Logos on Envelopes can Reduce Survey Returns: An Experiment in California

Royce Park¹, Matt Jans¹, John Rauch²
David Grant¹, Sherman Edwards²

¹California Health Interview Survey, UCLA Center for Health Policy Research,
10960 Wilshire Blvd, Los Angeles, CA 90024

²Westat, 1600 Research Blvd, Rockville, MD 20850

Abstract

Survey methodologists are always looking for ways to make the material they mail to respondents more likely to be opened, completed, and returned. Traditional advice is to avoid making the delivery envelope look too much like marketing or fundraising for fear that respondents will consider it junk mail, but there have been few experimental tests of this hypothesis. On the other hand, distinctive graphics and messages may be necessary to distinguish survey materials from other types of information and requests people receive in the mail. In this small experiment, we manipulated the delivery envelope and presence of a packet insert in the 2nd mailing of an address-based sample (ABS) screener form asking for basic household information and a telephone number for a subsequent telephone survey. The experimental envelope differed from the standard envelope only in the addition of the survey sponsor's logo (emphasizing public health). Addresses were randomized to receive either the standard (blank) envelope or the experimental envelope (with logo). The experiment was conducted on a random sample of addresses from the USPS Delivery Sequence File (DSF) in two California communities, and used the California Health Interview Survey (CHIS) telephone interview, which includes questions about health behaviors, health status, and insurance status. The screener forms and mailing materials were printed in English and Spanish because the communities sampled both had relatively high rates of Spanish-speakers. Results suggest that traditional advice about avoiding logos in mail survey design may be sound, but it is not clear whether the advantage of the logo-less envelope is systematic. We explore differences between the two communities, and between English and Spanish respondents. Implications for other mail survey designs, particularly those using ABS designs in hardto-survey communities will be discussed.

Key Words: Address-based sampling, mail survey, unit nonresponse

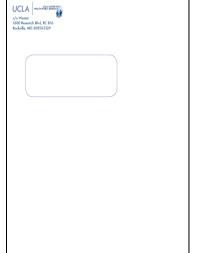
1. Logos on Envelopes and Unit Nonresponse

Decades of survey design guidance recommend using plain yet professional mailing materials to avoid appearing as marketing or fundraising requests (Dillman, Smyth, & Christian, 2008; Dillman, 1978; Fowler, 2014). This can be interpreted conservatively as a prohibition against all logos and color on mailing materials. Indeed several studies have found negative effects of these extra adornments on unit nonresponse (Dykema et al., 2012). On the other hand, Dillman, Smyth, and Christian (2008) recommend using a "recognized and respected logo" and to "limit print to standard colors" (p. 261, Guideline 7.7), suggesting that there is some flexibility in how survey researchers design these materials.

In an effort to increase response to a mailed screener form that was part of an address-based sampling (ABS) study, we attempted to leverage the logo, motto, and explicit endorsement of a community-based health enrichment program to increase completion and return of the screener form. Other than the UCLA logo as part of the return address, which appeared on all envelopes, the outgoing envelope was manipulated to either be blank or include a logo of The California Endowment (TCE) who sponsored the study (see Figure 1). The logo envelopes also included an insert or "buckslip" that further emphasized TCE's endorsement (see Figure 2). The specific research questions leading to this design were:

- 1) Does adding a logo to the envelope lead to more returns than the plain envelope? If yes, among what types of people?
- 2) Does the motivational message lead to more or fewer returns when the logo is not visible (i.e. when the packet was mailed in an outer USPS envelope)?

