

Follow-up Methods, Questionnaire Length, and Market Differences in Mail Surveys

In this experimental test, a telephone reminder produced the best response rate and questionnaire length had no effect on rate of return.

CONSIDERABLE progress has been made in the art of data collection and in the reduction of nonsampling error in survey research.¹ However, there are still many areas in opinion research about which little is known or the existing evidence is inconclusive. This is especially true for mail surveys, where empirical research has failed to bring about agreement on the nature or degree of influence of the factors that affect response rate.² The authors believe there are three major reasons for this information gap: many variables influencing the response, the lack of a comprehensive theory, and the limited resources allocated to fundamental research on survey techniques.

Three aspects of mail surveys are of considerable practical importance and yet are not well understood. First, how effective are different

follow-up procedures in mail surveys? Is a postcard reminder as effective as a telephone reminder? Is it better to switch to a telephone or personal interview for those respondents who do not return the mail questionnaire within a prespecified time period? While there is a general consensus that any follow-up or prodding generates additional response,³ there is little agreement about the relative effectiveness of different follow-up procedures.

Second, what is the effect of questionnaire length on the response rate? It seems logical that response rate would decrease with an increase in questionnaire length, but most of the evidence to date has failed to support this hypothesis. In fact, the opposite result has been found in a number of studies.⁴

The third question concerns the determination of interaction effects among questionnaire length, follow-up methods, and various respondent characteristics. For example, is one follow-up method more effective for a short questionnaire and another better for a long questionnaire? Also, are some respondents more receptive to a particu-

1. For a comprehensive bibliography on research on data collection, see Dale R. Potter, Kathryn M. Sharpe, John C. Hendee, and Roger N. Clark, *Questionnaires for Research: An Annotated Bibliography on Design, Construction and Use* (Portland: Pacific Northwest Forest and Range Experiment Station, USDA, 1972); and for a comprehensive theory of nonsampling error, see Seymour Sudman and Norman Bradburn, *Response Effects in Surveys* (Chicago: Aldine Publishing Co., 1974).

2. Christopher Scott, "Research on Mail Surveys," *Journal of the Royal Statistical Society*, Vol. 124 (No. 2, 1961), pp. 143-205; Paul L. Erdos, *Professional Mail Surveys* (New York: McGraw-Hill Book Co., 1970).

3. Joseph R. Hochstim and Demetrios A. Athanasopoulos, "Personal Follow-up in a Mail Survey: Its Contribution and Its Cost," *Public Opinion Quarterly*, Vol. 34 (Spring 1970), pp. 69-81; and Bruce K. Eckland, "Effects of Prodding to Increase Mail-Back Returns," *Journal of Applied Psychology*, Vol. 49 (June 1965), pp. 165-169.

4. See Scott, same reference as footnote 2, for a listing of studies.

lar follow-up method or questionnaire length than other respondents?

Study Design⁵

Answers to these questions about the effects of questionnaire length, follow-up method, respondent characteristics, and their interactions are critical to AT&T, which periodically sends a mail questionnaire to its residence customer panel of 30,000 members. These customers are asked to complete and return a four-page questionnaire; the data are used as input for AT&T's Market Research Information System (MRIS). The 30,000 residence customers in this longitudinal panel represent all telephone users at the national and state level, and local areas within some of the larger states. To ensure representativeness of the sample in the fixed panel, it is important to maximize the questionnaire response rate.

The four-page mail questionnaire requests information on telephones and their location in the home, telephone usage, housing, mobility, demographics, and socioeconomic characteristics. Together with information from company billing records, these data are used to develop models of telephone behavior patterns. The survey procedure uses an "alert" postcard, followed by a first mailing of the questionnaire with a cover letter requesting the customer's cooperation. Then a reminder postcard is sent, followed by the mailing of a second questionnaire to those who did not fill out and return the first.⁵

Three years after the initial customer data were collected, the company decided to obtain more current information by mailing a new questionnaire to present panel members. At the same time, the decision was made to revise the standard four-page questionnaire, to determine the effects of gathering additional attitudinal information, and to test alternative methods for

improving the response rate. This last concern was to guard against the generally declining response rates that had been experienced by many in survey research work.

