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Foot in the door and door in the face have been cited frequently as effective strategies for gaining compliance with behavioral requests. However, research efforts to confirm these two phenomena have produced mixed results. After deriving predictions about how the favorability of available information influences compliance, the authors report a synthesis of research results for both paradigms. Combined effect sizes across research results for several moderating variables are compiled. Implications for theoretical, empirical, and practical application of the syntheses are discussed.

Effectiveness of Multiple Request Strategies: A Synthesis of Research Results

Twenty years ago Freedman and Fraser (1966) asked, "How can a person be induced to do something he would rather not do?" Since then, more than 50 studies have sought the answer through research following one of two paradigms, the foot in the door (FITD) and/or the door in the face (DITF). This research tradition has not been programmatic and as a result some mediating variables and theoretical explanations have been given more research attention than others. Therefore, it is not surprising to find little agreement as to what conditions are necessary to produce statistically significant differences in compliance with behavioral request strategies.

Both strategies are attempts to obtain behavioral compliance through the use of sequential requests. In the foot-in-the-door paradigm, the first request is relatively small and all or a large majority of people agree to comply. The small request is followed by a larger request, called the "critical request," which is actually the target behavior. Operationally, the door in the face is the reverse strategy, in that the initial request is relatively very large and all or a large majority of people refuse to comply. The large request is followed by a smaller request, the critical request, which is the target behavior.

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Two quantitative reviews have examined the self-perception explanation for the FITD phenomenon (Beaman et al. 1983; Dillard, Hunter, and Burgoon 1983). Dillard and his colleagues also examined the reciprocal concessions explanation for the DITF phenomenon. Though Beaman concludes that the FITD effect is weak and new theoretical development may be necessary, Dillard claims to have disconfirmed both the self-perception explanation for the FITD effect and the reciprocal concessions explanation for the DITF effect. Moreover, Dillard contends that neither explanation can account for both the FITD and the DITF phenomena: "What is needed is a theoretical framework which (1) takes into account the empirical generalizations brought out by this review and (2) considers both strategies simultaneously" (p. 21). Both reviews conclude that new theoretical development is necessary but neither review indicates the direction the needed development should take.

Tybout, Sternthal, and Calder (1983) offered and tested an availability explanation for both effects that has several advantages over previous explanations for the outcomes of multiple request strategies. First, this explanation is consistent with prior research findings and subsumes other explanations for both the FITD and the DITF outcomes. Second, though parsimonious, it provides several testable research hypotheses. Third, its coverage extends beyond the multiple request strategies. For example, social labeling outcomes (Tybout and Yalch 1980) also can be accounted for by this explanation. Finally, it is easily interpreted in "real-world" terms for use by marketing practitioners.

We first present the theoretical predictions derived from

the availability hypothesis for multiple request strategies, then summarize a synthesis of previous multiple request research results in terms of these predictions. The implications of this integrative review are discussed in terms of the effectiveness of the theoretical explanation in predicting research results, unresolved research issues, and the impact of the synthesized results on marketing applications.

AVAILABILITY HYPOTHESIS PREDICTIONS

According to the availability hypothesis, information about one's own behavior and information about the behavior of the requester (request behavior) determine compliance in multiple request situations (Tybout, Sternthal, and Calder 1983). An individual's decision to comply with a critical request depends on the favorableness of the issue-relevant information available in memory. Compliance is enhanced when favorable information about either one's own behavior or the requester's behavior is available; compliance is undermined when unfavorable information about either own behavior or request behavior is available. Further, there should be no systematic effect when favorable information of one type is as available as unfavorable information of the other type.

Two factors seem to affect the availability of information in such situations, (1) the recency of information processing (Higgins, Rholes, and Jones 1977) and (2) the degree of information elaboration (Bower 1972). More recently processed information should be more readily available because of the expectation that recently processed information is more current in memory and more readily retrieved than information from prior experiences. Elaboration can occur when people associate new information with information already stored in memory, relating it to other events or concepts and thereby enriching the coding of the stimulus information. This form of elaboration creates more durable codes and is likely to produce more associative pathways in memory. The net effect of this elaboration is to facilitate retrieval of this information from memory, thereby making it more available. Performing a requested behavior is expected to generate more information elaboration than merely agreeing to perform the requested behavior. Further, information about oneself is likely to be attached to a more extensive network of associations, enhancing the number of retrieval paths and therefore the availability of the new information (Moore et al. 1979).

