

Increasing Incentive Salience: Effects of a Pre-Notification Letter on Nonresponse Follow-Up

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Abstract

Prenotification letters are often sent before the first household contact in telephone surveys to decrease initial nonresponse, but they may also be effective at increasing response in a nonresponse follow-up (NRFU) phase. Such letters are thought to increase the salience of a change in survey protocol, such as an increased incentive. If a protocol modification is expected to have an effect on response, ensuring its salience is essential (Groves, Singer and Corning 2000). We tested the effect of manipulating incentive salience in a survey that used an address-based sample and telephone interview within 14 geographically-, linguistically- and demographically-diverse communities across California. Households were called after providing a phone number on a mailed household information form or after their address was matched to a phone number. At the end of the first phase of data collection, a subsample of nonrespondents was selected for additional follow-up by telephone. A random half of the nonresponse follow-up group received a NRFU prenotification letter informing them of an increased incentive (\$40, up from \$20) and our upcoming call. Half did not receive a letter, but were called and offered the same increased incentive. We hypothesized that the mailing would increase response, and reduce the effort required to finalize cases because of increased incentive salience. Findings suggest that the letter does not improve response or reduce the number of interviewer hours required, but does reduce the number of dials made to cases. Implications for Leverage-Saliency Theory are discussed.

Key Words: Salience, incentive, pre-notification letter, nonresponse follow-up

1. Introduction and Research Questions

Prenotification (i.e., advance) and reminder letters are standard in survey practice, as these notifications increase householder awareness of the impending survey and add to the survey's legitimacy (Dillman, Smyth, & Christian, 2014). They can also make the sampled household aware of incentives and other design features that might increase response propensity. Leverage-Saliency Theory (LST) conceptualizes response propensity as occurring from a confluence of these individual survey design attributes, assuming they are

made salient to sampled units (Groves, Singer and Corning 2000). In other words, design features must be noticed in order to work. This study looks at the effect of increasing the salience of a change (increase) in incentive during a nonresponse follow-up (NRFU) phase of an address-based survey with phone interview.

More explicitly we ask:

- Does sending a NRFU letter that mentions the increase in incentive lead to increased response in the NRFU stage (relative to calling without sending a letter)?
- Does the prenotification letter reduce follow-up effort?

2. Methods

2.1 Study Background, Sample, and General Protocol

The study took place in the NRFU phase of the Building Healthy Communities (BHC) survey. BHC is a community-based health improvement project sponsored by The California Endowment (TCE) to “advance statewide policy, change the narrative, and transform 14 of California’s communities most devastated by health inequities into places where all people have an opportunity to thrive” (The California Endowment, 2016). TCE partnered with the UCLA Center for Health Policy Research (CHPR) and California Health Interview Survey (CHIS) to collect data from the BHC communities in 2015. RTI International was the data collection contractor.

Sampling and data collection proceeded in two phases: an initial data collection phase with a \$20 promised incentive, and a NRFU phase with a \$40 promised incentive. The experiment reported in this paper was implemented in the NRFU phase. In summary, the initial sample processing and data collection steps included:

1. Matching the address-based sample to telephone records by Marketing Systems Group (MSG), provider of the USPS Delivery Sequence File
2. Sending a form to unmatched households, requesting a phone number at which the household could be reached to participate in a phone interview
3. Conducting a phone interview with one sampled adult, one sampled teen, and with a parent or guardian of one sampled child

The NRFU phase involved a random sample of addresses that had completed the information form but had not completed the phone interview.

This study includes 700 addresses that were randomly selected for nonresponse follow-up out of the 28,532 sampled addresses included in the first sample release of the this survey.

2.2 Incentives

The initial data collection phase offered a promised \$20 incentive for interview completion. The incentive for a completed interview during the NRFU phase was \$40.

2.3 NRFU Letter Manipulation

At NRFU, the follow-up was randomized into two groups. Half received a prenotification letter mentioning the \$40 incentive (Letter Group) and half did not receive a letter (No Letter Group). All NRFU respondents received the \$40 incentive regardless of whether or not they received the letter mentioning it.

2.4 Other Differences between Letter and No Letter Groups

Calling to the Letter Group began 8 days after the calling to the No Letter Group to allow for printing, mail packet assembly, and mailing. The No Letter Group was called immediately after selecting the NRFU sample.