Since past research evidence on the effects of follow-up methods and questionnaire length on response rate was not decisive, a study was initiated to investigate the individual and joint effects of these factors in a variety of market areas. One purpose of the study was to compare the present questionnaire follow-up procedure and several alternative methods under controlled conditions to determine the best procedure for increasing the response rate. A second objective was to find out if a set of attitude items could be added to the questionnaire without decreasing the response rate. The study consisted of a $2 \times 4 \times 8$ three-factorial fixed-effect field experiment and a subsequent set of postexperiment interviews to explore customer attitudes toward the mail survey.

Test Variables

The first test variable was questionnaire length/content. Two questionnaire versions (two experimental levels) were used: a short, four-page questionnaire (slightly revised from the existing questionnaire); and a long, six-page questionnaire that included additional attitudinal and perceptual questions about the telephone as a product and as a service. The short questionnaire consisted of 28 items, and the long questionnaire contained the same 28 items plus 26 attitudinal items.

All questions but one were either check-box or called for writing in or circling a number. A descriptive statement and an example are given for each of the five sections of the questionnaire. Both questionnaire versions consisted of the same first four sections:

1. Five introductory questions:

	Completely Agree	Very Much Agree	Somewhat Agree
Having more than one telephone is a necessity . . .	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
	Neither Agree nor Disagree	Somewhat Disagree	Very Much Disagree
	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
			Completely Disagree
			<input type="checkbox"/> 7

2. Five "About Your Home" questions:

How many rooms are in your home? (Do not count bathrooms or closets)
Total number of rooms _____

How many separate bedrooms are in your home?
Total number of bedrooms _____

5. This procedure is detailed in Erdos, same reference as footnote 2.

* ABOUT THE AUTHORS.

A. Marvin Roscoe is a marketing manager in the Market Research Section of the AT&T Company, New York, and a doctoral student in marketing at New York University.

Dorothy Lang is a staff associate in Market Research at the AT&T Company, New York, and a doctoral student in organizational behavior at Baruch College, City University of New York.

Jagdish N. Sheth is I.B.A. Distinguished Professor and Research Professor in the College of Commerce and Business Administration, University of Illinois, Urbana-Champaign.

3. Ten "About Your Telephone Service" questions:

Normally, how many local calls in a typical day do you and your family make from your home?

Less than 1 call a day
 _____ call(s) a day.

Compared to your friends, how would you rate yourself and your family in regard to your telephone usage?

Infrequent Users	Less than Average Users	Average Users	Above Average Users	Very Heavy Users
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

4. Seven "About Your Family" questions:

Which *one* of the following statements best describes how your family makes most financial decisions, including buying major products and services?

Head of household decides alone	<input type="checkbox"/> 1
Head of household and spouse decide together	<input type="checkbox"/> 2
Spouse decides alone	<input type="checkbox"/> 3
Family members decide together	<input type="checkbox"/> 4

What is the highest grade attended or degree received by the head of the household?

Some grade school	<input type="checkbox"/> 1
Grade school completed	<input type="checkbox"/> 2
Some high school	<input type="checkbox"/> 3
High school completed	<input type="checkbox"/> 4
Some college	<input type="checkbox"/> 5
Bachelor's degree	<input type="checkbox"/> 6
Some graduate work	<input type="checkbox"/> 7
Master's or doctorate degree	<input type="checkbox"/> 8

In addition, the long questionnaire contained 26 attitude items:

	Completely Agree	Very Much Agree	Somewhat Agree
I often order things over the telephone to avoid a trip to the store	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3
	Neither Agree nor Disagree	Very Much Disagree	Completely Disagree
	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 7

The second experimental factor or test variable was *follow-up methods*. Four methods were selected as feasible alternatives after considerable exploration of the cost and convenience of various strategies. The four interviewing methods selected used a uniform postcard alert and first questionnaire mailing. The follow-up methods varied among experimental treatments and consisted of the present postcard and three new methods:

1. *Present follow-up method*—postcard reminder and a second mailing of the questionnaire
 The postcard reminder read:

Just a Reminder . . .

We'd like to include your opinions with those we've already received about the new services and equipment we are offering.

If you have not already done so, won't you please check your answers to the questions in the questionnaire we sent you recently, and return it to us.

Thank you for your help.

[Signature of local Telephone Company Manager and Company logo.]

2. *Second follow-up method*—telephone reminder and a second mailing of the questionnaire

The following reminder was used:

Hello I'm _____ and I represent your telephone company.

