

# THE EFFECT OF DIFFERENT INTRODUCTIONS AND ANSWERING MACHINE MESSAGES ON RESPONSE RATES

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During the past few decades refusal rates to telephone surveys have undergone a sharp increase, both limiting the generalizability of the findings and adding significantly to the costs of administering these surveys. According to one estimate (Bowers 1997), in the past seven years alone respondent refusal rates have gone up by approximately 20 percent. Opinion and market researchers need to study different approaches which might lead to greater cooperation rates or, at least, prevent a further decline in these rates. Two approaches which deserve far more attention than they have been accorded in the past are leaving messages on telephone answering machines and designing more effective survey introductions. This paper considers both the efficacy of leaving messages on answering machines and examining the persuasive potential of different survey introductions.

## Methodology

The data for this paper are based upon two waves of a national random-digit-dialing (RDD) survey of the general population carried out by Quality Controlled Services, a division of Maritz Marketing Research, Inc. Altogether there were 925 completed interviews in the first wave and 984 in the second wave. The first wave of the survey was conducted during the week of November 11-18, 1996 and the second wave was conducted during the week of April 14-21, 1997.

The methodology for both waves of the survey was virtually identical. Households which yielded an answering machine response disposition on the first call attempt were randomly assigned to one of four groups -- three experimental groups and a control group. In the three experimental groups, one of three different messages was left on the potential respondent's machine. In the control group, no message was left. The messages left on machines in the three experimental groups consisted of the following: Message #1 was a standard introduction. Message #2 consisted of the standard introduction plus a statement about the importance of the respondent's opinions. Message #3 consisted of the standard

introduction plus a statement about the prestigious nature of the publications in which the poll results generally appear. (The precise wording of the three different messages is provided in Appendix 1.) Households in the three experimental groups which subsequently produced an answering machine response disposition on the second call attempt (or third call attempt if the second call attempt resulted in a non-contact) were each further randomly split into two subgroups. In one subgroup a repeat message (duplicating the content of the first message) was read and in the other subgroup no repeat message was read.

When contact was established with a household in one of the three experimental groups, one of three introductory scripts (paralleling the content of the message left) was read to the potential respondent. When contact was established with a household in the control group (where no message was left) the three introductory scripts were randomly assigned to the potential respondent. Thus, roughly the same proportions of individuals in the control group were read each of the three alternative introductory scripts.

Respondents from the three experimental groups who were left a message on their machines and who agreed to be interviewed were asked up to three questions concerning the message. The first question asked respondents if they themselves listened to the message. Those respondents who answered affirmatively were then asked what effect, if any, listening to the message had on their willingness to participate in the survey. Finally, those respondents who both personally listened to the message and who said it made them more/less willing to participate were asked open-endedly about the salient aspects of the message.

The methodology called for up to three callback attempts to be made (when necessary) before a final response disposition was reached.<sup>1</sup> At the conclusion of the calling period, both the contact and completion rates<sup>2</sup> were calculated for the households in both the experimental and control groups.

## **Contact and Completion Rates of Answering Machine Owners**

Consistent with the results from previous research (Baumgartner 1990; Daves 1990; Tuckel and Feinberg 1991), the data in this study show that a substantial proportion of answering machine owners are both reachable by telephone survey researchers and willing to participate in surveys. Three quarters of those households which yielded an answering machine response disposition on the first call attempt were contacted on subsequent call attempts. By comparison, only 56 percent of those numbers which produced a "no answer" response disposition on the first call attempt were reached at the end of the calling period. Also, the completion rate of households which yielded an answering machine response disposition on the first call attempt was higher than the corresponding rate for both the "no answer" and "busy" households, although the differences were not statistically significant (53.6% vs. 48.1% and 41.5%, respectively). Finally, respondents who completed the interview in Wave 2 of the study were asked if they owned an answering machine. Sixty-three percent of those who participated in the survey answered affirmatively. Thus the evidence based upon both actual response dispositions and self-reported ownership of answering machines points to the conclusion that answering machine owners, by and large, remain accessible to telephone survey researchers.

