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ABSTRACT

A study was undertaken to solicit opinions from alumni on methods that might improve responses from graduate surveys. Two telephone surveys were conducted, one in 1991 which targeted the graduating classes of 1984 and 1989, and the second in 1994 among alumni of the classes of 1991 and 1993. In the 1994 survey information was gathered regarding factors that affected forwarding of mail surveys. Study findings indicated that low response may have been related to out-of-date addresses, which resulted in surveys not being correctly delivered. Opinions were obtained on other aspects of the alumni survey which could be adjusted to improve the response rate. Fifty-one percent of the 1994 respondents found the number of pages of the survey influential in whether they returned the survey, while only 45 percent of the 1991 sample felt this way. The importance of the questions to the respondent and the fact that the university was interested in their input were frequently indicated as factors in their decisions to respond. About half of the alumni contacted in both surveys felt that an incentive would influence them to return the survey. Three fourths of the 1991 respondents felt that their opinions would make a difference, while only just over one half of the 1994 respondents felt that way. Two survey interviews are appended. (Contains 22 references.) (SW)

EVALUATING REASONS FOR LOW RESPONSE FROM MAIL SURVEYS

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Jean Endo
Editor
AIR Forum Publications

EVALUATING REASONS FOR LOW RESPONSE FROM MAIL SURVEYS

Annual surveys are an important source of information for schools of all sizes, making low response to such surveys a significant concern. Although many aspects of survey methodology have been reported to improve responses for specific surveys, there are only general recommendations to prioritize these for use in each unique situation. Herein an approach is proposed that helps characterize the unique survey population and may help prioritize methods that could be used to stimulate response. Telephone surveys were conducted in 1991 and 1994 in order to evaluate aspects that could affect response from previous alumni surveys. The results of these surveys indicated that low response may have been related to out-of-date recipient addresses, which resulted in surveys not being delivered to the alumnus. Other aspects of the alumni survey that could be adjusted also were presented to alumni for their opinions of what might influence them to respond. This general technique could be applied to many other situations to guide selection of methods to improve response.

There is a wealth of advice on methodology that may be used in the design of a survey (Dillman, 1978; Suskie, 1992). Once the survey instrument is carefully designed, the cover letter is meticulously developed, and the best method for delivery has been selected, high returns are expected. When this does not occur, the causes are seldom clear. In situations where similar populations will be surveyed routinely, improvements in response are important. There are many changes that can be contemplated in an attempt to raise the number of returns. Improvement of the survey by trial and error can waste resources without justification. Elaborate research to determine optimum strategies is often not fundable nor compatible with uninterrupted compilation of information that is required for existing programs.

Numerous studies have indicated increased response rates for specific surveys from the manipulation of elements of the survey procedure or instrument (Blumberg et al., 1974; Dillman, 1978; Kanuk and Berenson, 1975; Linsky, 1975; Scott, 1961). Many of the studies included in these literature reviews considered only one or a few factors. They were based upon only a single survey and failed to demonstrate general applicability. To identify factors likely to improve responses in the majority of surveys, a few studies have analyzed published studies and computed statistical measures of the effects on some of these manipulations (Fox et al., 1988; Heberlein and Baumgartner, 1978). Some successful factors identified include pre-notification, offering incentives, and follow-up communications. Due to the nature of the published studies, there could be no attempt to identify interactions among the factors considered. The value of any of these methods in a new situation can not be predicted from existing literature.

A few studies used factorial designs to address concerns about interactions among factors (Gullahorn and Gullahorn, 1963; Peterson, 1975; Wiseman, 1973). Unfortunately, most of the elements selected affected responses to such a small degree that interactions were not usually detected. Main effects that were found to be significant factors were factors already known to be important. Even if this approach had been successful, it is

unlikely that it would have allowed prediction of utility of any tested methods for a new situation.

Our University conducts an annual survey of recent graduates in an effort to identify changes at the University that would improve operations, increase student satisfaction, and meet requirements of state legislative mandates. One such survey was conducted in October 1990 among alumni who graduated in 1984 (1976 people) or 1989 (2587 people). All graduates from both classes were mailed a survey based upon addresses supplied by the University Alumni Association. The mail survey consisted of about 95 questions, 78 of which required selection of an answer and the remainder required a short answer. Questions were distributed on three legal-size pages. There were only four questions that varied between the surveys sent to the different graduation classes. In October of 1993 a similar survey was mailed to graduates of the classes of 1991 and 1993. This survey consisted of four regular-size pages. There were 78 questions total, 73 of which required the individual to select an answer. As part of the 1993 survey, advanced degree students were asked a separate set of questions.

