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Using Behavioral Science to Improve Survey Response: **An Experiment with the National Beneficiary Survey**

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Much of the data on which policy and program decisions are based come from stakeholder surveys. We use these surveys to increase our understanding of characteristics, experiences, and behaviors when administrative data sources don't provide the kind of rich data we need. Unfortunately, convincing people to cooperate is increasingly difficult with the rise of do-not-call lists and the abandonment of landlines. Research firms have attempted to compensate for this decline in cooperation by investing in efforts to locate and engage potential respondents, but this increases the cost of survey data collection. However, design choices may improve cooperation without increasing cost. Findings from an experiment conducted as part of the National Beneficiary Survey (NBS) suggest one strategy to help on this front.

The NBS, conducted for the Social Security Administration, collects periodic data on a nationally representative sample of Social Security program beneficiaries. Findings from this large-scale study help policymakers better understand beneficiaries' experiences with Social Security programs and identify areas for improvement. Mathematica has been conducting the NBS since its inception in 2004.

To reduce the costs of data collection and encourage sample members to respond to our outreach, the study team recently experimented with making subtle changes to a letter mailed at the start of the study. Using principles from behavioral science, we aimed to determine whether a particular version of the letter was more effective at spurring sample members to call Mathematica to complete the interview. This brief discusses the design of the experiment and the features of the letter that were most effective at influencing sample members to take action.

Original version of the letter   **Personally relevant** version of the letter   **Concrete** version of the letter

THE ADVANCE LETTER: CREATING A CALL TO ACTION

All sample members received an advance letter seven days prior to the start of the telephone interviewing component of the study. In addition to the original version of this standard letter, we created versions that used slightly different approaches to encouraging participation. One new version used more personally relevant language, and another provided more concrete directions about what the recipient should do next. All the versions included the standard information that described the background and purpose of the study, addressed privacy and confidentiality concerns, and offered a gift card for completing the survey. A subset of sample members were randomly assigned to receive one of these versions.

A CLOSER LOOK AT THE LETTERS TESTED

Original. This letter, sent to 1,258 sample members, told the recipients that a survey representative would contact them soon. They were *invited to call in to participate in the study, and to call or email with questions, using the contact information provided.*

Personally relevant. This version of the letter, sent to 1,232 sample members, incorporated more personally relevant language that explained how the Social Security Administration would *like you to tell us about yourself and your experiences with programs like Social Security Disability Insurance and Supplemental Security Income.*

Concrete. This version of the letter, sent to 1,252 sample members, used principles from behavioral science to condense several possible steps in the original letter (call in to participate; call or email with questions) into a clear action step to take within a stated time frame. It directed sample members to *call a specific number (before x p.m.) in order to then exercise one of three options: complete the survey, schedule an appointment for later completion, or decline to participate in the study.* The letter reduced the salience of the default choice to do nothing and simply throw the letter away, and it also provided a clear action step that made not participating in the survey a more active choice. Research in behavioral science in other areas has shown the power of how the framing of a default option can dramatically change behavior (Johnson and Goldstein 2003[1]).

> The concrete letter generated more than 50 percent more call-ins.

Percent of Call-Ins in Response to Advance Letters

4.7%	5.3%	7.2%
Original version of the letter	**Personally relevant** version of the letter	**Concrete** version of the letter
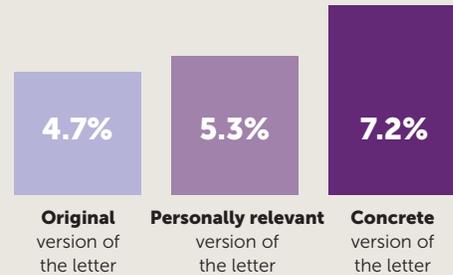
WHAT WERE THE RESULTS?

The primary outcome of interest was whether the first contact with a sample member was an inbound call (as opposed to an outbound call). We selected this as our primary outcome because we can be certain that all first contacts initiated by sample members were solely attributable to the receipt of the advance letter. The original version of the letter led 4.7 percent of the sample to call in prior to the start of outbound calling. The personally relevant version of the letter produced a slightly higher rate of call-ins (5.3 percent), but the difference was not statistically significant. The concrete version of the letter generated the highest percentage (7.2 percent) of call-ins, more than 50 percent greater than the control condition. This difference was statistically significant.

IMPLICATIONS FOR SURVEY RESEARCH

The results of this experiment show that the concrete letter generated the most call-ins, a statistically significant finding that highlights the valuable role that behavioral science can play in survey research. By making small changes to language and framing options for sample members to take action in a specific and tailored way, researchers can influence the behavior of their survey samples and increase the likelihood of response. In turn, this can help to contain costs on national surveys that have large samples and need high response rates.

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[1] Johnson, Eric J., and Daniel Goldstein. "Do Defaults Save Lives?" *Science*, vol. 302, November 2003.