- A. Recently we mailed you a questionnaire to fill out. Did you receive it?
 Yes () Ask Q.B.
 No () TERMINATE AND NOTIFY TELEPHONE COMPANY
- B. By the way, have you mailed it back yet?
 Yes () Read Statement C-1
 No () Read Statement C-2
- C-1. Thank you very much for your cooperation. We really appreciate your help.
- C-2. Your answers are very important to us to help provide improved telephone equipment and services. Would you please fill it out and mail it back to us?
 (CHECK HERE WHETHER OR NOT IT IS YOUR IMPRESSION THAT RESPONDENT INTENDS TO COOPERATE).

Intends to cooperate ()
 Does not intend to cooperate ()

Respondents were not given the option of answering the questionnaire over the telephone because the purpose of the study was to test the effectiveness of a telephone reminder as compared to a telephone interview, and the treatments were to be kept separate to avoid confusing the results.

3. *Third follow-up method*—letter alert followed by a telephone interview

The letter alert read:

Dear Customer:

Recently we mailed you a copy of the enclosed questionnaire as part of an important survey among telephone users. If you have already returned the original questionnaire, this is our way of saying "Thank you."

In case you were away or too busy to complete the questionnaire, an interviewer representing the Telephone Company will phone you during the

next few days to record your responses. Of course, all answers are confidential and will be combined with those of other telephone users.

It would be a great help if you would keep the enclosed questionnaire near the phone for convenient reference when our interviewer calls.

I personally will be very grateful for your help.

Sincerely,

[Signature of local Telephone Company Manager]

For the telephone interview, the interviewer read the questions from the questionnaire form to the respondent when necessary and recorded the answers on that form.

4. *Fourth follow-up method*—telephone interview without alert

The interviewer called the respondent without advance notification and read the questions from the questionnaire form.

The third experimental factor, or test variable, was *market heterogeneity*. The national panel in the MRIS system is based on a multistage stratified sample in which the Bell System is geographically divided into 100 regions, and a sample of 300 residence customers is chosen to represent each region. Based on a hybrid multivariate cluster analysis⁶ of the 100 Bell System markets in terms of socioeconomic, demographic, and telephone usage characteristics, the following eight geographical areas were chosen as representative market regions: Southeast Massachusetts; San Jose, California; Arizona; Philadelphia; Eastern Wisconsin; Suburban Chicago; Fort Worth, Texas; and Alabama. Although general regional differences in response rate among these areas were known, the study was designed to test whether or not one questionnaire version or follow-up method would be superior in one region while another would result in a higher rate of return in other geographical areas. These markets represented eight fixed levels of the third factor in the experimental design.

Questionnaires were mailed to a representative random probability sample of 264 customers in each market. Within each of these test regions, the sample was equally divided among the eight experimental conditions (two questionnaire lengths and the four follow-up procedures), with the result that each of the 64 cells in the three-

factorial experimental design had a sample of 33 customers.

In addition to these three experimental factors, information on respondent characteristics was obtained by using the demographic, socioeconomic, telephone usage, and attitudinal information from the questionnaire itself. These data were used to estimate the respondent attributes that could interact with questionnaire length and follow-up methods to influence reaction to these variables.

The Study

The study began with the 2,144 members of the sample receiving an alert postcard on a Monday of the first week of the survey and the questionnaire on the following Wednesday. The postcard and telephone reminder groups received a second questionnaire on Friday of the second week if the first questionnaire had not been returned.

The telephone reminders and follow-up telephone interviews were conducted in each test region from Friday of the first week through Monday of the third week by the field staff of a national commercial research company. The mailing dates, including those for the follow-up procedures, were designed to compensate for the regional variations in postal delays. Four attempts were made to contact each respondent for the telephone reminders and telephone interviews. In addition, the interviewer was allowed to speak to any responsible adult in the household if the head of household was not available. Finally, calls were made at various times of the day and evening that the local supervisor considered most appropriate. Every possible effort was made to minimize the differences in situational factors (time, person, and opportunity to reach) between the telephone and mail interviews.

The mail questionnaires were accompanied by cover letters on the letterhead of the local Bell Telephone Company. However, the content of the alert postcard, the cover letter, and the reminders was identical across all eight test market regions. All mailings were posted by the survey research manager of each local Bell Telephone Company and the return mail was delivered to that company.