No Logo Envelope



Logo Envelope



Figure 1. Logo and no logo envelopes used in the screener packet mailing¹

¹ Notice that the envelope we refer to as "no logo" has a UCLA Center for Health Policy Research logo in the return address. While the BHC logo is much more prominent overall, this isn't a strict



Figure 2. Insert attached to cover letter

2. Methods

2.1 Sample

Two California communities were purposively chosen for the address-based sampling pilot test. The test was a special study of the California Health Interview Survey and sponsored by The California Endowment (Jans et al., 2013). The communities had hard-to-reach and hard-to-survey characteristics, including moderate-to-high Spanish use (44% and 66%), high Hispanic concentrations (60-98%), high proportion of renter-occupied units (54% to 78%), and a moderate proportion of families below the poverty line (30 to 33%). In total, 7,274 addresses were sampled and mailed to. The experimental design, dispositions, and sample sizes are described in Table 1. The mailing schedule in Table 1 combines both communities, but results are broken out by community in Section 3. Results. We summarize some results combining communities together to focus on the overall effect of the mailing manipulations.

2.1 Mailing Materials, Experimental Manipulation, and Mailing Schedule

The study protocol included three survey packet mailings. For the first mailing, a self-administered screener form asking for household demographics and a phone number was mailed in a white 9" x 12" envelope with a UCLA logo and return address. The second and third mailings, to nonresponding addresses, included an experimental manipulation of two features of the mailing packet. Half of the second and third mailings were randomly assigned to the original packet and half to the experimental packet. The randomization was conducted at sampling, so the same random half received the experimental packet at mailings 2 and 3. Since the insert and second logo were used in the same random half of mailings their independent effects cannot be assessed.

The experimental packet added a logo of the sponsor's community initiative to the envelope and a corresponding insert with further sponsor endorsement (see Figures 1, and 2 above).

test of the complete absence v. minimal presence of a logo. Any difference between a completely blank envelope and one with only the return address logo is not measured here.

The general packet material was consistent between both treatment and control conditions and included a cover letter, FAQ page, and a 1-page screener form. Each piece was printed in English and Spanish to avoid nonresponse due to language. In the experimental condition, the insert was glue-tacked to the cover letter to ensure that it would not slip to the bottom of the envelope or slip to the top and block the address. The glue-tack also ensured that the insert would be seen by respondents who opened the envelopment and pulled out the cover letter or packet contents. Mailings were conducted between October and December 2013. Table 1 summarizes the overall mailing design and sample sizes mailed. The first experimental packet (packet mailing 2 in the protocol) was mailed by USPS First Class mail, and the second (packet mailing 3) by USPS Priority Mail. In the second experimental mailing (packet mailing 3, Priority Mail), the logo and insert manipulations were applied to packets just as they were in the first experimental mailing (packet mailing 2, First Class Mail) and the entire packet (including the logo envelope) were enclosed within the priority mailing envelope.

Table 1. Sample sizes and Returns at Each mailing

Screener Form Mailing	Standard	BHC Logo and	Returned
v	Packet	Insert	"Complete"*
	(No BHC		1
	Logo)		
Mailing 1	7,274	NO EXPERIMENT	780
-\$2 incentive		SCREENER	10.7%
		MAILING 1	(11.4% excl.
			PND**)
Postcard – Reminder cards sent t	o all sampled add	resses	,
Mailing 2	3,260	3,253	425
Experimental Packet 1			6.5%
-			(6.8% excl. PND)
Mailing 3	2,883	2,893	342
Experimental Packet 2			5.9%
-enclosed in USPS Priority			(6.0% excl. PND)
Envelope			,
*Completed and partially comple	stad forms		

^{*}Completed and partially completed forms

3. Results

There was a significantly lower participation rate in the first experimental mailing ($x^2 = 4.20$, p = 0.04, see Figure 3), but not in the second experimental packet (results not shown). The effect appeared only in Merced ($x^2 = 4.21$, p = 0.04). The direction of the difference in Boyle Heights supports the same conclusion, but the difference is not statistically significant.

