RESPONDENT SELECTION IN MAIL SURVEYS OF ESTABLISHMENTS: PERSONALIZATION AND ORGANIZATIONAL ROLES

Carl Ramirez, U.S. General Accounting Office U.S. GAO, 441 G St NW, Room 2440, Washington, DC 20548

Key Words: establishment survey, respondent selection, personalization

Abstract

Identifying and contacting the proper respondents are critical steps in any organizational survey. Without prescreening or perfect knowledge of an organization's structure, two opposing approaches might be employed: 1) mailing surveys with a high degree of "person targeting" (using proper names and titles, and a personal appeal) and "role targeting" (picking specific roles and offices in the technical core where the needed information most likely resides), or 2) mailing questionnaires generically to the organization's top executive, to avoid the costs of developing targeting information, and to gain effective access to the corporate information hierarchy and channels of communication. In a split-sample experiment, specific person- and role-targeting in respondent selection vielded higher response rates than generic targeting of high authority informants, but no difference in response characteristics was observed. Actual respondents often differed from those selected under both approaches, but more so under the generic treatment.

Background

Respondent selection in establishment surveys, and organizational surveys in general, is important—even though the unit of analysis may be an institution or an office, one or more people have to answer the questions. Theories of survey response suggest a number of factors related to respondent selection that determine response errors and survey nonresponse. They can be summarized in three major categories.

1) Knowledge and Access to Information Systems. Access to records and specialized information is frequently cited as the most important component of establishment survey response to factual questions: many organizational surveys require respondents to consult computerized records and paper files, to make physical observations, retrieve their own memories, and consult with other organizational experts (Edwards & Cantor, 1991; Dutka & Frankel, 1991). Because of the multiplicity of roles in many organizations, it is essential to locate the respondent who is closely involved with the subject of interest, and who possesses the knowledge or opinions needed (Kumar, et al., 1993; Gower & Nargundkar, 1991). The structure of data in the information system also challenges the respondent; incompatibility of records with survey reporting requirements has been shown to be an impediment to response (Ponikowski & Meily, 1989). The respondent/ information system interaction is further emphasized by Tomaskovic-Devey, et al. (1994), who refer to the organizational "capacity" to respond—"organizational practices and divisions of labor and information that facilitate or inhibit the assembly of relevant knowledge to reply adequately to survey requests."

2) Authority. Organizational policy may prohibit survey participation, hierarchical control may strictly direct the flow of information to and communication with outsiders, and gatekeepers may impede access. Individual members may not be authorized to access the information system (Goldenberg, et al., 1993). Authority to respond may be an issue at the interorganizational level as well: relationships of business units or subsidiaries with parent firms may impact survey response (Tomaskovic-Devey, et al., 1994).

3) Motivation. Frequently cited as an incentive to respond is the personal commitment survey respondents develop when they find that the perceived benefits (affirmation of the respondent's altruism, personal interest, etc.) outweigh the burdens and costs of responding (Dillman, 1978). Motivational factors help determine the level of response error associated with the respondent (through the willingness to consult records instead of relying on memory or estimation) as well as the decision to participate in the survey at all (Goldenberg, et al., 1993). Ponikowski & Meily (1989) demonstrate that few respondents are motivated enough to transform incompatible data into questionnaire format. Tomaskovic-Devey, et al. (1994) look at organizational-level motivation as well: some organizations and industries interact with and are dependent upon their environments in ways that promote cooperation with requests for information, while others shield their operations from the researcher.

As Tomaskovic-Devey et al. (1994) have demonstrated across these three categories, organizational characteristics play an important role in measurement and nonresponse error. The size and structure (complexity, centralization, formalization) of the organization can have serious implications for contacting the proper respondent and that respondent's interaction with the information system. For example, in a small organization, one respondent, perhaps even the owner or president, can provide all of the information necessary, but in a larger organization, that knowledge is distributed (Gower & Nargundkar, 1991). Also, some organizations have preestablished channels of communication for dealing with inquiries from their environment. Many organizations attempt to "buffer their technical core" (Scott, 1981; Thompson, 1967) with peripheral layers of management that screen, direct, and negotiate external requests for information. The effects on nonresponse and response quality of these organizational structures might be beneficial or harmful: a boundary-spanning unit might use its authority and knowledge of the organization to facilitate a quick answer from the correct respondent, or it might shunt the survey request to an unqualified respondent or edit the responses and introduce error.