Though behavior is thought to be affected by the available information, availability is not a sufficient condition for predicting behavior. Behavior also is predicated on the favorableness or valence of the available information. Valence is defined in relative terms, in that one piece of information is viewed as being more or less favorable than some other information (Hannah and Sternthal 1984). Within the context of multiple requests, factors that lead to favorable information being available are (1) compliance with an initial request (FITD) and (2) concessionary request behavior (DITF). Conversely, re-

fusal of a request (DITF) and an escalation in the demands of a requester (FITD) are sources of unfavorable information. Empirical support for these relationships is provided by Tybout, Sternthal, and Calder (1983). Each request strategy affords an opportunity for favorable or unfavorable information to be available to the requestee. Therefore, it is necessary to ascertain when the available information is likely to be relatively more favorable.

In the foot-in-the-door strategy, agreeing to an initial request is likely to generate pleasing or favorable information about oneself. Further, the more meaningful or substantial the compliance to the initial request, the more favorable will be the information about oneself. Subtracting from the favorableness of this information will be the escalation in demands by the requester in making the second request. However, the greater the time delay between requests, the more likely it is that the favorable information about oneself, from the initial compliance, will be retrieved because self-associated networks are retrieved more readily than information about others or situations. The effect of the time delay should be to enhance the availability of the favorable self-information in relation to the unfavorable escalation information. Also, a second request by a different requester is less likely to be perceived as an escalation, thus making the favorable self-information relatively more available. Finally, because performing the behavior requires greater self-commitment, more elaborate information networks can be tapped, thus making own-behavior information more available. Therefore, for the FITD strategy, we hypothesize that if the initial request is accepted, compliance with the critical second request will increase under the following conditions.

1. As the relative magnitude of the initial request increases.
2. If the initial request behavior is performed as opposed to being agreed to be performed.
3. As the time delay between requests increases.
4. If each request is made by a different requester.

For the door-in-the-face technique, compliance with the critical request should be enhanced when favorable information from the concessionary critical request is more available than the information associated with own behavior in rejecting the initial request. The concessionary information should be more available when (1) the concession is substantial, (2) the requests are contiguous, and (3) the same person makes both requests. Substantial concessions may draw attention to the favorable concessionary request behavior. If multiple associations with past concessionary request behaviors are present, their salience should be heightened by the current request, causing individuals to devote more thought to the concessionary behavior and less thought to their own behavior. The result would be that the favorable concessionary request behavior is more readily available than one's own behavior. Moreover, contiguous requests provide less time for individuals to retrieve unfavorable own-behavior information. Finally, to enhance the perception

of a concession, the type of request and the person making the request should be the same for both requests. Therefore, for the DITF strategy, we hypothesize that if the initial request is rejected, compliance with the critical request will increase under the following conditions.

5. As the relative magnitude of the concession increases.
6. As the time delay between requests decreases.
7. If both requests are made by the same requester.

The seven hypotheses identify several moderating variables that enhance or undermine the effectiveness of multiple request strategies. Using integrative review procedures, we coded, compared, and then combined results from previously published multiple request studies to test these information-availability predictions. The methodology and procedures used in this review are described next.

STUDY SELECTION CRITERIA

We conducted a careful search of the literature using previous reviews (Beaman et al. 1983; DeJong 1979; Dillard, Hunter, and Burgoon 1983) and various indexes. As a result of this search, 59 articles were discovered that reported research on either the foot in the door, the door in the face, or both phenomena.