3. Results

Figure 1a shows that the No Letter Group (called immediately) had significantly more completed interviews than the Letter Group (calling delayed; Pearson chi-square $p = 0.02$). The obvious confound in this comparison is the difference in calling duration (28 days for No Letter and 20 days for Letter). Thus, it would be premature to conclude that the letter led to reduced returns.

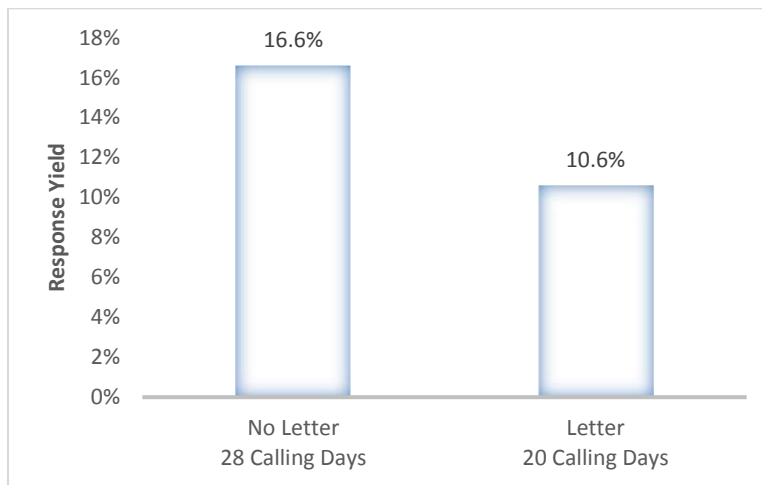


Figure 1a: Overall NRFU Response Yield by No Letter v. Letter

Figure 1b shows that there is no significant effect of the letter when controlling for the number of calling days (Pearson chi-square $p = 0.4760$). The small, non-significant difference is still in the same direction as Figure 1a, however.

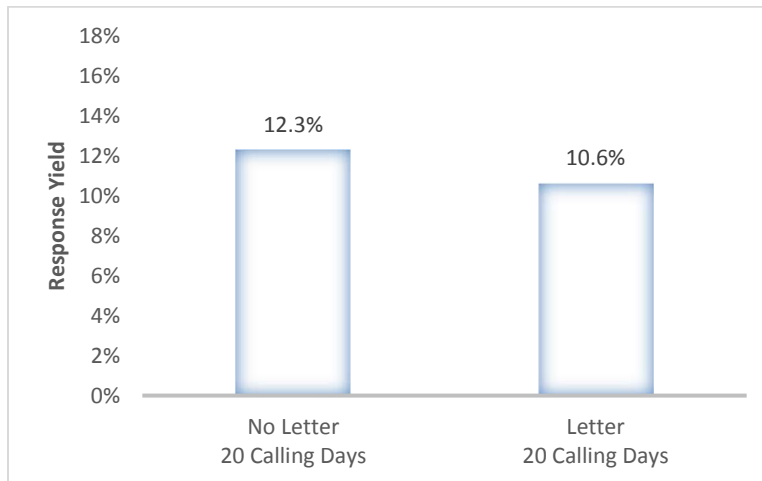


Figure 1b: NRFU Phase Response Yield by No Letter v. Letter Controlling Number of Days

Two measures of calling effort were also assessed: dials per interview (Figure 2a) and hours per complete (Figure 2b). It took more dials to complete an interview when no letter was used than when a letter was used (t-test $p < 0.0001$), but there was no effect of the letter on hours per complete (t-test $p = 0.3022$).