A great deal of research has been done on mail questionnaire survey techniques and procedures to reduce nonresponse and response error. One mail survey technique that has been the subject of much experimentation and is closely related to the issue of respondent selection is *personalization*—Dillman (1978) recommends that every aspect of the mail survey package should be personalized: contact names and titles, and hand-signed cover letters with personal salutations should be used, and the overall tone and appeal should be tailored to the recipient. Precontacting mail questionnaire respondents to notify them of the coming survey would further personalize the experience. This definition of personalization also implies that the survey request should be addressed to the person for whom the questionnaire subject is most salient—this overlaps the domain of respondent selection.

Indeed, in much of the literature on mail questionnaire surveys, "personalization" actually encompasses two different but related issues, both having to do with the task of respondent selection: First, there is "person targeting"—the specificity with which respondents are addressed by proper name, full title, and office, and the extent to which the survey materials reflect a personal appeal. Personally precontacting (by telephone, for example) respondents is another way to further this type of personalization. This is personalization in terms of the familiarity with which we address the respondent; it gives a tailored feel to the mail survey. Presumably, this builds respondent trust and commitment to the survey task.

Second, there is "role targeting" of respondents, which is related to "personalization" in that one can target the current occupants of specific, technical organizational roles where the information resides, or the organizational positions which can directly access the relevant parts of the information system. Role targeting can also be achieved through questionnaire instructions which specify in detail the type of person who should fill out the questionnaire, even if the exact identity of that person is not known beforehand. Precontacting is sometimes used solely to identify the most appropriate unit and/or individual respondent. Role targeting is closer to what most of the literature refers to as respondent selection. See Table 1.

Table 1: Components of Personalization in the Organizational Survey

	Person-Targeting	Role-Targeting
Definition	Making the survey more personalized by addressing the questionnaire using proper names, titles, offices, etc. Any survey protocol or questionnaire package characteristic that promotes a personal, tailored impression.	Making the survey more personalized by addressing the questionnaire so that it goes to a person in a specific role in the organization that represents the actual respondent of choice or the best point of entry for the survey request.
Techniques	 Use of proper names Tailored cover letters Prenotification calls 	 Identifying relevant specialist(s) in technical core Identifying effective communication channels Instructions specifying respondent qualifications
Example: General	Generic addressing ("Proprietor/Owner," or simply the name of the company).	No respondent identified; no specifications in the instructions.
Example: Specific	Specific addressing (proper name and title of the respondent).	Addressing to an actual job title in the organization, with specifications and requirements that the respondent should meet.

While these two dimensions-person targeting and role targeting-are often highly correlated in mail survey addressing strategies, this need not be the case. For example, a survey might be personalized with a person's complete name, but that person might arbitrarily be the owner/proprietor, the president/CEO, or the highest ranking manager in some subunit, as opposed to a specialist within the ranks of the organization (persontargeted but not role-targeted). On the other hand, a survey might be addressed to a specific title or organizational role, such as "Treasurer" or "Compliance Officer," but lack the personalized touch of a name (not person-targeted, but role-targeted). Or it could be sent to a specific office, with no individual named, if the researcher knows the activity of interest resides in that office or department, and the researcher is indifferent to which of the equally qualified office members serves as respondent (not person-targeted, but role-targeted).

Most research on the effects of personalization in mail questionnaire surveys has focused on household or individual surveys, or has confounded the person- and role-targeting dimensions. (Treatments in those experiments often control for the presence or absence of a proper name, but not for the type of respondent targeted.) While experimental results on personalization-most closely related to persontargeting-are mixed, a plurality of studies indicate some positive effect, mostly in terms of response rates (including Paxson, et al., 1995; Christianson & Tortora, 1995; Yu & Cooper, 1983). Other studies, however, indicate mixed or insignificant results in terms of response rates and error (for example, Moore, et al., 1993). A few studies have been published suggesting negative effects of personalization on response rates or data quality (Kerin & Peterson, 1977; Andreason, 1970).

On the subject of role targeting in the organizational survey, however, the picture is less clear. A number of findings have been published about the use of various types of organizational actors as informants. It has been suggested, for example, that using highly placed corporate officers (president or vice president of a company) as respondents can lead to less detailed, less accurate (more estimation), and more hastily completed responses than targeting specialists who may be further down the organizational hierarchy (Gower and Nargundkar, 1991). Sudman and Phillips (1991) explore the different cognitive processes used and answers provided by respondents from different parts of the same organization, but note that no other studies have referred to cognitive processes to determine why organizational respondents differ.