## **The Effect of Leaving a Message on Answering Machines on Response Rates**

A critical question faced by survey researchers is whether or not to leave a message on the answering machines of potential respondents. Some might argue that leaving a message would increase response rates. The rationale for doing so is leaving a message would perform the same role as pre-notification in mail surveys -- it would help to legitimize the survey. Conversely, others might argue that leaving a message would not be beneficial because it would serve to "forewarn" potential respondents about the survey which they might construe as a "nuisance call." Still others might contend that leaving a message would have no discernible effect because either the message itself would lack salience or the time lag before the respondent is re-contacted would nullify its putative positive (or negative) effects.

The data here indicate that there is little difference in the contact rate of answering machine households which were left a message and those which were not

left a message (75.0% vs. 77.9%). Those households which were left a message had a slightly higher completion rate than their no-message counterparts but the difference was not statistically significant (54.6% vs. 50.8%).

## **The Effect of Leaving Repeat Messages on Response Rates**

While several studies have been conducted to measure the effect of leaving a message on response rates (Baumgartner 1990; Daves 1990; Xu, Bates, and Schweitzer 1993), little scholarly attention has been devoted to examining the impact of leaving repeat messages. Two competing hypotheses could be posited concerning the possible effect of leaving repeat versus just one message on answering machines. Leaving repeat messages could be viewed as beneficial for a number of reasons. First, leaving more than one message would serve to underscore the legitimacy of the survey. Second, it might invoke the "norm of reciprocity" whereby a potential respondent might feel more obligated to make himself/herself more accessible to the survey researcher because of the effort expended by the researcher. Third, it would increase the probability of a given respondent in a household personally hearing the message. On the other hand, leaving a repeat message could have negative consequences. The principal drawback would be that the potential respondent might view the repeated messages as a source of annoyance.

The data in this paper show that there is a negligible difference in the contact rate of answering machine households which were left two messages and those which were left just one message (48.3% vs. 51.9%). The completion rate of the one-message group (58.3%) is higher than the completion rate of the two-message group (50.0%) but this difference does not prove to be statistically significant. In short, leaving two messages certainly does not enhance the prospect of reaching potential respondents and may, in fact, reduce their willingness to participate in the survey.

## **The Impact of Different Answering Machine Messages on Response Rates**

While overall leaving a message on the answering machines of potential respondents does not seem to have much of an influence on the contact rate, specific messages might have greater appeal than others. Based on prior research carried out with mail surveys, one might hypothesize that messages which underscore the importance of each respondent's opinions or which

highlight the prestige of the survey might lead to an increase in response rates. In this study, answering machine households were left three different messages: Message #1 -- a basic introduction, Message #2 -- a basic introduction plus a statement about the importance of the respondent's opinions, and Message #3 -- a basic introduction plus a statement about the prestigious nature of the survey.

The data reveal little variability in the contact rate of the households which were exposed to the three different messages (72.3% , 75.6% , and 77.0% respectively). With respect to the completion rate, respondents from households which were left Message #1 participated in the survey at a higher rate than their counterparts from households which were left Message #2 or Message #3 (62.9% vs. 50.4% and 52.2% respectively). Interestingly, Message #1 is the basic introduction and makes no appeals to either the importance of the respondent's opinions or to the fact that the survey results will be disseminated in a number of prestigious publications. It is the shortest message, however, and as past research has indicated (Dillman, Gallegos, and Frey 1976), brevity in survey introductions is a virtue.

#### **Self-Reported Impact of Answering Machine Messages on Survey Participation**

Respondents who had a message left on their machines and who agreed to participate in the survey were asked if they personally listened to the message. All told, 57 percent reported they themselves heard the message and an additional 18 percent said "someone else in the household" had heard the message. Those who said they personally heard the message were then asked what effect, if any, listening to the message had on their willingness to participate in the survey. Only 27 percent responded that listening to the message made them more positively disposed towards survey participation. Nine percent responded that listening to the message made them less inclined toward being interviewed. What is most striking is that a solid 60 percent said that listening to the message had "little or no effect" on their willingness to participate. This finding accords with the results presented above concerning the completion rate of answering machine owners who were left a message versus those who were not left a message. It appears that leaving a message has only marginally beneficial effects.