Alumni Surveys conducted by this University consistently have had relatively low response (32.7% for the 1990 mail survey and 25.8% for the 1993 mail survey). A recent study examined the use of cover letter appeals and graphics to increase response rates on the mail surveys (Wilkes, 1992). Neither was effective in improving the response from the 1991 alumni survey even though previous studies had indicated benefit in other situations (Biner, 1988; Houston and Nevin, 1977; McKillip and Lockhart, 1984).

The lack of improvement in the response to the alumni mail surveys resulting from the manipulations above suggested that other variables may have influenced the response. The purpose of the current study was to solicit opinions from alumni on methods that might improve response from surveys. The study allowed determination of the portion of the mailed surveys received by alumni and exploration of factors that influenced forwarding of mail. Two telephone surveys were conducted, one in 1991 that targeted the graduating classes of 1984 and 1989 and the second in 1994 among alumni of the classes of 1991 and 1993. Only in the 1994 survey was information gathered regarding the forwarding of mail surveys.

Method

Current literature and reviews were consulted to select methods that were compatible with the alumni surveys conducted annually (Dillman, 1978; Suskie, 1992). Since we were required to include the entire graduation class, some methods reported to be fairly reliable in improving response, like pre-notification and follow-up communications, were cost prohibitive. We decided to focus on the cover letter, appearance and size of the survey, significance and relevance of topics, and incentives. Since the source of the survey can have an influence on response, we also questioned alumni about their feelings about the University sending surveys to them.

Telephone surveys were conducted in February 1991 and March 1994 among a randomly selected sample of alumni who had been mailed an alumni survey the previous fall. For the survey conducted in 1990, this sample included 308 members of the class of

1984 and 251 members of the class of 1989. The 1994 survey included 212 alumni from the class of 1991 and 228 members of the class of 1993. The phone calls were made during four evenings each week for two weeks. The 1990 study began calling on a Monday evening, while the study conducted in 1994 began on a Sunday evening. Up to three attempts were made to contact each person and correct telephone numbers were sought whenever an incorrect number was discovered.

The interview instrument (Appendix A) began by identifying the caller as a student calling on behalf of the University, followed by a request for help in improving the annual alumni survey. Individuals were categorized by whether they remembered receiving and/or returning the alumni survey and asked a series of questions regarding the design of mail surveys.

The 1994 survey also included a separate set of questions, regarding the forwarding of mail to the alumnus, for cases in which the alumnus no longer lived at the address on file (Appendix B). The purpose was to determine whether residents were likely to forward mail to alumni, and partially characterize the types of mail forwarded. A few questions also were included to determine if there were aspects of the survey envelope that would influence residents to forward the survey.

Results

During the 1991 survey, we were able to contact 47.7% of the class of 1984 sample and 41.4% of the class of 1989 sample (Table 1). In 1994, we were able to contact only about 34.8% of the class of 1991 sample and 32.8% of the class of 1993 sample. Incorrect telephone numbers prevented contact in a substantial number of cases (13% in the 1991 telephone survey and 41% in 1994). Another 42% of the 1991 sample remained unclassified at the culmination of the survey either because they were not available or because there was no answer after up to three attempts to contact them. In 1994 this number was smaller (25%) but was still a substantial portion of the sample. Some of these individuals may have been contacted with further effort.

Predictions of the behavior of the alumni population surveyed by mail were based upon the results of the telephone survey. The following assumptions were made. First, it was assumed that those that were able to be classified by telephone in Table 1 represented a fair cross section of the alumni population. This would include all respondents of the telephone survey, those not interested in responding, and those with wrong numbers. It was assumed that those not interested in the telephone survey would not have been interested in completing the previous mail survey. Those with wrong numbers were assumed to have had wrong addresses at the time of the mail survey and did not receive a forwarded questionnaire. Under these assumptions the behavior of the alumni population have been predicted (Table 2).