One study that did attempt to separate the effects of person- and role-targeting was Van Liere, et al.'s (1991) experiment in which organizations were precontacted by phone, and the name of the best-qualified respondent was determined. In one experimental group, the caller then spoke directly with that person to emphasize the importance of the study and notify them of the coming mail questionnaire-this fostered a higher degree of person-targeting. In another group, the best-qualified respondent was identified but not spoken to directly. No difference between these treatments was detected, but both approaches increased response rates over a control group that simply received the mail questionnaire without any respondent pre-identification or precontact. The authors concluded that talking to the desired respondent (increased person-targeting) had no additional beneficial effect over only identifying (roletargeting) a specific respondent.

Research Scope

The objective was to evaluate two commonly used mail questionnaire respondent selection strategies that represent polar opposites on the person-targeting and dimensions. role-targeting In one strategy, organizations receive questionnaires addressed generically to the firm, or to the owner or top manager, without proper names (the "general" ends of both the person-targeting and role-targeting dimensions-Figure 1 describes the characteristics of the two strategies in terms of their locations along both dimensions of personalization). The other strategy usually addresses specific technical actors within the core of the organization, by name and title, who represent best guesses for directly accessing the needed data (the "specific" extremes of the person- and role-targeting dimensions).

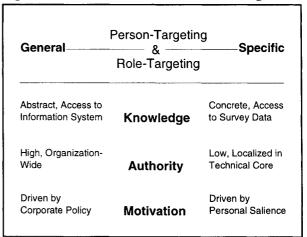


Fig. 1: Characteristics of 2 Selection Strategies

There are several limitations to this design. The interactions between the two dimensions of person- and role-targeting are not contrasted (this experiment also confounds the two dimensions, although both are individually specified). Also, the locations of the treatments along the two dimensions are not uniform: the choice of an owner or top manager target may not always represent the most "general" end of the role-targeting spectrum. In some organizations, the owner or top manager may be knowledgeable of even the most technical subjects. Instead, this choice represents a common entry point for information requests that takes advantage of well-developed channels of communication.

Methodology

A split-half experiment was conducted in a 1995 mail survey carried out by the U.S. General Accounting Office on specific financial practices at U.S. banks and thrifts. The survey collected both factual and opinion data about certain financial activities. Many of the questions were technical, and required the respondent to perform calculations for specific reporting periods.

Ninety-seven sample elements were randomly assigned to the "general" treatment—their mailing labels and cover letters were addressed simply to "President/CEO" without a corresponding name, and the cover letter salutation simply read "Dear Sir or Madam."

The remaining 92 sampled banks were assigned to the "specific" respondent treatment—the mailing label and cover letter were addressed to a specific corporate officer by name and title, and the salutation in the cover letter also referred to the chosen respondent by name. This officer was chosen in accordance with rules developed during previous research that suggested where in a bank the financial activity of interest would most likely be located. Often, the role targeted had a title such as "Finance Officer," "Chief Financial Officer," "Director of Finance," or "Director of Risk Management." Sometimes, specific officers at the Vice President level were assigned the duties that corresponded to the activities of interest.

The questionnaire instrument and all other materials and procedures associated with the survey were the same for both treatments. The two contact approaches were maintained as faithfully as possible, even during telephone followups with nonrespondents.

Results

The two respondent selection treatments were analyzed in terms of 1) overall response rate; 2) response characteristics, including response speed (the number of days from mailout to receipt of returned questionnaires), amount of item nonresponse, and number of open-ended items with volunteered text data; and 3) accuracy in targeting the ultimate respondent.

Response Rate by Treatment

Response rates were higher for the specific person- and role-target treatment group. That group had a response rate of 87% (80 out of the 92 eligible sampled organizations completed useable questionnaires), while the general treatment group responded in only 72% (70 out of 97) of the cases. The higher degree of personand role-targeting were clearly a more effective combination (p < .01). The benefits of authority and established channels of communication for access to the information system did not outweigh the lack of personalization and role specification in the general target group.

Other Response Characteristics by Treatment

The mean number of days from mailout to return of completed questionnaires did not vary by treatment: The 79 specific-target treatment returns for which an elapsed time could be computed was 30.7 days. For the 69 general-target questionnaires, the mean was 30.8 days. In the specific treatment, half of the returns were received by the 19th day, while half of the general treatment responses were received by day 18.