We applied two sets of criteria to select treatment effects for the review. The first set was used to select studies for inclusion. Only published studies were included; working papers, theses, and dissertations were excluded. It should be noted that published reports tend to be biased toward reporting significant findings and larger mean effect sizes (Cooper 1984; Glass, McGaw, and Smith 1981; Greenwald 1975; Rosenthal 1984). Additionally, only those studies providing sufficient information for a quantitative assessment were included. The second set of criteria was used to select specific treatments from each chosen study. First, to eliminate subject self-selection as an alternative explanation, all subjects receiving the initial request were required to have received the subsequent critical request. Second, the operational definition of each treatment had to be consistent with the theoretical constructs from the availability hypothesis. Third, each treatment was required to have an appropriate control group so that the only difference between the treatment and control groups could be attributed to the FITD or DITF effect. Multiple requests that were combined with other treatments (e.g., labeling, incentives, and punishments) were not included in the analysis.

DATA CODING SYSTEM

To compile data for the review, we developed a coding system to operationalize the constructs in the availability hypothesis. The characteristics reflecting the constructs implied by this explanation for the results of multiple request studies were (1) the magnitude of the moderating request, (2) the time delay between requests, (3) the similarity of requests, (4) the same versus dif-

ferent requester, and (5) the type of initial request. The quantitative data collected for each study included percentage compliance for first and second requests, sample size, chi square values, and probability values for each statistical significance test. The methodological characteristics of each study also were recorded. The coding form, quantitative assessment procedure, and list of reviewed articles are available from the authors.

Relative Magnitude of Moderating Request

The relative magnitude of the initial request for the FITD request strategy was operationalized as the ratio of the critical request size to the initial request size. When the critical/initial request ratio is large, the initial request is considered relatively small and conversely the escalation is considered large. When the ratio is small, the initial request is considered relatively large and the escalation small. For the DITF, the relative magnitude of the concession is represented by the ratio of the initial request size to the critical request size. A large initial/critical request ratio should be interpreted as a relatively large concession and a small ratio should be interpreted as a relatively small concession.

Where possible, the sizes of the requests were determined objectively. For those studies in which money donations were requested, the ratio simply represents the relative dollar difference between the requests. However, for studies in which respondents were asked to answer questions or perform a task, we used either the number of questions asked or the time required to answer the questions or do the task. In all such cases the questions or tasks were converted to minutes. In most situations the conversion was straightforward (e.g., approximately five minutes to answer five questions). Whenever the magnitude could not be determined objectively, one of the authors made an initial judgment about the relative magnitudes of the requests. Subsequently, this judgment was tested by having students in a marketing research course estimate the relative magnitudes of the requests. For example, the students estimated that "going downstairs to pick up a display packet" was two to three times greater than "displaying a poster." The median of the distribution of magnitude estimates was used as the estimate of the relative magnitude of requests.

For the data analysis the selected categories for the FITD review were (1) less than two times greater (large initial request), (2) two to four times greater (moderate initial request), and (3) more than four times greater (small initial request). For the DITF, the same classification categories were used except the critical request was *X* times less than the initial request.

Time Delay Between Requests

All studies were fairly explicit in reporting the length of the delay. Therefore, in most cases the actual number of days was coded. When a range was reported (e.g., 7 to 10 days) the median delay was used (e.g., 8.5 days).

Similarity of Requests

Favorable request behavior must create the perception of a concession for the DITF effect. Therefore, only treatments employing a critical request that represented a smaller version of the initial request were included for analysis. A critical request was deemed similar if the sponsoring organization was the same *and* if the nature of the requested task was the same.

Requester

As hypothesized, a moderating variable for multiple requests to be effective is whether the same requester makes both requests. The requester was coded as similar if the person making both requests was the same.

Type of Initial Request

For the FITD effect, the initial request must lead to either agreement to perform a task or the actual performance of the task. According to the availability hypothesis, actually performing the initial requested behavior should create more favorable own-behavior information than simply agreeing to perform the behavior. Therefore, each initial request was coded as behavioral if the researchers verified the performance of the requested behavior. The initial request was coded as verbal if the researchers reported that respondents agreed to perform the task (but did not).