Respondents who said that listening to the message made them more/less willing to cooperate in the survey were then asked open-endedly what about the

message, in particular, increased/decreased their motivation to participate. Those who said the message increased their willingness to participate replied that the most salient aspect of the message was that the purpose of the call was not a sales solicitation. Typical of such responses was the following: "Most of the time telemarketing does not leave a message and you took the time to leave a message." Or, as another respondent stated, "It was because it said it was not a sales pitch." About half of all the responses to this open-ended question alluded to the non-solicitation aspect of the message. Only one respondent mentioned the opportunity to offer one's opinions (as underscored in Message #2) as a motivating factor. No one mentioned the prestigious nature of the publications in which the poll results generally appear (emphasized in Message #3) as an inducement for participation.

#### **THE EFFECT OF DIFFERENT SURVEY INTRODUCTIONS**

A second focus of this study was to consider the persuasive potential of different survey introductions. Since the vast majority of refusals in telephone surveys occur right after the introductory remarks have been made, it is important that these remarks be as motivating as possible.

Previous research on the effect of varying survey introductions on refusal rates has yielded mixed results. Among Washington state residents, Dillman, Gallegos, and Frey (1976) found that varying the introduction did not have a major impact on refusal rates. Importantly, the most efficacious introduction was the shortest one. Similarly, in a national probability study, O'Neil, Groves, and Cannell (1979) found only marginal differences in refusal rates among groups exposed to different introductions. However, it should be pointed out that each introduction was prefaced with the statement: "Hello, this is the University of Michigan calling." The inclusion of this statement at the beginning of each introduction may have suppressed the effects of the differing introductions. More recently, in a study of Alabama residents, Gonzenbach and Jablonski (1993) found that including a non-solicitation statement increased the completion rate by 6 percentage points. On the other hand, a study among adult residents in the Seattle metropolitan area (Pinkleton, Reagan, Aaronson, and Ramo 1994) found that including a non-solicitation statement did not affect response rates. The authors of this last-mentioned study hypothesized, though, that an introduction which draws a sharper distinction

between a survey and a telemarketing call might positively impact response rates.

In the present study, three different introductions were randomly assigned to potential respondents. These were the same introductions as those read to answering machine households once they were contacted. The results reveal a high degree of uniformity in the completion rates of respondents who were read the different introductions. The disparity between the highest and the lowest rate is a mere 3.3 percent.

## CONCLUSIONS

A number of major conclusions have emerged from this analysis. First, as the incidence level of answering machine ownership has trended upwards (now estimated at between 60-70 percent of all telephone households in the U.S.), answering machine owners still remain accessible to survey researchers. Both the final contact rate of households which initially yielded an "answering machine" response disposition and the self-reported ownership of answering machines among completed interviews show that a sizable proportion of owners are reachable by survey researchers. As answering machine ownership has spiraled upwards, however, the gap between the completion rate of owners versus non-owners (which formerly was considerably higher among owners) has narrowed.

A second major finding of this study is that there is no difference in the contact rate between answering machine households which were left a message and those households which were not left a message. The completion rate of households which were left a message, though, was slightly greater than the rate of the no message households. Relatedly, leaving repeated messages seems to depress the completion rate. The lack of a major effect of leaving a message on response rates accords with respondents' own perceptions of the importance of the message. Respondents who listened to a message on their machines and who subsequently completed the interview were asked what effect, if any, listening to the message had on their inclination to participate in the survey. While a greater percentage said listening to the message made them more willing than less willing to participate (27% vs. 9%) a sizable majority (60%) reported that listening to the message had little effect on their disposition to participate.

In terms of the persuasive potential of different messages, the most efficacious one proves to be the shortest one. The message which had the highest completion rate was the standard message bereft of any appeals to the importance of the respondents opinions or statements about the prestigious nature of the poll. Significantly, those respondents who reported that the message made them more positively disposed towards participating frequently cited one theme which was present in all of the messages: that the purpose of the call was not a sales solicitation.

Based on the findings above, survey researchers might consider leaving one message on the answering machines of potential respondents if this would not add significantly to the costs of administering the survey. The message should be brief and explicitly state that the purpose of the call is not a sales call. The mere fact of leaving a message would help to reinforce that notion since telemarketers generally do not leave messages.