Likewise, the proportion of valid answers to open-ended questions did not vary significantly by treatment. The level of open-ended text answers was calculated as the proportion of eligible opportunities for answering with a written comment that were taken by a respondent. (Depending upon previous answers, respondents were eligible to answer up to nine open-ended questions.) The questionnaires from the specific-target treatment group registered open-ended comments in 12% of their opportunities, while the general-target treatment group had such comments 11% of the time.

To gauge item nonresponse, the number of valid responses were counted for a set of eight items that applied to all respondents. Over all 150 completed questionnaires, 43% had valid answers to all of these required questions. Only 11% failed to give answers to four such questions, the maximum number of item nonresponses observed. When the distributions of the number of item nonresponses were examined by treatment group, the specific-target treatment group (mean nonresponses of 1.3) did not differ significantly from the general-target group (mean of 1.2).

Thus, none of the response characteristic variables showed any effects from the two treatments. The specific treatment did not yield significantly higher scores on the survey quality indicators.

Accuracy of Respondent Targeting

For each of the completed questionnaires, we identified the name and title of the actual respondent who ultimately filled out our questionnaire, and compared that to the generic title of President/CEO (in the general-target treatment) or to the particular bank officer's name and title selected in the specific-target treatment.

For the 78 completed questionnaires from the specific treatment group where a name and title of the actual respondent were available, 46% (n=36 questionnaires) were filled out by the same respondent as originally targeted. In 31% (n=24) of the cases, a respondent with a different name, but the same title filled out the questionnaire. And in 23% (n=18) of the cases a respondent with both a different name and a different title completed the questionnaire.

For the 68 completed general treatment questionnaires where the respondent gave his or her name and title, only 18 (26%) were completed by the President or CEO. In the other 74% of the cases, an organizational representative other than the President or CEO filled out the survey.

While the specific person- and role-target treatment resulted in a higher percentage of correctly targeted questionnaires than the general approach (46% vs. 26%, p < .10), both treatments resulted in a significant number of questionnaires for which a different name and/or title appeared as the actual respondent.

In most cases where the actual respondent title differed from the title of the preselected respondent in the specific-target approach, the discrepancies were understandable: for example, we had picked the wrong vice president, or a treasurer had completed the questionnaire and not a chief financial officer or president/CEO. There were a limited number of titles that made up the population of respondents; most differences were probably due to slight variations in the structure of responsibilities and mission areas under dissimilar corporate structures.

Respondent Targeting Results from other Bank Surveys

In another survey of banks (U.S. General Accounting Office, 1995), generically addressed to the "President/CEO" of 2,500 banks, only 51% of the questionnaires were actually filled out by the president or CEO. In contrast, in a person-targeted but still not role-targeted survey of 178 farm credit associations (specialized banks for agricultural lending), 95% of the respondents were the presidents or CEO's that had been targeted by name (U.S. General Accounting Office, 1994).

This suggest that the effects of person- and roletargeting on respondent selection accuracy are distinct, and that accuracy rates can vary widely. However, it must be noted that this nonexperimental data was obtained from different populations on different questions (the farm credit association survey dealt mostly with opinion and policy data, which may have been more salient to respondents at the president/CEO level than the more technical, specific data associated with mutual fund sales in the other bank survey). Furthermore, the associations surveyed generally have fewer staff than most of the banks, making it likely that association presidents would be more prominent as respondents.

Discussion

The two polarities of respondent selection approaches tested here yielded different response rates—the specific person- and role-targeting approach that identified, by name, specific respondents closer to the organization's technical core produced a higher response rate than did a generically addressed survey targeted to the office of the chief executive at the top of the organization. However, other response characteristics such as speed, item nonresponse, and volume of open-ended question response were unaffected by the experimental treatment. This leads to the preliminary conclusion that respondent selection strategies may affect the decision to participate in, complete and return the survey, but have little effect on how fast the response process is carried out, and how much effort goes into answering the questionnaire.

The overall finding that actual respondents often differed from targeted respondents, even when specific titles are reviewed and selected beforehand is a cause for concern. Even precontacting sampled organizations to identify the most likely respondent does not determine with certainty who will fill out and return the questionnaire. It is not clear how often "replacement" respondents are more appropriate than originally targeted ones.