RESULTS

To report the results of the quantitative assessment of the foot-in-the-door and the door-in-the-face phenomena, we use the fourfold point correlation coefficient, ϕ . Phi is positive when the proportion of complying subjects in the experimental group exceeds the proportion of complying subjects in the control group. For the opposite condition, ϕ is negative. As specified previously, a necessary condition for the FITD phenomenon is that the respondent comply with the initial request before being asked to comply with the critical request. Only 20 of the 77 results assessed represented 100% initial compliance. To avoid a self-selection bias threatening the internal validity of results, researchers have routinely included the initial noncompliers in the experimental group when testing the significance of their results. However, it should be acknowledged that the inclusion of noncompliers works against the availability explanation for the FITD—people with unfavorable own-behavior information would not be expected to comply with the critical request. Therefore the results from those studies reporting initial compliance of at least 80% are reported separately from those studies with a “less pure” test of the FITD phenomenon.

After a ϕ value was calculated for each result, the results of each multiple request strategy were compared for consistency (homogeneity) and then combined to obtain an overall index of relative effectiveness. This average index value was tested for significance, confidence intervals were computed, and the tolerance for null results

was calculated. Finally, the data were partitioned to explore the appropriateness of the hypotheses.

Test of Homogeneity

Because sample sizes differed across results, it was necessary to develop a weighting procedure that recognizes the influence of sample size on the precision of a study's results. Following the procedure developed by Hedges (1982), we weighted each ϕ_i by the reciprocal of the variance of ϕ_i . For all results, the weighted average effect size for the foot-in-the-door strategy is .125. For the 38 (of 77) results with at least 80% initial compliance, the weighted average effect size is .144. For the door-in-the-face strategy the weighted average effect size is .070. All three sets of results are homogeneous.

Combining Results

The chi square test for significance of the overall degree of association is statistically significant for both compliance strategies. The analysis also indicates that 2398 additional FITD null results and 477 additional DITF null results would be needed to reduce these significant associations to the .05 level. Therefore, the pattern of results in these compliance studies is not due to chance, and the tolerance for null results indicates the overall results are not due to sampling bias in the studies selected for review.

Substantive Issues

The availability explanation provides hypotheses about the influence of several moderating variables on the effectiveness of multiple request strategies. To evaluate these hypotheses, the coded data were categorized as explained before and the quantitative procedures were applied to these data. The results of these assessments are reported first for the foot-in-the-door and then for the door-in-the-face data.

Foot-in-the-Door Results

Relative magnitude of initial request. For the FITD, we hypothesized that if the initial request is accepted, compliance with the second request will increase as the magnitude of the initial request increases. Operationally, the effect size index should decrease as the critical/initial request ratio increases. For all 77 results, the correlation between effect size and the critical/initial ratio is $-.15$ ($p = .10$, $d.f. = 75$) and the largest average effect size is for the moderate magnitude of initial request category. However, the hypothesized relationship is found for the 80% compliance data set in that the average effect size decreases as the relative magnitude of the initial request increases (Table 1). In both data sets, a statistically significant association between the compliance strategy and effect size is found only when the magnitude of the initial request is categorized as moderate.

Performance of requested behavior. It was possible to code 58 of the 77 results according to whether the

Table 1
SUMMARY OF FOOT-IN-THE-DOOR STATISTICS: RELATIVE MAGNITUDE OF INITIAL REQUEST

| Statistic | All studies | | | Studies with 80% initial compliance | | |
|--|-------------|----------|-------|-------------------------------------|----------|-------|
| | Large | Moderate | Small | Large | Moderate | Small |
| Weighted mean, $\bar{\phi}$ | .111 | .165 | .081 | .240 | .210 | .053 |
| Weighted variance, s^2 | .030 | .032 | .012 | .028 | .035 | .011 |
| Number of results, K | 8 | 41 | 28 | 4 | 24 | 10 |
| Sample size, n_r^a | 229 | 1446 | 1086 | 99 | 647 | 672 |
| χ^2 for heterogeneity of ϕ 's (d.f. = $K - 1$) | 3.42 | 19.77 | 6.45 | 1.41 | 11.00 | 3.01 |
| p | .75 | .95 | .99 | .90 | .99 | .99 |
| χ^2 for association of ϕ 's (d.f. = 1) | 1.42 | 17.41 | 3.43 | 2.93 | 13.99 | .78 |
| p | .10 | .001 | .10 | .10 | .001 | .50 |
| Standard error for $\bar{\phi}$ | .093 | .040 | .044 | .141 | .056 | .135 |
| 95% confidence interval for $\bar{\phi}$, \pm | .182 | .078 | .086 | .316 | .126 | .265 |