Postexperiment interviews were conducted with a subsample of respondents that included some customers who did not return the questionnaire by the end of the experiment. These interviews were held to determine the respondents' feelings toward the survey in general and their reactions to the time intervals in the mailing and follow-up procedures, to verify the demographic

6. A. Marvin Roscoe, Jagdish N. Sheth, and Welling Howell, "Applications of a Hybrid Cluster Analysis in Industrial and Residential Markets" (Working paper, January 1974).

TABLE 1
RETURNED QUESTIONNAIRES

Markets	SHORT QUESTIONNAIRE Follow-Up Method				LONG QUESTIONNAIRE Follow-Up Method				Average Response Rate
	Postcard Reminder	Telephone Reminder	Telephone Interview No Alert	Telephone Interview with Alert	Postcard Reminder	Telephone Reminder	Telephone Interview No Alert	Telephone Interview with Alert	
Alabama	43.3%	67.7%	56.2%	32.3%	70.0%	68.8%	39.4%	39.4%	53.2%
Southeast									
Massachusetts	70.3	70.3	54.1	64.9	59.5	78.4	58.4	58.4	64.2
Suburban Chicago	74.2	87.5	50.0	71.9	75.0	63.6	31.2	54.6	63.5
Ft. Worth	75.8	71.9	71.9	87.1	81.8	81.8	62.5	87.9	77.6
Eastern									
Wisconsin	69.7	87.9	57.6	59.4	72.7	87.9	51.5	63.6	68.8
Philadelphia	57.6	75.0	54.6	69.7	48.5	69.7	66.7	78.8	65.1
Arizona	78.8	66.7	57.6	69.7	75.0	84.9	78.8	87.9	74.9
San Jose	80.0	84.4	65.6	62.5	81.8	76.8	56.2	58.1	70.7
Average response rate	68.7	76.4	58.4	64.7	70.5	76.5	55.6	67.2	67.3

information provided in the survey, and to check the understanding of specific questions. A total of 393 respondents were successfully interviewed; these were approximately equally divided among the three experimental factors. One-third of the interviews were conducted in person and the others by telephone.

An analysis of variance was performed on the data from the basic experiment, and the three experimental factors and all combinations of their interactions were tested for significance. In addition, specific questions on the test questionnaire were cross-tabulated by questionnaire length, follow-up method, and market. From the postexperiment survey, usage and attitude information were tabulated by return or nonreturn of the earlier experimental questionnaire, early vs. late return, questionnaire length, and follow-up method. The postexperiment survey allowed the comparison of respondents and nonrespondents in terms of both demographic and response characteristics.

Results and Discussion

The results of the questionnaire returns are summarized in Table 1. The overall response rate was 67.3%. There were significant differences across various experimental treatments of the three factors.

First, the four follow-up methods produced considerably different response rates across the markets and across the two versions of the questionnaire. The telephone reminder was the best follow-up, with an average response rate of 76.4%; followed by the postcard reminder, with an average of 69.6%; the telephone interview with

an alert, with an average of 65.9%; and, finally, the telephone interview without an alert, with an average response rate of 57.0%. Based on the Newman-Keuls test on the pairwise differences within an experimental factor,⁷ AT&T found that most of the differences across follow-up methods could be attributed to two conditions: (1) the telephone interview without alert is significantly worse ($p < .01$) than the other three follow-up methods, and (2) the telephone reminder is significantly better ($p < .05$) than the other three follow-up procedures in generating response.

Second, there were no significant differences in the response rate between the short and the long questionnaire. This result adds to the growing evidence that there is no adverse effect on the response rate with reasonable questionnaire length.

Third, as expected, the eight markets reacted differently to the experimental conditions. The best response rate came from the Fort Worth area, and the poorest response rate came from the Alabama area. The Newman-Keuls test showed that most of the differences across the eight markets came from Alabama, which had a significantly lower response rate than all other markets ($p < .05$), and Fort Worth, which had a significantly higher response rate than the four below-average markets ($p < .05$).

To quantify the significant differences across the three experimental factors and to isolate the main and the interaction effects, an analysis of

7. See B. J. Winer, *Statistical Principles in Experimental Design*, 2nd ed. (New York: McGraw-Hill Book Co., 1971), pp. 191-196.

