

Recently the foot-in-the-door principle was applied in a typical business research setting by Reingen and Kernan. Results of this single-contact or nondelay foot application were mixed; compliance rates for the foot treatment groups lacked statistical significance when compared with those of appropriate control groups. A field experiment undertaken to explain these results yields evidence that the specific nature of the foot manipulation in part determines its effectiveness. The study compares the effectiveness of high and low involvement foot manipulations in generating compliance with both short and long forms of a mail questionnaire. The high and the low involvement foot manipulations generate significantly higher response rates and faster response times than a noncontact control situation. In addition, the short form questionnaires generate a higher return rate. High involvement foot treatments generate higher response rates than low involvement foot treatments. Managerial implications of the results and suggestions for future research are presented.

Testing the Effectiveness of Alternative Foot-in-the-Door Manipulations

Much attention has been given to isolating the factors leading to increased mail survey response rates. However, in spite of the large number of studies conducted, little is known about why mail survey subjects behave as they do (Kanuk and Berenson 1975; Linsky, 1975). Theory-anchored research is required if generalizations of results are to be made beyond the unique combination of survey topic and sample population used for a particular study. The recent efforts of Reingen and Kernan (1977; 1979) involving the use of a self-perception predicated foot-in-the-door manipulation to increase participation in a mail survey are examples of such theory-anchored research. Our study continues their efforts to apply the foot principle in a marketing research setting and offers an explana-

tion for the mixed results in their most recent study. This explanation and extension of their work involves using alternate forms of the foot manipulation. In addition, by varying the amount of effort required by the subsequent or critical task, we investigate the power of these alternate foot manipulations in a marketing research setting.

BACKGROUND

The basic notion of the foot-in-the-door paradigm is straightforward; namely, compliance with a small initial request significantly enhances the likelihood of compliance with a larger subsequent task. The self-perception explanation asserts that an individual infers attitudes and beliefs from observation of his/her own behavior. Thus, compliance with a small request causes the subject to infer a positive attitude about the subject or task involved. The foot-in-the-door effect and the self-perception theory explanation have been discussed by Scott (1976; 1977).

Reingen and Kernan first applied the self-perception predicated foot-in-the-door in a marketing research context (1977; 1979). Their first study was designed to test the self-perception explanation of the phenomenon in a business research setting. The self-percep-

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tion explanation was upheld by the data. They concluded that the greatest potential for use of the foot was as a form of precontact for a subsequent mail survey. The second study (1979) departed from the classic format of foot-in-the-door studies in two respects. First, a single telephone contact was used for solicitation of participation in both the foot and critical tasks. Second, actual compliance rather than stated compliance was used as the measure of performance. Results of this second experiment were mixed for both verbal and behavioral compliance with the critical task (i.e., completion and return of a six-page mail survey). Behavioral compliance measures yielded treatment differences in the predicted direction (i.e., foot return was greater than precontact return, and precontact return was greater than no precontact return), but the differences lacked significance.

Reingen and Kernan suggested two possible explanations for the lack of statistical significance between treatments. First, psychological reactance may have been aroused. That is, the one-contact interaction coupled with the selfish nature of the request may have aroused a desire, in some subjects, to demonstrate freedom of choice by reacting in a direction opposite the perceived pressure. Second, the high response to the initial request suggests a ceiling effect. The authors noted a need for research to investigate these possible explanations of the poor performance of the foot-in-the-door manipulation.

Another possible reason for the lack of significant results in the most recent study by Reingen and Kernan is the use of a single contact for soliciting participation in both the foot and critical tasks. The issue is whether or not the subject has time to make belief inferences about him/herself on the basis of the behavior elicited by the foot manipulation when both requests are made at the same point in time.

The attribution theory literature does not provide an answer to this timing question. This literature simply states that self-attributions are made, and does not postulate how long a period of time is required. However, there is some empirical support for the effectiveness of a "nondelayed foot" (e.g., Cann, Sherman, and Elkes 1975; Reingen 1978). Cann, Sherman, and Elkes found that, "If a small favor is requested initially, the timing of the second request is of little importance." They concluded that, "The present results would seem to indicate there is actually very little difference in the compliance rates obtained in the 'small-request-no delay' and 'small request-delay' condition" (1975, p. 179).

OVERVIEW OF STUDY

Our study shares three key characteristics with the second Reingen and Kernan experiment. First, the study generated a high overall response rate to the survey request which is similar to the ceiling effect reported by Reingen and Kernan. Second, we used

the same one-contract request format but with two foot manipulations (one similar to that used by Reingen and Kernan). Third, our study had a marketing research (consumers' attitudes toward recent new car purchases) rather than a prosocial topic. The sponsoring organization was a university instead of a fictitious research company as used by Reingen and Kernan. Use of the university sponsor makes possible the separation of sponsor and topic effects as explanations for Reingen and Kernan's mixed results.