^aSample size reported is for treatment conditions only, because some studies had a single control group for multiple treatments.

respondent had performed the initial requested behavior. As shown in Table 2, as hypothesized, the average effect size is larger when the initial requested behavior was performed than when the request was merely agreed to ($r = .27$, $t(56) = 2.12$, $p < .025$). Similarly, for the 80% compliance data set, 32 of the results were amenable to this analysis. The results are similar except the correlation is not statistically significant ($r = .13$, $t(30) = .78$, $p < .25$).

Time delay between requests. The correlation of time delay between requests and effect size is a nonsignificant .03. The weighted mean effect size is .126 for the no-

delay condition and .119 for a delay between requests (Table 3). Results are similar for the studies with 80% initial compliance, except the weighted mean effect sizes are slightly higher (Table 3).

Same requester. Using a different requester for the critical request produced a slight but nonsignificant increase in the weighted average effect size for all studies (Table 4). For the studies with an 80% initial compliance rate, using a different requester for the critical request enhanced the effect size obtained, but the difference between using the same and different requesters is not statistically significant.

Table 2
SUMMARY OF FOOT-IN-THE-DOOR STATISTICS: PERFORMING BEHAVIOR AND AGREEMENT TO PERFORM

| Statistic | All studies | | Studies with 80% initial compliance | |
|--|---------------------|----------------------|-------------------------------------|----------------------|
| | Performing behavior | Agreement to perform | Performing behavior | Agreement to perform |
| Weighted mean, $\bar{\phi}$ | .153 | .079 | .148 | .114 |
| Weighted variance, s^2 | .022 | .024 | .024 | .064 |
| Number of results, K | 34 | 24 | 21 | 11 |
| Sample size, n_r^a | 1190 | 1062 | 906 | 264 |
| χ^2 for heterogeneity of ϕ 's (d.f. = $K - 1$) | 12.17 | 10.11 | 9.16 | 8.75 |
| p | .995 | .99 | .99 | .75 |
| χ^2 for association of ϕ 's (d.f. = 1) | 13.07 | 2.66 | 8.23 | 1.79 |
| p | .001 | .10 | .005 | .25 |
| Standard error for $\bar{\phi}$ | .042 | .049 | .052 | .085 |
| 95% confidence interval for $\bar{\phi}$, \pm | .082 | .096 | .101 | .167 |

^aSample size reported is for treatment conditions only, because some studies had a single control group for multiple treatments.

Table 3
SUMMARY OF FOOT-IN-THE-DOOR STATISTICS: TIME DELAY BETWEEN REQUESTS

| Statistic | All studies | | | Studies with 80% initial compliance | | |
|---|-------------|-------|-------------|-------------------------------------|-------|-------------|
| | No delay | Delay | All results | No delay | Delay | All results |
| Weighted mean, $\bar{\phi}$ | .126 | .119 | .125 | .144 | .143 | .144 |
| Weighted variance, s^2 | .022 | .027 | .025 | .023 | .051 | .031 |
| Number of results, K | 30 | 47 | 77 | 23 | 15 | 38 |
| Sample size, n_e^a | 1110 | 1651 | 2761 | 918 | 500 | 1418 |
| χ^2 for heterogeneity of ϕ 's (d.f. = $K - 1$) | 11.59 | 19.78 | 31.61 | 9.60 | 9.91 | 19.48 |
| p | .99 | .95 | .95 | .99 | .90 | .95 |
| χ^2 for association of ϕ 's (d.f. = 1) | 8.20 | 10.61 | 19.73 | 9.11 | 3.82 | 13.34 |
| p | .005 | .005 | .001 | .005 | .05 | .001 |
| Standard error for $\bar{\phi}$ | .044 | .037 | .028 | .048 | .073 | .040 |
| 95% confidence interval for $\bar{\phi}$, \pm | .086 | .072 | .055 | .094 | .142 | .089 |

^aSample size reported is for treatment conditions only, because some studies had a single control group for multiple treatments.