Finally, this study reveals that varying the introductory remarks has little bearing on completion rates. Yet it would be erroneous to conclude that the content of the introductory statements is not important. As was the case with the answering machine messages, embedded in each of the three introductions was a non-solicitation statement. As the respondents themselves said (in commenting on the salience of the answering machine messages), knowing that the call is not a sales call is critically important. Thus, the persuasability of the introductory statement might depend as much, if not more, upon stating the absence of a negative (that the call is not a sales solicitation) than upon stating the benefits associated with participating in a particular survey. In this regard, it is again important for opinion and market researchers to clearly identify the purpose of the call and to differentiate it from a sales call. In sum, the most effective introduction would appear to have two attributes: brevity and an unambiguous identification as a public opinion survey.

## Appendix 1. Messages Left on Answering Machines

Message #1 (the basic introduction)

Hello, I'm \_\_\_\_\_ from Maritz Marketing Research, a national marketing research company. We are conducting a public opinion survey about (insert topic). We assure you this is not a sales call. We're

sorry we missed you and will call you back within a day or two.

Message #2 (the basic introduction plus the importance of the respondent's opinions)

Hello, I'm \_\_\_\_\_ from Maritz Marketing Research, a national marketing research company. We are conducting a public opinion survey about (insert topic). We assure you this is not a sales call. Your household was randomly selected to represent the opinions of thousands of people living in your area and your personal opinions are extremely important to us. We're sorry we missed your call and will call you back within a day or two.

Message #3 (the basic introduction plus the prestige of the poll)

Hello, I'm \_\_\_\_\_ from Maritz Marketing Research, a national marketing research company. We are conducting the AmeriPoll public opinion survey about (insert topic). We assure you this is not a sales call. The results of the AmeriPoll survey appear in prestigious national publications such as the *Readers Digest*, *The Wall Street Journal* and *USA Today*. We're sorry that we missed you and will call you back within a day or two.

#### Footnotes

<sup>1</sup>Certain numbers in the phone bank which did not yield a "live contact" were not called back a second, third, or fourth time before the study quota was met. For example, approximately 30 percent of the numbers which yielded an "answering machine" response disposition on the first call attempt and which did not subsequently produce a live contact were not called up to four times even though a final response disposition had not yet been attained. (Several of these numbers, though, were called a second or third time.) The numbers which were not called back additional times were omitted from the analysis. Importantly, the determination of whether such numbers were called back again was made on a random basis. Thus, any bias which might be introduced into the analysis as a result of their exclusion was probably not serious.

<sup>2</sup>The contact rate is defined here as the proportion of eligible household numbers (i.e., all telephone numbers excluding nonresidential and nonworking numbers) which yielded a "live contact." The completion rate is

defined here as the number of completed interviews divided by the number of both completed interviews and refusals.

#### References

Baumgartner, Robert M. 1990. "Telephone Answering Machine Messages and Completion Rates for Telephone Surveys." Paper presented at the annual meeting of the American Association for Public Opinion Research, Lancaster, PA.

Bowers, Diane K. 1997. "CMOR's First Four Years." *Marketing Research: A Magazine of Management Applications* 9:44-45.

Daves, Robert P. 1990. "You Know What To Do At The Beep But Do Survey Researchers?" Paper presented at the Midwest Association for Public Opinion Research, Chicago, Ill.

Dillman, Don A., Jean Gorton Gallegos, and James H. Frey 1976. "Reducing Refusal Rates For Telephone Interviews." *Public Opinion Quarterly* 40:66-78.

Gozenbach, William J. and Patrick Jablonski 1993. "The Non-Solicitation Statement: A Methodological Consideration For Survey Introductions." *Proceedings of the American Statistical Association, Survey Research Methods Section*, 1236-1240.

O'Neil, Michael J., Robert M. Groves, and Charles F. Cannell 1979. "Telephone Interview Introductions And Refusal Rates: Experiments in Increasing Respondent Cooperation." *Proceedings of the American Statistical Association, Survey Research Methods Section*, 252-255.

Pinkleton, Bruce, Joey Reagan, Dustin Aaronson, and Eduard Ramo 1994. "Does 'I'm Not Selling Anything' Increase Response Rates in Telephone Surveys?" *Proceedings of the American Statistical Association, Survey Research Methods Section*, 1242-1247.

Tuckel, Peter S. and Barry M. Feinberg 1991. "Answering Machines and Telephone Surveys." *Public Opinion Quarterly* 55:200-217.

Xu, Minghua, Benjamin J. Bates and John C. Schweitzer. 1993. "The Impact of Messages on Survey Participation in Answering Machine Households." *Public Opinion Quarterly* 57:232-237.