spouse attended college

Number of years completed \_\_\_\_\_

or

Highest degree spouse obtained?

B.A., B.S., or Teaching Certificate

M.A. or M.S.

Ph.D., E.D.D., etc.

D.D.S., M.D., etc.

Other (Please specify)

10. Have you ever been married?/ or have you had any previous  
 marriages? If Yes:

a. First marriage (if other than current marriage described  
 above):

Date:

\_\_\_\_\_  
 Month Year

Terminated:

\_\_\_\_\_  
 Month Year

Terminated by:

Death

Divorce

Legal separation

Annulment

Other (Please specify)

b. If more than one marriage obtain same information as above.

11. Do you have any children? (By present or previous marriage; please indicate.)

12.	Name	Sex	Birthdate Month-Year
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

13. FOR THOSE WHO DID NOT GRADUATE FROM COLLEGE (M.S.U.)  
What are your main reasons for leaving M.S.U. before graduation?

From this list which is the most important reason or reasons? (Circle the one more important if indicated.)

List of possible reasons for leaving M.S.U. before graduation: (Read to respondent)

- \_\_\_\_\_ Dropped out because I was uncertain about my goals.
- \_\_\_\_\_ Was not interested in school work.
- \_\_\_\_\_ Wanted to go to work right away.
- \_\_\_\_\_ Did not have the ability.
- \_\_\_\_\_ Got married, or planned to marry shortly.
- \_\_\_\_\_ Was needed at home.
- \_\_\_\_\_ It seemed financially impossible to continue.
- \_\_\_\_\_ Parents did not encourage my continuing.
- \_\_\_\_\_ Personal illness.
- \_\_\_\_\_ Decided to go to technical, business or proprietary school
- \_\_\_\_\_ Other (Please specify)

THANK YOU VERY MUCH!

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