Summary. One of the four hypothesis tests is significant and two of the other tests indicate data trends in the expected directions, particularly for the set of studies with an initial compliance of at least 80%. The use of a time delay between requests apparently did not affect compliance with the subsequent request. However, compliance with the second request did increase if either the relative magnitude of the initial request increased, the

initial request behavior was performed, or a different requester made the critical request.

The foot-in-the-door multiple request strategy is associated positively with compliance. For all studies, the best estimate of this association is $\phi = .125$; for studies with at least 80% initial compliance, the best estimate is $\phi = .144$ (Table 3). Moreover, this association is enhanced when performance information is available, when a moderately large critical request is used, or when different requesters are used to make the requests: Thus, the availability of favorable own-behavior information seems to enhance compliance with foot-in-the-door multiple requests.

Table 4
SUMMARY OF FOOT-IN-THE-DOOR STATISTICS: REQUESTER, BOTH REQUESTS

| Statistic | All studies | | Studies with 80% initial compliance | |
|---|--------------------|-------------------|-------------------------------------|-------------------|
| | Same requester Yes | Same requester No | Same requester Yes | Same requester No |
| Weighted mean, $\bar{\phi}$ | .120 | .128 | .125 | .172 |
| Weighted variance, s^2 | .023 | .026 | .024 | .039 |
| Number of results, K | 23 | 54 | 16 | 22 |
| Sample size, n_e^a | 1009 | 1752 | 787 | 631 |
| χ^2 for heterogeneity of ϕ 's (d.f. = $K - 1$) | 10.70 | 20.91 | 8.85 | 10.32 |
| p | .975 | .90 | .90 | .975 |
| χ^2 for association of ϕ 's (d.f. = 1) | 6.75 | 13.01 | 5.81 | 7.86 |
| p | .01 | .001 | .025 | .01 |
| Standard error for $\bar{\phi}$ | .046 | .035 | .052 | .061 |
| 95% confidence interval for $\bar{\phi}$, \pm | .091 | .069 | .102 | .120 |

^aSample size reported is for treatment conditions only, because some studies had a single control group for multiple treatments.

Door-in-the-Face Results

Relative magnitude of concession. The effect size index was expected to increase as the magnitude of the concession increased. However, the data reveal a slight but nonsignificant negative relationship ($r = -.114$). For each category, the association between effect size and relative magnitude of concession is statistically nonsignificant (Table 5).

Time delay between requests. Though only seven DITF results occurred after a delay between requests, as expected, the average effect size is larger for the no-delay condition than for the delay condition ($r = .302$, $t(54) = 2.33$, $p < .025$). There is a significant degree of association between effect size and no delay between requests.

Same requester. The correlation between effect size and similarity of requester is $.188$ ($t(54) = 1.41$, $p < .10$). Use of the same requester for both requests tends to result in a larger effect size than use of different requesters.

Table 5
SUMMARY OF DOOR-IN-THE-FACE STATISTICS: MODERATING VARIABLES

| Statistic | Magnitude of concession | | | Delay | No delay | Same requester | | All results |
|--|-------------------------|----------|-------|-------|-----------------|-----------------|-------|-------------|
| | Small | Moderate | Large | | | Yes | No | |
| Weighted mean, $\bar{\phi}$ | .095 | .041 | .081 | -.080 | .092 | .074 | -.027 | .070 |
| Weighted variance, s^2 | .053 | .049 | .025 | .007 | .043 | .040 | .053 | .042 |
| Number of results, K | 18 | 18 | 20 | 7 | 49 ^b | 49 ^b | 7 | 56 |
| Sample size, n_r ^a | 452 | 604 | 558 | 172 | 1442 | 1442 | 172 | 1614 |
| χ^2 for heterogeneity of ϕ 's (d.f. = $K - 1$) | 11.85 | 14.89 | 6.91 | .62 | 30.69 | 28.46 | 4.51 | 34.01 |
| p | .75 | .50 | .99 | .99 | .50 | .50 | .50 | .50 |
| χ^2 for association of ϕ 's (d.f. = 1) | 2.05 | .51 | 1.83 | .553 | 6.10 | 3.99 | .061 | 3.94 |
| p | .10 | .25 | .10 | .25 | .025 | .05 | .75 | .05 |
| Standard error for $\bar{\phi}$ | .067 | .057 | .060 | .108 | .037 | .037 | .109 | .035 |
| 95% confidence interval for $\bar{\phi}$, \pm | .131 | .112 | .112 | .212 | .073 | .073 | .214 | .069 |