TABLE 2
ANALYSIS OF VARIANCE OF QUESTIONNAIRE RETURNS

Source of Variation	Sum of Squares	Degrees of Freedom	F Ratio	Significance
Questionnaire length	0.26	1	0.04	N.S.
Follow-up methods	342.53	3	16.94	.001
Markets	350.93	7	7.44	.001
Questionnaire length × Follow-up methods	7.51	3	0.37	N.S.
Questionnaire length × Markets	103.70	7	2.20	.10
Follow-up methods × Markets	311.87	21	2.20	.05
Questionnaire length × Follow-up × Markets (error)	141.58	21		

The use of the three-factor interaction for the estimate of the error variance was based on Tukey's test for nonadditivity, which was rejected as not significant.

variance using Tukey's test for nonadditivity was performed on the data.⁸ The results are summarized in Table 2. As expected, both the factors of follow-up methods and market heterogeneity had significant main effects, while questionnaire length had no significant main effect. Significant interaction effects were found between the follow-up method and market heterogeneity factors and, to a much lesser extent, between questionnaire length and market heterogeneity. No significant interaction effect was found between questionnaire length and follow-up methods.

A postexperiment survey was conducted to assess attitudinal differences among respondents belonging to different experimental conditions. One would expect no significant differences across experimental groups in their general attitudes toward survey participation when *both* the responders and nonresponders are included in each experimental group. This lack of difference would suggest that the experimental groups were in

agreement in their feelings toward survey participation, which can provide additional credence to the analysis of variance results.

Table 3 summarizes the feelings of survey participants toward survey participation across different experimental conditions. These have not been broken down by market due to the extremely small sample sizes in each cell for many of the responses. As can be seen from Table 3, the percentages of positive, negative, and neutral comments are remarkably similar across the experimental conditions when both responders and nonresponders are grouped together. Overall, 81% of the respondents had positive feelings toward the survey, 15% had negative feelings, and 7% were either neutral or had no opinion. (As a result of multiple comments, the categories will tend to add to more than 100%.) This agreement among experimental groups with respect to their general feelings toward survey participation gives stronger support to the results discussed earlier.

To obtain insights into the reactions to the specific experimental conditions (questionnaire

8. See same reference as footnote 7, pp. 394-397.

TABLE 3
ATTITUDES TOWARD SURVEY PARTICIPATION

Nature of Respondents' Comments	QUESTIONNAIRE LENGTH		FOLLOW-UP METHOD			
	Long (N=192)	Short (N=194)	Telephone Reminder (N=97)	Postcard Reminder (N=96)	Telephone Interview No Alert (N=96)	Telephone Interview with Alert (N=96)
Positive	81%	80%	82%	81%	80%	79%
Neutral	7	8	7	5	7	9
Negative	15	16	13	16	14	18

Note: Based on the responses of all 386 participants in the postexperiment survey, including those who did not return the test questionnaire. As a result of multiple comments, the categories will tend to add to more than 100%.

TABLE 4
ATTITUDES TOWARD THE QUESTIONNAIRE

Nature of Respondents' Comments	Long Questionnaire (N=159)	Short Questionnaire (N=161)
Positive	70%	67%
Neutral	9	7
Negative	30	30

Note: Based on the responses of the 320 participants in the postexperiment survey who had completed the test questionnaire. As a result of multiple comments, the categories will tend to add to more than 100%.

length and follow-up procedures), the respondents were asked how they felt about the experimental condition to which they were subjected. Table 4 summarizes the feelings toward the length of the questionnaire for each of the two levels of the experimental condition. Only those who returned the questionnaire are included in this analysis. As can be seen from the table, there were no real differences between the short questionnaire and long questionnaire groups, although there was a slightly greater positive response to the longer questionnaire.

Interestingly, the group with the longer questionnaire considered it to be "comprehensive/well designed" to a significantly greater degree than the group with the shorter questionnaire (28% vs. 17%). However, this was somewhat offset by a higher percentage of positive responses in the shorter questionnaire group with respect to the "easy to fill out/not too long" (16% vs. 10%) and "questions were to help the company improve service" (11% vs. 6%) categories. With respect to the negative comments, it was surprising to find that considerably more respondents in the shorter questionnaire group felt that some of the questions were too personal (14% vs. 4%). As was expected, slightly more respondents in the longer questionnaire group felt that some of the questions were complicated (12% vs. 8%).