In the cases where an alumnus was not reached and the current resident was still in contact with the alumnus, he/she was questioned about forwarding of mail to the alumnus. This portion of the survey was only conducted in 1994. Of the 27 individuals who completed this survey, a high percentage claimed to forward all mail received for the alumnus (Table 3). There was no indication that mail from the University was selectively

screened out and not forwarded by most residents, although a frequent concern expressed during the interview was that the alumnus was not able to make a contribution to the University at this time. This referred to the University's fund raising activities. The Resident Survey provided information regarding the influence of several factors in the decision to forward mail. In terms of the method of addressing the envelope, the vast majority reported that it did not make a difference if the envelope was typed or handwritten. Three quarters of the respondents reported that an "alumni survey" stamp would have made the envelope more likely to be forwarded. Finally, the majority of the respondents had no preference whether the envelope was addressed from the individual's department or the University.

In general, the attitudes displayed by the alumni were very similar in 1991 and 1994 (Table 4). Most of the respondents reported that they usually return surveys (72% in 1991 and 69% in 1994)(Question 3). Although the cover letter was read by most alumni (91% in 1991 and 86% in 1994) (Question 4), in both surveys less than one third noticed the signature on the letter (Question 5). A majority of those contacted did not feel the appearance of the survey or the number of questions were influential in determining whether they returned a survey (Question 6). Fifty-one percent of the 1994 respondents found the number of pages of the survey influential in whether they returned the survey, while only 45% of the 1991 sample felt this way (Question 7). The maximum number of questions and pages (Questions 8 and 10) recommended for a survey was quite low, with fair agreement between the four graduation classes (Figures 1 and 2). The importance of the questions to the person (Question 11) and the fact that the University was interested in their input were frequently indicated as factors in their decisions to respond (Question 12). About half of the alumni contacted in both surveys felt that an incentive would influence them to return the survey (Question 13). Three fourths of the 1991 respondents felt that their opinions would make a difference, while only just over one half of the 1994 respondents felt that way (Question 14).

The number of pages in a survey seems to affect the actions of the individual receiving it differentially depending upon their classification with respect to returning the survey. For alumni contacted in both 1991 and 1994 who remembered returning the mail survey, only about one third of the respondents considered the number of pages in their decision to respond (Table 5). Over half of the alumni of the four classes who did not return the survey felt they would base their decision to respond in part on the number of pages. These numbers were also similar for those who did not recall receiving the survey, with just over half that reported the number of pages of a survey would play a role in their decision to respond.

Conclusions

A correct address for the respondent is an important factor in any mail survey. This telephone survey suggests that a major portion of the surveys mailed probably did not reach the intended alumnus (Table 2). First of all, 20-30% of those classified claimed not to have received the survey. It seems likely that a large portion of those with wrong phone numbers (17-55%) would have had wrong addresses 6 months prior to the phone

call when surveys were mailed. Therefore, a large portion of these alumni probably did not receive the survey either. Combining these totals indicates that 45-80% of alumni may not have received a survey.

Due to the large number, we investigated why so many addresses were out of date. In discussions with the Registrar's Office, it was revealed that to comply with the Buckley Amendmen, students were allowed to replace their home address with their local mailing address. This address was used to mail grades at the end of each semester. At the time of the change, it was thought that only a few students would change their address. Unfortunately, a large portion of the students soon began to switch addresses. This resulted in the loss of permanent addresses for future tracking of these students. Since the discovery, the alumni association has begun recording home addresses during the early part of the freshman year for each student, but it will take over 6 years to fully recover from this simple administrative decision.

We attempted to predict the proportion of the alumni population that could be targeted for improvement in response. For this we assumed that those that either did not return a survey they had received or were not interested in responding to the telephone survey would not have responded to the mail survey (Table 2). From this it is estimated that 12-17% of the alumni population would not normally respond to the alumni survey. These alumni are the only group that could be influenced to return a questionnaire by manipulation of the survey system. This is a rather small group, considering the minor effects many of the available changes in survey methods are predicted to invoke. Some of the best factors improved response rates less than 15% (Fox et al., 1988; Peterson, 1975). This translates to only about 1-2% potential improvement in response for our alumni survey if delivery is not improved, a level that would be very difficult to detect. Therefore, unless a greater proportion of the surveys reach the alumni, there seems to be little possibility to substantially improve response by improving this survey system.