^{**}Post Office Not Deliverable

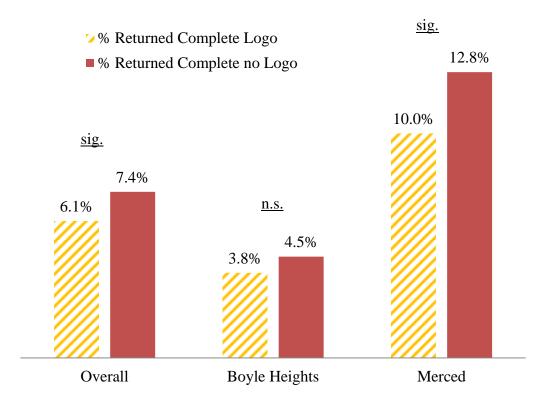


Figure 3. Participation rates at first experimental mailing

At the first experimental mailing, addresses in single-family dwellings were marginally less-likely to return the form when it had a logo (logo = 5.42% v. no logo = 6.69%, $x^2 = 3.46$, p = 0.063). Multi-family dwellings have the same direction of difference, but it was not significant.

Analyzing data on the returned screener forms shows that forms returned from the logo envelopes in the first experimental mailing were marginally less likely than those from the non-logo envelopes to indicate someone age 41+ lives in the household ($x^2 = 2.98$, p = 0.08). Forms with a logo from the second experimental mailing were significantly more likely to indicate adults age 18-40 live in the household than non-logo envelopes ($x^2 = 4.15$, p = 0.04). Other screener variables that were tested but did not show significant differences between logo and non-logo conditions include presence and number of children and teens, number of adults, language in which the form was completed, and preferred language for the call.

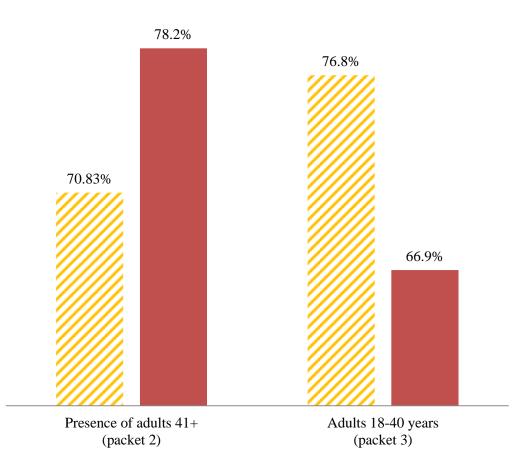


Figure 4. Significant differences in demographics (of completed forms; packet 2 = experimental packet 1 = First Class; packet 3 = experimental packet 2 = Priority)

At experimental packet 1, single-family dwellings appear to be marginally less likely to return a completed form when the logo is used (5.42% v. 6.69% for no logo, $x^2 = 3.46$, p = 0.063). Multi-family dwellings show same direction of difference but the effect was not significant (results not shown).

4. Discussion

The results are modest but support the concern that additional logos can suppress returns. The logo slightly reduced the return rate from the first experimental packet mailing only (second mailing in the overall protocol), and the effect was only seen in Merced. This suggests that logo effects are not universal, and that community and individual characteristics may moderate effects. Boyle Heights is urban, with more renters, and a higher rate of Hispanics and Spanish speakers than Merced. It is not immediately clear what specific features of urbanicity, Hispanic identity, or Spanish language use would lead to less of an effect of the logo, but opens the door for future research in these areas.

4.1 Why didn't the logo work?

Several things could have contributed to the negative impact of the logo. First, community members may have been less familiar with the study funder than we expected. Although the funder organizes and supports health improvement programs in both communities, and we sampled only from the areas of those communities in which those programs are implemented, we lack concrete evidence that that the citizenry in general knows the funder by name and logo. Additional "brand recognition" research or on-the-ground observations would tell us if the TCE logo and message are salient images for community members, and what connotations they have. Second, cognitive heuristics that people use when sorting their mail may lead to the judgement that the envelope contains fundraising material or advertising due to the professional and sleek appearance. Such a judgement would likely lead to a decision to throw away the envelope rather than open it. Third, language factors may play a role as well. The logo on the envelope was only presented in English, so its message ("Health Happens Here") may not have been understood by those who do not speak English. However, the insert was translated into Spanish, so it would have been readable by English and Spanish speakers who opened the envelope.