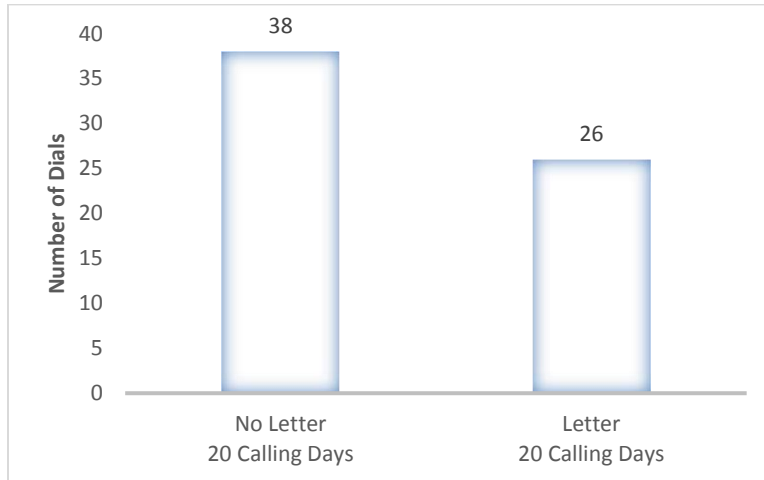


Figure 2a: Difference (No Letter v. Letter) in Average Number of Dials to Complete an Interview

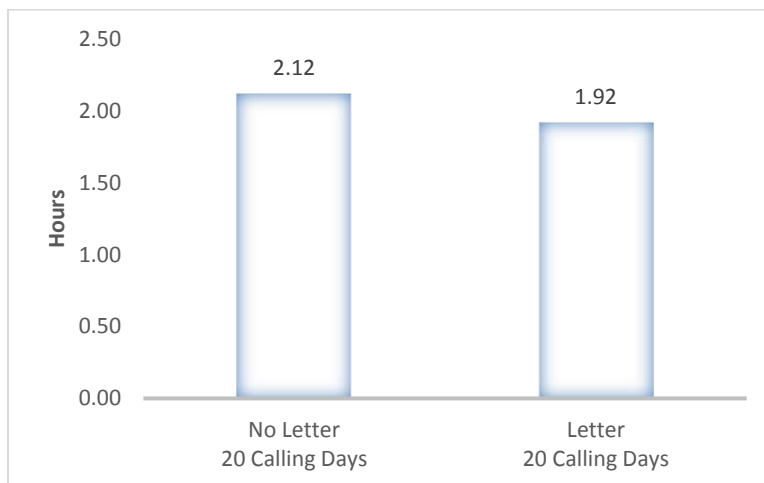


Figure 2b: Average Interviewer Hours per Complete Survey

4. Discussion

The topic of design feature salience is a complex one. Not only must the survey designer make sure that important design features are *potentially* salient (e.g., mention them in a letter or interviewer script), but the sampled unit or person must notice those design features for their effect to have leverage. In many cases, the second criterion may not be met. The first criterion requires knowing a) which features are likely to increase participation, and b) how to make them salient. Given the extensive literature on incentive effects, we thought that an increased incentive, if made salient, would increase response.

However we only observed a marginally (nonsignificant) negative effect on the number of completed interviews attributable to the letter. More encouragingly, we saw a reduction in the number of dials made to cases receiving the letter, suggesting that it took less effort to resolve these cases. While the letter did not result in more completed interviews, it may have drawn the household's attention, therefore increasing the chances of contacting and resolving the case, and thus reducing the amount of calling required. Interestingly, hours per complete were lower when the letter was used (although nonsignificant).

4.1 Limitations

Perhaps the largest limitation of the study is that the 20 days of data compared are not the same 20 days. Any difference in the overall productivity for the days selected (e.g., because they were different days of the week), could easily influence the productivity and response outcomes independent of the experimental manipulation.

4.2 Future Research

Setting aside many open questions about how to achieve salience and leverage it, there are a few things we could do to explore our letter effect more fully. First, looking at other final dispositions like refusals and contacts without completes would allow us to see exactly where the letter has an effect in the household contact and response process. There is also likely variability in the letter effect across the 14 communities sampled. Exploring this variability would elucidate sociodemographic aspects of the letter effect. The effect of the letter on overall costs (including calling, printing, mailing, incentives, etc.) would also be helpful to explore for future survey planning.

Beyond our data, the issue of true salience should be more proactively explored, even if only qualitatively. We have little knowledge, as a field, of what exactly happens to prenotification and reminder letters once they reach a household. How many are seen by a householder? How many are opened? How many thrown away? Each of these bridges must be crossed in order for the design feature to become salient and have an effect. Further, can interviewers, if trained to mention the new incentive, serve as a reinforcement of the message in the letter? This could make up for non-salience due to discarded or unseen letters. These are just a few questions that, if answered with future research, could significantly shape the future of mail and multimode survey research in years to come.

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