The survey of the limited number of individuals who were still in contact with the alumnus indicated that mail received for the alumnus was usually forwarded. It is important to note that answers provided to these questions may have been skewed by the individual's desire to appear socially responsible. Combinations of answers to some questions on the survey indicate an inconsistency in their responses. For example, while nearly all of those questioned said they forwarded all mail, 20% of these did not forward advertisements or junk mail and about 10% claimed not to forward all types of mail from Clemson University. Another interesting point illustrated by the forwarding of mail survey is the fact that 74% of those surveyed felt that they would be more likely to forward mail that was marked "alumni survey." One explanation for this may be related to the fund raising activities of the University. Comments during the interview often included a statement that the alumnus would not have any money for the University at this time. It is possible that mail that appears to be concerned with fund raising is not always forwarded. The lack of a clear preference concerning the origin of the letter from a Department or the University is not surprising. The alumnus could have developed a loyalty to the Department, but this probably would not have been discerned by his/her associates or family unless they also had studied under that Department.

Assuming that improvements in the delivery of the survey can be achieved, our results provide a basis for suggesting ways to directly improve mail survey instruments. There were some strong preferences indicated for short surveys, both in terms of number of pages and questions (Fig. 1 and 2). Also, the length of the survey instrument was considered in the decision to return the survey by more than a third of those responding, both with respect to the number of pages and questions (Table 4). The number of questions was not considered important as frequently as the number of pages even though the mail survey had nearly 100 items, well above the optimum suggested in Figure 1. For those who decided not to return the survey, half considered the number of pages in their decision (Table 5). Various attempts to determine the effect of changing the length of a survey have provided mixed results, and it is not clear that longer questionnaires will reduce response (Linsky, 1975; Kanuk and Berenson, 1975). In some cases, longer surveys have elicited greater response, but this was attributed to greater salience rather than more pages (Jansen, 1985). Perhaps for the University's alumni, a shorter questionnaire would improve response rates, but the gain in response may not be worth the substantial loss of information.

The entity or group identified on a survey as the source of the survey may affect response. Several studies have identified the source of the survey as a major factor affecting response, with universities identified as a favored source in some cases (Fox et al., 1988; Peterson, 1975). It seems likely that our question, concerning their perception of their behavior in returning surveys (72% usually return surveys in the 1991 study, while 70% of the 1994 study respondents do), would have been answered with respect to the University because the preceding portion of the interview concerned the alumni survey. The direct question about their behavior if a survey was from the University also revealed a strong loyalty (88% were more likely to return the survey in 1991 and 84% in 1994). Our alumni survey may already have an advantage and returns will probably be high relative to the population that receives a questionnaire.

Dillman (1978) considers costs and rewards to the respondent, and the development of trust in the source of a survey to be major concerns in response to surveys. One of the rewards that is feasible to offer is to make changes in the organization on the basis of the survey results. This should be particularly effective for a university contacting alumni who have a substantial tie to the organization. For this to be effective, the alumni must trust the university to carry out their promises. The results of the telephone survey have identified a relatively high proportion of alumni who are not sure whether their opinions will make a difference, 75% in 1991 and 54% in 1994 (Table 4). We consider this high because there was no similar indecision concerning most other questions on the survey. These alumni might be encouraged to respond at a higher frequency if they could be convinced that their ideas will be considered.

Monetary incentives have been identified frequently as effective in increasing response in a wide variety of situations (Blumberg et al., 1974; Kanuk and Berenson, 1975; Linsky, 1975; Wiseman, 1973). Some studies have demonstrated better response when the incentive was included in the survey rather then promised upon return of the survey (Furse and Stewart, 1982; Linsky, 1975; Wotruba, 1966). The current studies

indicated just over half of the alumni felt that they would consider a promised chance for reward in their decision to respond. This seems rather low with respect to other factors contributing to their decision to respond, but may represent some potential for influencing response. The football raffle ticket was included in the surveys, which is why it was specifically mentioned in the telephone survey. It would have been interesting to have asked whether inclusion of 25 cents in each survey would have influenced response as an additional question. This is a technique that has frequently produced substantial gains in responses (Blumberg et al., 1974; Kanuk and Berenson, 1975; Linsky, 1975).

The importance of the questions to the alumnus was frequently indicated as a factor in the decision to return a survey. We are not aware of any reports that directly address the effect of this judgment on response. This may be addressed to some extent by the reports of the effect of salience on response. Heberlein and Baumgartner (1978) attempted to classify published surveys as to the salience of the subject covered. This judgment was based upon the timeliness and importance of the issues to the group contacted. For example, a survey concerning the educational plans of veterans who had expressed an interest in the Veterans Administration's educational assistance program would be classified as highly salient. A survey of a random sample of households concerning the brand of corn flakes they prefer would not be considered salient. If their judgment was correct, response appeared to increase with salience. However, it may be difficult to judge the salience of university related issues to alumni and therefore it may be difficult to address this possibility for improving response to the alumni survey.