Nature of the Foot Manipulation

The attempt to manipulate the nature of the initial or foot request follows directly from Freedman and Fraser's (1966) suggestion that the reason the foot works is that it allows the respondent to become involved in the subject area. Therefore, a properly designed foot could generate more involvement and, hence, lead to a greater degree of participation with the subsequent larger request. In searching for possible alternative formats for the foot, we asked telephone interviewers and interviewer supervisors what type of questioning method allowed the respondent to become more involved in a subject or topic area under consideration. There was considerable agreement among interviewers and supervisors that subject involvement increased whenever the interview process included followup or probe questions.

These questions, which allowed the subject to indicate why he or she felt a particular way, worked much better than simple yes/no questions in building high subject involvement. The yes/no question format, which was considered least desirable by interviewers, involved reading a statement to a respondent and asking the respondent to indicate whether he or she agreed or disagreed with it. We used these two questioning methods (probe, yes/no) as alternative operations of the foot principle. The foot manipulation used by Reingen and Kernan, which involved asking the subject to answer four short questions related to soft drink preference and consumption, is similar to the yes/no or low involvement foot used in our experiment.

We expected compliance with the foot telephone interviews to lead to increased compliance with the larger questionnaire task. The expectations are summarized in H_1 and H_2 (see Table 1 for an explanation of the treatment letter designations).

H_1 : Response rates will be greater for the yes/no format (*C* and *D*) and probe format (*E* and *F*) initial request treatments than for the control treatment (*A* and *B*).

H_2 : Response rates will be greater for the probe format (*E* and *F*) initial request treatments than for the yes/no format (*C* and *D*) initial request treatments

In addition to the standard response rate measure, dependent measures of response speed and response

Table 1
EXPERIMENTAL DESIGN—SIZE OF QUESTIONNAIRE

<i>Nature of precontact</i>	<i>Short form</i>	<i>Long form</i>
None control	<i>A</i> <i>N</i> = 100	<i>B</i> <i>N</i> = 100
Yes/no format foot	<i>C</i> <i>N</i> = 100	<i>D</i> <i>N</i> = 100
Probe format foot	<i>E</i> <i>N</i> = 100	<i>F</i> <i>N</i> = 100

quality as measured by completeness were included in the analysis (Hansen and Scott 1977; Houston and Ford 1976). We expected that the foot treatments in general and the probe treatment in particular would generate faster and more complete returns.¹ These expectations are summarized in H_{3-6} .

- H_3 : Speed of response will be faster for the yes/no format (*C* and *D*) and probe format (*E* and *F*) initial request treatments than for the control treatment (*A* and *B*).
- H_4 : Speed of response will be faster for the probe format (*E* and *F*) initial request treatments than for the yes/no format (*C* and *D*) initial request treatments.
- H_5 : Completeness of response will be greater for the yes/no format (*C* and *D*) and probe format (*E* and *F*) initial request treatments than for the control group (*A* and *B*) treatments.
- H_6 : Completeness of response will be greater for the probe format (*E* and *F*) initial request treatment than for the yes/no format (*C* and *D*) initial request treatments.

Size of Subsequent or Critical Task

In addition to testing the proposition that the format of the foot determines its effectiveness, we investigated the relationship between the foot and the length of the critical task by using two lengths of followup questionnaires. Both contained basic demographic and classification questions as well as a series of attitudinal questions. The short task questionnaire contained 11 attitudinal questions (32 total) and the long task questionnaire contained 81 (102 total). The attitudinal items included in the short form were selected from the 81-item pool subject to the constraint that one item be chosen from each of 11 constructs composing the 81-item pool. In this way, topic bias was minimized, as respondents in each treatment group were asked

¹ A questionnaire returned within 35 days that was 85% complete was considered a response. Response slowness for a treatment is the mean number of days it took to return a questionnaire. Response completeness was measured as the percentage of unanswered questions for those questionnaires satisfying the 85% complete return criterion.

to respond to questions on similar subject matter (Berdie 1973). We expected that the response to the shorter questionnaire would be greater than the response to the appropriate long form questionnaire.

- H_7 : Response rate will be greater for all short questionnaire treatments (*A*, *C*, and *E*) than for long questionnaire treatments (*B*, *D*, and *F*).

