

When Can I Stop Calling? Do the Hard-to-Reach Respond Differently to Surveys?

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Introduction

A fundamental rule of telephone surveying is to make several calls to each sample element to reduce non-response bias (e.g., OMB, 2006). Concern about such bias has increased recently in light of reduced response rates to telephone surveys (Lee et al., 2007). However, as the number of calls made to non-answering numbers increases, the survey becomes more expensive and time-consuming. If the survey responses of the hard-to-reach do not differ from those of the easy-to-reach, there is less need to make multiple calls to each number. A large-scale telephone household health survey found demographic but not health characteristics related to ease of contact (Davern et al., 2008), leading those authors to conclude that multiple calls and attempting refusal conversion increases survey cost and respondent burden with little benefit.

Method

We examined the relationship between survey responses and the number of calls required to reach respondents, across seven survey data sets. Variables examined covered demographics, program awareness, attitudes toward energy efficiency, and other issues of interest to program implementers. Sample sizes ranged from 38 to 956.

Results

The number of calls required for contact ranged from one to 18. In all surveys, about 90% or more of the contacts were achieved within four calls.

Out of more than 120 analyses performed, only 10 showed a significant relationship between number of calls and survey response. Three of the seven surveys found no significant relationships at all. Most (6 of 10) of the significant relationships were in demographic or firmographic variables, consistent with Davern et al.'s findings. Those were found in two of the surveys: a nonparticipant survey for a nonresidential efficiency program found that building owners, large companies, and businesses other than restaurants were more easily reached than tenants, small companies, and restaurants; and a residential energy efficiency awareness study found that older, more highly educated, and higher-income respondents tended to be easier to reach than younger, less-educated, and lower-income ones.

Two other surveys found no relationship between ease of contact and demographics and a total of four significant relationships out of 66 substantive survey questions examined. Three of the four significant relationships were weak (number of calls accounted for 1%, 7%, and 18% of the variation in responses, respectively).

Conclusions

The current findings largely support the view of Davern et al. (2008). The best approach may be that suggested in a report by the U.S. Bureau of Labor Statistics (Sangster, 2003): rather than focusing simply on reducing non-response, focus on reducing non-response bias, such as by giving greater weight to respondents reached after multiple calls.

References

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