^aSample size reported is for treatment conditions only, because some studies had a single control group for multiple treatments.

^bThough the number of results and sample size are equal, not all no-delay results occurred with the same requester.

Summary. In terms of the three hypotheses tested, no significant association is found between compliance and the relative magnitude of concession, but there is a positive association between compliance and making the critical request without a delay and between compliance and using the same requester. The door-in-the-face strategy, overall, is associated positively with compliance. The best estimate of this association is .07 (Table 5). The association is enhanced when concession information is available, when the concession is made immediately after the initial request, or when the same requester makes the requests. Thus, the availability of favorable concessionary-behavior information seems to enhance compliance with door-in-the-face multiple requests.

CONCLUSIONS

The availability hypothesis, introduced by Tybout, Sternthal, and Calder (1983) to explain the relative effectiveness of multiple request strategies, was used to guide our integrative review. On the basis of the premise that multiple request strategies enhance compliance when either favorable own-behavior or favorable request-behavior information is available, we developed seven hypotheses. These hypotheses suggested certain variables that would influence the relative effectiveness of either the FITD or the DITF multiple request strategy. We tested the hypotheses by combining results across previously published research reports on the effectiveness of multiple request strategies. It should be clear that no causal inferences can be made about the hypothesized relationships on the basis of this review. However, the degree to which the published results are associated with the hypothesized variables can be assessed.

Foot in the Door

The first hypothesis suggests that compliance with the critical request should increase as the relative magnitude of the initial request increases. The difficulty in operationalizing this moderating variable is that the magnitude judgment is internal to the respondent and therefore cannot be determined validly for meta-analyses. However, it is reasonable to expect that the respondents compare the magnitude of the subsequent critical request with the magnitude of the initial request. Presumably, this comparison accounts for the unfavorable request-behavior information. The ratio of the critical request to the initial request therefore seems appropriate for assessing the hypothesized trend. Operationally, the smaller this ratio (indicating a larger initial request), the larger should be the weighted average effect size. In general, this trend did occur, but the trend is not monotonic nor is there a statistically significant correlation between this moderating variable and effect size. However, when the data are categorized according to the degree of compliance with the initial request, the trend is monotonic when initial compliance exceeds 80%.

The second hypothesis—that when both information from performing the behavior and information from the request are available, compliance would be greater than when information from agreeing to perform is available—is supported by the data. The correlation between effect size and the presence or absence of performance information is significant. Moreover, the degree of association between compliance and the availability of performance-behavior information is statistically significant.

The third hypothesis predicts that compliance would increase as the time delay between requests increases. It

was expected that the unfavorableness of an escalation in the request would become less available to respondents as the delay between requests increases. The correlation between this variable and effect size is nonsignificant, suggesting that delay between requests, by itself, may not be an important moderating variable.

Finally, using a different requester for the critical request is positively but nonsignificantly associated with compliance.

Door in the Face

The fifth hypothesis predicts that compliance with the critical request would increase as the relative magnitude of the requester's concession increases. The expectation that effect sizes would be larger as the concession increases is not supported by the data. Instead, only a slight nonsignificant association is found. Additionally, there is no significant association between this variable and compliance.

By viewing a requester's concession as favorable information, the sixth hypothesis predicts that compliance would decrease as the delay between requests increases. Though only seven results occurred during a delay condition, the evidence does support this hypothesis. Moreover, the association between the no-delay category and compliance is significant.