Since cover letters appear to be read frequently, there may be some opportunity to influence response at this stage. Appeals in cover letters can affect response in some cases (Biner, 1988; Houston and Nevin, 1977; McKillip and Lockhart, 1984). A recent study at the University examined the use of cover letter appeals and graphics to increase response rates on surveys of alumni (Wilkes, R. A., 1992). Neither was effective in improving the response rates on the 1991 alumni survey. Although different types of appeals have not affected response in some cases (Sirlan et al., 1960; Sletto, 1940), it seems likely that the delivery problem addressed above severely limited Wilkes' ability to detect differences even if they existed. The low frequency of alumni who noticed the signature on the cover letter indicates that the signiture will not play a major role in stimulating response. This supports reports that failed to demonstrate changes in response related to signatures (Dodd et al., 1988). Overall, few published reports demonstrate any improvements in response rates that result from changes in the cover letters (Blumberg et al., 1974; Kanuk and Berenson, 1975; Linsky, 1975). Personalized cover letters have not improved response to some mail surveys (Clausen and Ford, 1947). These facts lead to the conclusion that it may be difficult to identify changes to the cover letter that will substantially increase response.

There are serious implications of low response rates, related to sample bias, that have been discussed in great detail in the literature (Dillman, 1978). However, our experience over five survey seasons provides us with some confidence that we are receiving a representative sample. Because surveys are sent to the entire population, the selection of the sample contacted in the phone survey is a function of delivery process and

correct addresses. Little variation is detected by surveys from year to year for measures of attitudes toward situations that are not changing at the University, while there are changes in attitudes concerning other situations that are in flux (D. Underwood, personal communication). For example, more alumni are indicating that their awareness of environmental problems was increased during their time at the University. This appears to be a direct result of some major programs instituted to improve the education process in this area. This does not prove that bias does not exist in our results, but does reduce concern that sample bias may be a serious problem.

In our situation, the most important discovery from the telephone survey was the lower than expected delivery of surveys to alumni. Where others are experiencing low response on periodic mail surveys, a telephone survey similar to this one could provide valuable insight at relatively low cost. Long distance phone costs were less than $500 for each survey and graduate students conducted the survey. This report provides some additional guidelines for other issues to address during such a survey. The process offers a way to address the problems of attempting to extend published results to unique situations and directly examines the nature of the population to be surveyed.

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Table 1.
Classification by Telephone Survey of the Percentage of a Sample of Four Alumni Graduating Classes that had Recently Been Sent a Mail Survey Concerning Their Experiences at the University.

	Telephone Survey Year			
	1991		1994	
	Graduation Year		Graduation Year	
	1984 (308)[a]	1989 (251)	1991 (161)	1993 (201)
I. Classified in telephone survey	57.8	57.8	76.4	73.1
A. Contacted by telephone	47.7	41.4	34.8	32.8
1. Completed telephone survey	43.8	39.4	32.3	29.9
a. Returned mail survey	21.8	16.7	8.7	6.5
b. Survey received/not returned	5.8	5.6	8.1	5.5
c. Did not receive mail survey	16.2	17.1	15.5	17.9
2. Not interested in phone survey	3.9	2.0	2.5	3.0
B. Wrong telephone number[b]	10.1	16.3	41.6	40.3
II. Not classified in telephone survey	42.2	42.2	23.6	26.9

[a]Numbers in parentheses indicate the number of alumni selected for inclusion.
[b]Phone numbers that were determined to be wrong and could not be corrected by contact at the first telephone number available.

Table 2.
Estimates of Percentage of the Alumni Population That Could be Classified with Respect to Behavior in the Mail Survey from Results of the Telephone Survey.

	Graduation Year			
	1984 (178)[a]	1989 (145)	1991 (123)	1993 (147)
Returned survey	37.6	29.0	11.4	8.8
Survey received/not returned	10.1	9.7	10.6	7.5
Did not receive survey	28.1	29.7	20.3	24.5
Not interested in survey	6.7	3.4	3.3	4.1
Wrong address (wrong phone number)	17.4	28.3	54.5	55.1

[a]Numbers in parentheses indicate the sample size for the telephone survey.