METHOD

A 3×2 factorial design was used to test the effect of an initial contact on the degree of compliance with a subsequent mail questionnaire request. The three initial requests included the probe and a yes/no format foot treatment as well as a no contact control treatment. The two levels of mail questionnaire request were the 32-item and 102-item questionnaires (see Table 1).

The topic was the respondents' attitudes toward their most recent new car purchase. The general questions covered issues such as their degree of satisfaction with the automobile and the sources of information used in deciding what automobile to purchase. Subjects were selected at random from the most recent Columbus, Ohio, telephone directory. A total of 600 questionnaires were sent to subjects (100 in each treatment).

Two hundred questionnaires were mailed to a random group of subjects without any prior notification. The remaining 400 were mailed after an initial telephone call was made. Interviewers made telephone calls to equal numbers of subjects in each of the four prior notification treatments. Potential subjects were screened by asking whether they had purchased a new car within the last three years. If they said they had, they were asked to answer some basic questions on general perceptions toward automobile dealers. An upper limit of five minutes was set for this foot-in-the-door interview. At the end of five minutes, the subject was asked if he/she would be willing to participate in the mail survey portion of the study. The questions asked during the foot-in-the-door interview had been generated during previous focus group discussion on consumers' perceptions of satisfaction with their new car purchases (Robinson 1977). The same questions were asked in the high and low involvement treatments, the difference being the way the questions were asked. In the low involvement interviews, subjects were read a statement (e.g., "all car dealers overcharge on their repair work") and were asked whether they agreed with the statement. In the high involvement treatment, in addition to being asked whether they agreed with the statement, subjects were asked why they felt that way.

Once a subject had been screened (i.e., purchased a new car within the last three years), that person received a copy of the questionnaire in the mail regardless of whether he/she had agreed to participate or even to answer the initial questions in the foot-in-

Table 2
RESULTS OF HYPOTHESIS TESTS

Nature of initial contact	Response rate ^a (% returned)		Response speed ^b (in days)		Response completeness ^c (% unanswered questions)	
	Short form	Long form	Short form	Long form	Short form	Long form
Yes/no foot	42.7 ^d	32.9 ^e	7.5	7.8	4.01	3.98
Probe foot	57.6 ^f	45.6 ^f	7.4	7.7	3.98	4.01
No contact control	29.7	16.6	13.8	14.2	4.02	4.06

^a χ^2 results—comparisons using a 2×2 contingency table comparing individual treatments with appropriate control group

^bANOVA results—main effect form of contact significant beyond .001 level, main effect length of questionnaire not significant

^cANOVA results—main effect form of contact not significant, main effect length of questionnaire not significant

^dSignificantly greater than control group at .09 level.

^eSame at .025 level.

^fSame at .005 level.

Note: All chi-square tests were corrected for continuity

the-door manipulation.² These questionnaires were mailed within three days of the initial contact. A second wave of questionnaires was sent to all subjects who had not responded to the first questionnaire within 10 days.

RESULTS

Table 2 summarizes the results of the hypothesis testing for the six experimental conditions in the study. The results support hypotheses H_{1-3} and H_7 . H_{4-6} are rejected.

Response rates are greater for the four foot treatment groups than for the corresponding control groups (H_1).³ As predicted, the probe format foot treatments generate higher response rates than the yes/no format foot treatments (H_2). The control groups are significantly slower in responding to the mail survey than are the four telephone contact groups (H_3).⁴ In addition, for all pairs of precontact conditions, the short form questionnaire has a significantly higher response rate than the long form questionnaire (H_7).

The two telephone contact conditions give similar patterns in terms of response speed (H_4). The results indicate no relationship between foot manipulations and response completeness (H_5 , H_6). That is, no

differences are found for response completeness between any of the experimental conditions.

DISCUSSION

The Foot-in-the-Door Principles

The results of our study provide further support for the foot-in-the-door technique. That is, compliance with the small task telephone interview led to increased compliance with the subsequent larger task of completing a mail questionnaire. As predicted by self-perception theory, compliance with a telephone interview request for self-report data increased the probability of actual compliance with a subsequent larger request for additional data.

Other results are less supportive of research hypotheses. Foot treatment subjects are not different from control subjects in percentages of questionnaire items completed. Thus, the basic expectation that subjects who formed favorable attitudes toward the issue and/or task would provide more data is not supported. Perhaps, as Seligman, Bush, and Kirsch (1976) suggest, there is a "... fixed amount of commitment that any individual is willing to make on a particular issue" (p. 518).