Again, despite the small number of results occurring when different requesters were used, the seventh hypothesis is supported. Using a single requester enhances the contiguous requests requirement posited in the sixth hypothesis.

Important Unresolved Issues

The primary purpose of our article is to present an integrative review of the research literature on multiple request strategies and to assess the current level of knowledge about this research domain. Several important issues and implications isolated during the review process are explored briefly in this section.

Theoretical explanation. The availability hypothesis seems to be parsimonious as a theoretical explanation for the success of multiple request strategies. In addition to providing a single theoretical base for both FITD and DITF strategies, it offers several moderating variables that should influence the relation between request strategy and compliance. The review-generated evidence supports five of the seven hypotheses based on the availability explanation. Programmatic research now needs to be directed to testing these hypotheses more formally.

Methodological issues. When coding the research reports, we recorded the methodological characteristics of each report and conducted a *post hoc* power analysis. There were no significant differences in average effect sizes due to whether or not random sampling was used, type of subjects, or research setting. In this respect, the results we report do generalize across these methodological characteristics.

In general, research on both request strategies is char-

acterized by low statistical power. Moreover, only 30 of 77 FITD and 26 of 56 DITF original results are statistically significant at $p < .10$. All statistically nonsignificant FITD results have power less than .55. With Cohen's (1977) power criterion of .80 and the average effect size reported here, future sample sizes need to be at least 150 if the traditional significance level of $p = .05$ is used. As discussed by Sawyer and Ball (1981), given the average effect sizes reported here, researchers in the area of multiple request strategies should no longer use small sample sizes.

Finally, for the FITD strategy, the hypotheses presented carry the condition that the initial request is accepted. However, as reported, for 51% of the results the compliance with the initial request was less than 80%. Clearly, in the future researchers should not proceed or should redesign their research if compliance with the initial request does not approach this standard, regardless of the theoretical explanation being tested.

Management Perspectives

The practical importance of the results of our integrative review depends on the interpretation of the average effect size reported. Rosenthal and Rubin (1982) report a useful method for interpreting effect sizes called the "binomial effect size display" (BESD). In a multiple request situation, if there is no effect due to the strategy used, the proportion of respondents complying with the critical request would be equal in the experimental and control groups (i.e., $\phi = 0$). In other words, there would be a 50:50 chance that the request strategy would improve compliance over the control group's compliance. Thus, an average effect size of $\phi = .125$ means the average compliance rate for the FITD strategy is 12.5% better than that for an equivalent control group. For example, using an FITD strategy, on the average, could improve a survey's response rate by 12.5%, or an additional 125 per 1000 respondents. Whether this enhancement of the response rate is economical depends on the costs of using an FITD multiple request strategy.

Limitations

The obvious conclusion at this time is that the foot-in-the-door multiple request strategy is likely to be more effective than the door-in-the-face strategy. Nevertheless, compliance rates for specific applications of these strategies may vary, depending on the nature of the requests, the respondent population, and other situational factors.

Conclusions that can be drawn from our study are limited because of limitations inherent in the review methodology. Though care was taken to define variables so that the effects of other variables were partialled out, some possible confounding of variables could not be overcome.

Another limitation is in the generalizability of the results obtained by our review. The results integrated in our review do not represent a random sample of multiple

request research results, nor do they represent a random assignment of levels of the independent variables examined. The ability to generalize these results to all multiple request situations is limited by this lack of random assignment. Further, confining the review to published results is likely to have enhanced the average effect sizes reported. Nevertheless, the tolerance for null results, particularly for the FITD strategy, indicates that these effect sizes are robust in terms of this result-selection bias.

Final Comments

The overriding purposes of our integrative review are to summarize previous research, present the state of knowledge about multiple request strategies, and highlight research issues needing further investigation. The availability hypothesis affords a parsimonious, theoretical explanation for when multiple request strategies are likely to be effective. Comparing and combining research results on the basis of the availability explanation provides general support for the conceptualization. The need for further theoretical development in this domain, suggested by previous reviewers, is fulfilled in our review. Finally, the results are shown to be interpretable for use by marketing practitioners.

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