Table 5 summarizes the postexperiment comments specifically related to the follow-up methods. Due to the small sample size, respondents for both telephone interview follow-up procedures have been combined into a single category. Significantly more respondents in the telephone interview group gave positive comments than in the telephone reminder and postcard reminder procedures (87% vs. 51% and 47%, respectively). This is somewhat surprising in view of the fact that the response rate was lower for the telephone interview follow-up methods. However, most of the positive comments were more in the

TABLE 5
ATTITUDES ABOUT FOLLOW-UP METHODS

Nature of Respondents' Comments	Telephone Reminder (N=97)	Postcard Reminder (N=97)	Telephone Interviews ^a (N=41)
Positive	51%	47%	87%
Negative	11	7	18
Don't remember/ Didn't receive	11	39	0

^aAlert group and no-alert group combined. Includes only respondents given telephone interview.

Note: As a result of multiple comments, the categories will tend to add to more than 100%.

nature of doing a favor or ingratiating the telephone interviewer than of the advantage of the follow-up method. Thus, 41% stated that they did not mind the telephone interview and 30% said they were glad to help the company. In contrast, only 10% felt the phone call made the survey clearer and 27% favored the telephone interview over the mail questionnaire. Examining the positive comments in the telephone and postcard reminder groups, however, it was found that most of the positive comments were directly anchored to the use of follow-up procedures. Many respondents considered the follow-up a good idea or a good reminder.

With regard to the negative comments, it appears that some of the cooperative respondents in the telephone interview group did not like telephone interviews or resented the telephone survey when they had an unlisted number (7%). Some of the respondents in the telephone reminder procedure found it to be "annoying or pushing me" (15%).

Finally, a large percentage of respondents claimed they did not receive the postcard reminder or did not remember receiving it (39%). Similarly, some of the respondents in the telephone reminder group also claimed they did not receive, or did not remember receiving, the reminder (11%). Inasmuch as it is easier for the respondent to claim nonreceipt of a mail reminder than a telephone reminder, the superiority of the telephone reminder found in the study may be due partly to this factor.

Postexperiment analysis of the eight markets produced no significant differences except that the respondents in the Fort Worth area had significantly higher incomes than the 1970 U.S. Census data for the area had indicated. Due to the many multiple telephone numbers in the upper-income households in the Fort Worth area, the random probability sample had generated a greater number of upper-income respondents.

The lack of systematic differences in the feelings toward survey participation, or toward specific experimental conditions across the eight markets, is disappointing as the authors believe that the concept of market segmentation in survey research is meaningful. That is, some questioning procedures are better suited for one segment of the total respondents while others are better suited for other segments, and no single technique of data collection would optimize the returns from all segments of the population.

Summary and Conclusions

This study was designed to test and evaluate two specific questions for management. First, could an instrument of 26 attitude items be added to the present questionnaire without hurting the response rate? Second, was there a practical alternative to the present follow-up procedure that would increase overall response rate? The results clearly indicated that the attitude questions could be added to the questionnaire without any measurable effect on response rate and that the longer questionnaire would not influence the selection of the follow-up procedure. The telephone reminder with the second mail questionnaire proved to be the best overall strategy to replace the present postcard reminder. The telephone reminder was consistently more effective over all markets and made a more positive and memorable impression on the survey participants. The emphasis here was placed on increased response rate, which would result in improved panel validity and effectiveness; therefore, no direct cost comparisons were made. However, since the survey mailing and collection are done

locally, the telephone reminder costs compare favorably with the costs to print, address, and mail the reminder postcards. It is interesting to note that both the low-cost reminders and mail return performed better than the more expensive telephone interviewing. It is encouraging to know that better results do not have to cost more.

Since the telephone reminder and the postcard reminder are similar in nature and differ only in form, it is possible to suggest that if specific markets find that the results with the telephone reminder do not achieve a better return than their previous experience, they should continue to use the postcard reminder. This tailoring of the survey procedure to specific markets suggests that the best survey methodology might be different for various market areas. In particular, the results of this study suggest that high-income socioeconomic customer groups and those in the Southwest respond best to the alert and telephone interview. However, this procedure should not be used in many areas of the South, where the best response was obtained by a telephone reminder. The telephone interview is also not recommended as a follow-up procedure in and around the major metropolitan areas, inasmuch as the telephone reminder was preferred in the city and the postcard reminder was more effective in the suburban areas. However, additional research is needed to confirm and extend these secondary findings.

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