Measures of Compliance

The study provides evidence that agreement to participate with a subsequent request may not lead to actual performance. Fully 94.5% of probe treatment group subjects agreed to complete a mail survey, yet only 57.6% completed the short questionnaire and 45.6% completed the long questionnaire. Similarly, for the yes/no initial task groups, 86.4% agreed to participate in the second task but only 42.8% completed the short questionnaire and 32.9% returned the longer questionnaire. Thus, we suggest that future research on the foot-in-the-door mechanism include tests for actual compliance, rather than the weaker measure of compliance intention found in most studies cited in the literature.

²There is a possible sampling error in contacting the controls only at Time 2. Subjects who could not be contacted at Time 1 had been eliminated from the experimental groups but not from the control group. However, of the 400 subjects contacted at Time 1, only five could not be reached at Time 2. Thus the subject populations available at both Time 1 and Time 2 and that available only at Time 2 are virtually identical.

³For further evidence of the efficacy of a prenotification telephone call in a similar data collection situation see Robinson (1977) and for a review of all forms of prior notification see for example Kanuk and Berenson (1975) or Linsky (1975).

⁴A faster return is desired only if the speed is not gained at the expense of response quality or degree of completeness. To examine this relationship, a correlation analysis was conducted between response speed and response completeness. The results of this analysis show no statistically significant relationship between speed and completeness.

Practical Implications

The results clearly demonstrate that the degree of effectiveness of the foot is a function of the format of the foot. There can be little doubt that the foot principle works well in this data collection situation with even the low involvement foot generating significantly higher response rates and speedier returns. However, the results suggest that considerable care should go into the design of the format of the foot. In our study, the high involvement or probe format foot produced increases of 34.6 and 48.6% in the response rates of the short and long questionnaires in comparison with the low interaction or yes/no format foot.

In many marketing research situations the researcher requires responses to both structured and unstructured questions. Such research settings appear ideal for application of the foot technique. In our study, data were required on level of satisfaction with an automobile and actions taken as a result of satisfaction or dissatisfaction. These questions are well-suited to a telephone interview in which explanations and elaborations could be provided. Data also were sought on the demographic, attitudinal, and personality correlates of satisfaction. These questions are amenable to a structured mail survey format. The adopted design permitted the gathering of both structured and unstructured responses with an approach that also stimulated response rates and response speed.

Theoretical Implications

There is nothing in the self-perception literature to suggest the period of time required for a subject to make attitudinal inferences based on behavior. The results of our study and other empirical studies, however, indicate situations in which the foot principle is likely to generate a high degree of compliance. These "situations" are defined by three variables, sponsoring organization, subject or topic of the request, and the timing of requests. In general, the best results have been obtained when both the sponsoring organization and the topic have been prosocial (see Reingen and Kernan, 1979, for a review). Reingen and Kernan (1977) and Scott (1976), however, have found some support for the technique in commercial situations where the two requests were made in two separate contacts.⁵ These findings suggest that in general when two contacts are used the foot principle can produce positive results in prosocial and commercial situations. When a one-contact or nondelay format is used the results are different. For example, Tybout (1978) and Reingen and Kernan (1979) failed to generate positive or supportive results in a commercial one-contact format. There are, however, exceptions to this last

⁵In the Scott (1976) study, support for foot-in-the-door was found only when the analysis was confined to those subjects who had complied with the initial request

observation (see Reingen and Kernan, 1979, for a discussion). In spite of these exceptions, a generalization can be made: in prosocial situations the timing of requests is less important, i.e., there is a good chance the foot will work in either a two-contact or a one-contact format. When a commercial, i.e., marketing research, situation is used, the foot is much more likely to work if the two-contact format is used. Results of our study are an exception to this generalization. Two explanations seem likely to explain this difference. One is that a modified foot was used, i.e., a high involvement foot was used to gain compliance. This explanation does not account for the success of the low involvement manipulation. Explanation of its success is perhaps a function of the sponsoring organization. Recall that Reingen and Kernan used a fictitious marketing research agency in their "commercial" situation. We used a similar topic (new car survey) but the study was sponsored by a university. In a sense the university-sponsored business research combination is not prosocial nor is it commercial research; it is an in-between combination.

Results of our study suggest that the high involvement foot would have the greatest chance of generating compliance in a regular commercial business research situation. The exact method of generating high involvement should be a function of the target population. That is, the high involvement foot should be subjected to a manipulation check using a sample of the target population.

The foot principle offers considerable potential as a means of generating compliance with a survey request. The results of our study help explain the mixed results of earlier attempts to use the foot in a commercial setting. The notion of tailoring a high involvement foot to fit the specific target population seems to be one way of making the foot work in the one-contact format. Additional studies of this nature are needed to help the marketing researcher take advantage of the foot principle.

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