Table 3
Percentage of Responses by 27 Current Residents Contacted During 1994 Telephone Survey Who were still in Contact with an Alumnus.

Question	Yes	No	DN[a]
Do you forward all mail she/he receives?	89	11	0
Do you forward mail that appears to be advertisements or junk mail?	44	56	0
Do you forward mail that is from (the University)?	82	7	11
Are there types of mail that you do not forward?	52	41	7
Are there types of mail from (the University) that you do not forward?	18	78	4
Does it make a difference if the envelope is handwritten or typed?	15	85	0
If the envelope was marked or stamped "Alumni Survey" would you be more likely to forward it?	74	18	7
Are you more likely to forward mail that is from his/her department rather than the University?	4	22	74

[a] DN = Do not know/do not remember.

Table 4.
Percentage Response by Question for all Respondents of Two Telephone Surveys (1991 and 1994) of Alumni Classes that had been Mailed an Alumni Survey Previously.

		Class of 1984 or 1991[a]			Class of 1989 or 1993			Combined Total		
Phone Year	Q No.[b]	Yes	No	DN[c]	Yes	No	DN	Yes	No	DN
1991	3	69.6	10.4	14.1	74.7	21.2	2.0	71.8	15.0	9.4
1994	3	64.7	13.7	21.6	73.3	16.7	10.0	69.4	15.3	15.3
1991	4	91.9	2.2	5.9	89.9	5.1	5.1	91.0	3.4	5.6
1994	4	78.4	17.6	3.9	91.7	6.7	1.7	85.6	11.7	2.7
1991	5	32.6	60.7	5.9	31.3	61.6	6.1	32.1	61.1	6.0
1994	5	19.6	78.4	2.0	23.3	73.3	3.3	21.6	75.7	2.7
1991	6	23.7	69.6	5.9	33.3	55.6	8.1	27.8	63.7	6.8
1994	6	23.5	72.5	3.9	31.7	65.0	3.3	27.9	68.5	3.6
1991	7	40.0	54.8	5.2	51.5	47.5	0.0	44.9	51.7	3.0
1994	7	47.1	49.0	3.9	53.3	45.0	1.7	50.5	46.8	2.7
1991	9	35.6	58.5	4.4	34.3	58.6	5.1	35.0	58.5	4.7
1994	9	35.3	58.8	5.9	40.0	60.0	0.0	37.8	59.5	2.7
1991	11	75.6	22.2	2.2	81.8	16.2	2.0	78.2	19.7	2.1
1994	11	68.6	23.5	7.8	75.0	25.0	0.0	72.1	24.3	3.6
1991	12	87.4	8.1	4.4	87.9	12.1	0.0	87.6	9.8	2.6
1994	12	76.5	19.6	3.9	90.0	10.0	0.0	83.8	14.4	1.8
1991	13	45.2	52.6	1.5	56.6	41.4	2.0	50.0	47.9	1.7
1994	13	54.9	37.3	7.8	70.0	28.3	1.7	63.1	32.4	4.5
1991	14	76.3	11.9	10.4	73.7	16.2	10.1	75.2	13.7	10.3
1994	14	51.0	31.4	17.6	56.7	23.3	20.0	54.1	27.0	18.9

[a] Response from classes of 1984 and 1989 are reported for phone year 1991; classes of 1991 and 1993 for 1994 phone year.
[b] Question number; refer to survey instrument for text question in Appendix A.
[c] DN = Do not know/do not remember.

Table 5.
Number of Respondents and Percentage Response to Questions on the Telephone Survey by Classification with Respect to Receipt and Return of the Mail Survey. Graduating Classes have been Combined for this Grouping.

		Number of Respondents								
Phone Yr.		Returned			Not Returned			Not Received		
1991		109			32			93		
1994		27			24			61		
		Percentage Response to Questions								
	Question No.	Yes	No	DN	Yes	No	DN	Yes	No	DN
1991	7	32.1	65.1	1.8	50.0	40.6	9.4	58.1	39.8	2.2
1994	7	33.3	63.0	3.7	63.0	37.5	0.0	53.3	43.3	3.3
1991	14	86.2	7.3	5.5	53.1	25.0	18.8	69.9	17.2	12.9
1994	14	67.7	18.5	14.8	50.0	41.7	8.3	50.0	25.0	25.0

Figure 1. The maximum number of questions that respondents felt a survey should have.