The fact that we see the effect in Merced only suggests that there may be characteristics about the communities, such as quality of mail delivery and type of mail receptacles, and differential characteristics of respondents. For example, Merced has fewer renter-occupied dwellings, and likely fewer multi-family apartment buildings than Boyle Heights. Multi-family units where mail is delivered to a central location present more opportunities for mis-delivered mail or for someone other than the sampled resident to receive the package. In terms of manipulation fidelity, packets mailed to single-unit dwellings are probably more likely to be received by the same person each time because there is less opportunity for mis-delivery than in multi-unit dwellings.

These are numerous person-level and community-level hypotheses that could be explored further to understand more concretely why and when logos work. With only two communities sampled, the effect of community is difficult to disentangle from the effect of housing unit and household characteristics. Both communities have hard-to-survey characteristics, but there are several distinguishing features that differentiate the two. Merced is smaller and more rural than Boyle Heights, and is a college/farming town with the newest UC campus. It has fewer Hispanic-identified people (60-63% v. 92-98% for Boyle Heights), and fewer people who speak Spanish at home (44% v. 84% for Boyle Heights). As a community, there are fewer renter-occupied units (54% v. 78% for Boyle Heights). Yet both communities have similar rates of adults 18-39 and families below the poverty level (Jans et al., 2013).

Most of the self-reported demographic differences in the logo and no logo conditions we tested were non-significant. Age differences in logo and no logo conditions were not the same in experimental packet 1 and experimental packet 2. This could be due to either the differences in make-up of the sample at each point in time, or the fact that packet 2 was sent in a USPS envelope. Adults age 41+ were more likely to be reported on a form from the non-logo mailing, but only at experimental mailing 1. Adults age 18-40 were more likely to be reported on forms from logo mailing at experimental packet mailing 2 (USPS Priority envelope).

4.2 Implications for Design and Future Research

Based on this research alone, we would have to support the conservative interpretation that logos are more detrimental than helpful, and they have a neutral impact at best. While these findings are not conclusive, researchers who want to apply logos to mailings should follow these guidelines: a) be conservative about the logo and messaging to avoid looking "too professional", or like a marketing or fundraising effort, b) test logos on small subsets of cases before conducting a full-sample application to avoid adverse effects on the sample as a whole, and c) use frame data available for ABS and other list sample to conduct further research into the types of people, households, and communities that are the most sensitive to logo effects. We recommend that future research on this topic embed explicit factorial experiments when multiple facets of the design are manipulated. As a result of manipulating the envelope logo and insert together, we limited our ability to infer the independent effect of each.

Future research includes analyzing the effects of community, dwelling type and age more thoroughly; assessing the completeness of the forms returned; and seeing whether logo or non-logo cases where more likely to include a phone number (and what type of number).

Acknowledgements

The authors sincerely thank The California Endowment which funded this pilot test and has been a strong supporter of CHIS in general.

References

Dillman, D. A. (1978). Mail and Telephone Surveys: The Total Design Method. Wiley.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2008). *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method.* John Wiley & Sons.

Dykema, J., Cyffka, K., Jaques, K., Ganci, R., Elver, K., & Stevenson, J. (2012). SHOW me the money?: Effects of preincentives, differential incentives, and envelope messaging in an ABS mail survey. In *Annual Meeting of the American Association for Public Opinion Research*, *May, Orlando, FL*. Retrieved from

http://www.amstat.org/sections/srms/proceedings/y2012/files/400221_500635.pdf

Fowler, F. J. (2014). Survey Research Methods (5th ed.). Thousand Oaks, CA: Sage.

Jans, M., Grant, D., Lee, A., Park, R., Edwards, S., Rauch, J., & Flores-Cervantes, I. (2013). Address-based sampling (ABS) as an "alternative" to RDD: A test in California. In Proceedings of the American Statistical Association, Section on Survey Research Methods. Boston, MA.