References

- Andreason, Alan (1970) "Personalizing Mail Questionnaire Correspondence" Public Opinion Quarterly, Vol 34:273-277.
- Christianson, Anders and Robert D. Tortora (1995) "Issues in Surveying Businesses: An International Survey," in B.G. Cox, D.A. Binder, B. N. Chinnappa, A. Christianson, M.J. Colledge, P.S. Kott (eds.), Business Survey Methods, New York: Wiley, pp. 237-256.
- Dillman, Donald (1978) Mail and Telephone Surveys: The Total Design Method. New York: Wiley.
- Dutka, Solomon and Lester R. Frankel (1991) "Measurement Errors in Business Surveys," in P. Biemer, B. Groves, L. Lyberg, N. Mathiowetz and S. Sudman (eds.), *Measurement Errors in Surveys*, New York: Wiley, pp. 113-123.
- Edwards, W. Sherman and David Cantor (1991) "Toward a Response Model in Establishment Surveys," in P. Biemer, B. Groves, L. Lyberg, N. Mathiowetz and S. Sudman (eds.), *Measurement Errors in Surveys*, New York: Wiley, pp. 211-233.
- Goldenberg, Karen L., and Shail Butani, Polly A. Phipps (1993) "Response Analysis Surveys for Assessing Response Errors in Establishment Surveys," Proceedings of the International Conference on Establishment Surveys, Alexandria, VA: American Statistical Association, pp. 290-299.
- Gower, Allen R. and Mukund S. Nargundkar (1991)
 "Cognitive Aspects of Questionnaire Design: Business Surveys Versus Household Surveys," *Proceedings of the Annual Research Conference*, Washington, D.C.: U.S. Bureau of the Census, pp. 299-312.
- Kumar, Nirmalya and Louis W. Stern, James C. Anderson (1993) "Conducting Interorganizational Research Using Key Informants," Academy of Management Journal, Vol 36, pp. 1633-1651.
- Kerin, Roger A. and Robert A. Peterson (1977) "Personalization, Respondent Anonymity and Response Distortion in a Mail Survey" Journal of Applied Psychology, Vol 62, pp. 86-89.
- Moore, Dana and Rodney Baxter (1993) "Increasing Mail Questionnaire Completion for Business Populations: The Effects of Personalization and a Telephone Followup Procedure as Elements of the Total Design Method," *Proceedings of the International Conference on Establishment Surveys*, Alexandria, VA: American Statistical Association, pp. 496-502.
- Paxson, Chris, and Don Dillman, John Tarnai (1995) "Improving Response to Business Mail Surveys," in

B.G. Cox, D.A. Binder, B. N. Chinnappa, A. Christianson, M.J. Colledge, P.S. Kott (eds.), *Business Survey Methods*, New York: Wiley, pp. 303-316.

- Ponikowski, C. H. and S. A. Meily (1989) "Controlling Response Error in an Establishment Survey," *Proceedings of the Survey Research Methods* Section, American Statistical Association, Alexandria, VA: American Statistical Association, pp. 258-263.
- Scott, Richard W. (1981) Organizations: Rational, Natural and Open Systems, Englewood Cliffs, NJ: Prentice-Hall.
- Sudman, Seymour and Norman M. Bradburn (1974) Response Effects in Surveys, Chicago: Aldine.
- Sudman, Seymour and Joan M. Phillips (1994) "Cognitive Aspects of Organizational Reporting," paper presented at the American Association for Public Opinion Research Annual Conference, Danvers, MA.
- Thompson, James D. (1967) Organizations in Action, New York: McGraw-Hill.
- Tomaskovic-Devey, Donald, Jeffrey Leiter, and Shealy Thompson (1994) "Organizational Survey Nonresponse," *Administrative Science Quarterly*, Vol 39, pp. 439-457.
- U.S. General Accounting Office (1994) Farm Credit System: Potential Impacts of FCB Mergers on Farmer and Rancher Borrowers (GGD-95-19). Washington, DC: U.S. GAO.
- U.S. General Accounting Office (1995) Bank Mutual Funds: Sales Practices and Regulatory Issues (GGD-92-19). Washington, DC: U.S. GAO.
- Van Liere, Kent D., and Robert M. Baumgartner, Pamela P. Rathbun, Bobbi Tannenbaum (1991) "Factors Affecting Response Rates in Surveys of Businesses and Organizations," paper presented at the American Association for Public Opinion Research Annual Conference, Scottsdale, AZ.
- Yu, Julie and Harris Cooper (1983) "A Quantitative Review of Design Effects on Response Rates to Questionnaires," *Journal of Marketing Research*, Vol 20, pp. 36-44.