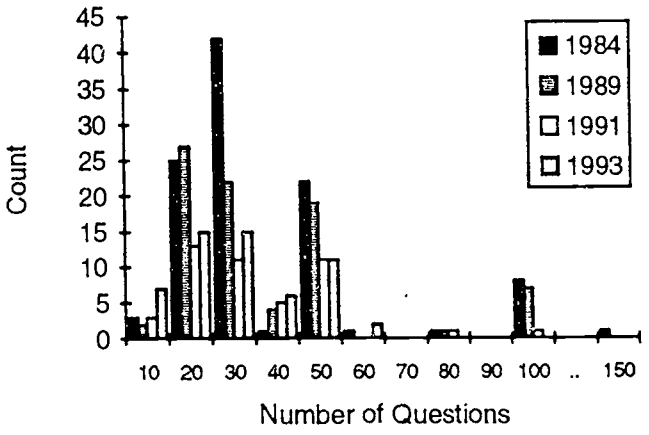
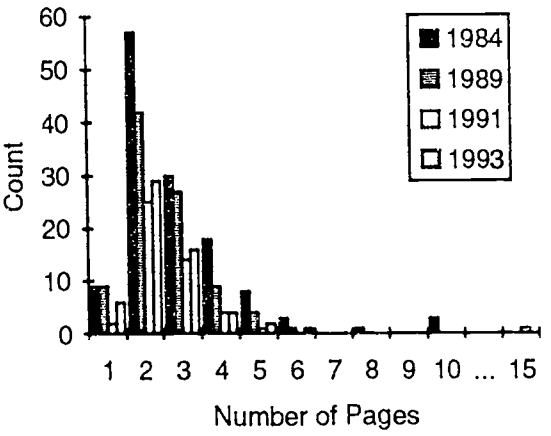


Figure 2. The maximum number of pages that respondents felt a survey should have.



APPENDIX A
Alumnus Survey Interview

Hello, my name is _____ and I am a student calling on behalf of (the University).
May I speak with _____.
If NO then: Thank you for your time, good bye.
If alumnus not living at this address then: Are you still in contact with _____?
If YES then: Conduct Resident Survey Interview (completed in 1994 survey only).
If alumnus not available at this time: Would you know when I might reach him/her?
If alumnus available at this time then: Each year we are required to survey our graduates by mail. We are trying to improve the overall quality of these surveys. Will you take 2 minutes to answer a few questions?
If NO then: Thank you for your time, good bye.
If YES then: Last fall we sent surveys to the class of (year of graduation). You should have received a survey.

(The remainder of the interview is presented below with parenthetic substitutes that depend upon the respondent's answers to the first two questions)

1. Do you recall receiving it?
2. Do you remember if you returned this survey?
3. Do you usually return surveys?
4. Do you usually (/Did you) read the accompanying cover letter?
5. Do you usually (/Did you) notice who signs (/signed) the cover letter?
6. Do you (/Did you) decide to respond based on the appearance of the survey?
7. Do you (/Did you) decide based on the number of pages of the survey?
8. What do you feel is the maximum number of pages a survey should be?
9. Do you (/Did you) decide to respond based on the number of questions on the survey?
10. What do you feel is the maximum number of questions a survey should have?
11. Do you (/Did you) decide to respond based upon the importance of the questions to you?
12. Are you more likely to respond if the survey is from (the University)?
13. Are you more likely to respond if there is an incentive such as the chance to win free football tickets?
14. Do you feel that your opinions on these types of surveys make a difference?

APPENDIX B

Resident Survey Interview

Each year we are required to survey our graduates by mail. We are trying to improve the overall quality of these surveys and would like your assistance. Would you be willing to take 2 minutes to answer a few questions?

If NO then: Thank you for your time, good bye.

If YES then:

1. Could you give me a phone number or address where _____ can be reached?
2. Do you forward all mail she/he receives?
3. Do you forward mail that appears to be advertisements or junk mail?
4. Do you forward mail that is from (the University)?
5. Are there types of mail that you do not forward?
6. Are there types of mail from (the University) that you do not forward?
7. Does it make a difference if the envelope is handwritten or typed?
8. If the envelope was marked or stamped "Alumni Survey" would you be more likely to forward it?
9. Are you more likely to forward mail that is from _____'s department rather than the University?