THE EFFECT OF AN EXPLICIT REFUSAL OPTION ON SAMPLE OUTCOMES: A STUDY OF UNION MEMBERS

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This paper addresses two issues of interest to survey research methodologists. First, it looks at the effects of offering an explicit pre-survey refusal option in the form of a postcard mailed to respondents. The effect of the postcard option on response rates will be analyzed. Second, the paper looks at the effect of the refusal option on resource expenditure. As the findings show, the explicit refusal option involves benefits and drawbacks in the overall process of survey administration, and the composition of the sample moderates these effects.

Method

Sample

The sample was selected from the United States and Canadian membership lists of an international trade labor union. Respondents who were listed as being members in 2001 were selected for the study. The sample was stratified by age (≤30 years old versus >30 years) and participants 30 years old and younger were over-sampled.

Before starting this study, we thought that it would be an ideal vehicle for examining the effects of a pre-survey postcard refusal option. However, there were two unexpected problems with the sample that made it less then ideal and that should qualify analysis and interpretation. First, we expected that virtually all of the members on the list would be eligible to be interviewed, when in fact many of them were not. Second, the union believed that the contact information was current, so we expected to be able to locate and contact more respondents than we did. These features of the study make it difficult to interpret our results unequivocally. However, we feel that our findings offer some insight into the use of a pre-survey refusal option.

Survey

The 30-minute telephone survey asked about experiences with the union and employers. The entire sample received a pre-notification letter (N=2603), prior to being called. The letter told them that they had been selected to be in the study, and to expect a phone call in the next few weeks.

At the time of the mailing, the sample was divided into two groups. The first group (n=1455) received only the pre-notification letter. The second group (n=1148) received the pre-notification letter and a chance to opt-out of the study before receiving a phone call. To opt-out, the respondent had to mail back a postage-paid postcard that was included with the letter. The postcard had the respondent's identification number, and a statement that said "I do not wish to participate."

Results

Response Rates

Our analyses found several important and significant differences in sample outcomes between the treatment groups. Table 1 shows sample outcomes by treatment group (refusal option v. no refusal option). The full survey included respondents from both the United States and Canada. Because of issues with the postal system and delivery of prepaid postcards, no Canadians received the pre-survey refusal option, so all Canadians were excluded from the analyses for this paper.)

Sample outcomes were categorized by their final codes. Final code categories are:

Category Label	Description
Interview	Completed phone interview
Not Able to Trace	Respondent not located by CSR
Limit	Respondent was located but did not complete the phone interview despite our attempts
Unpublished Phone Number	Respondent's phone number could not be found in directory assistance
Non-eligible	Respondent was not eligible for the study due to unemployment or not being a member of the union
Ill Respondent	Respondent was too ill to complete the survey
General Refusal	Respondent refused to do the survey once the screener was completed
Screening Refusal	Respondent refused to do the survey while the interviewer was trying to complete the screener
Postcard Refusal	Respondent refused via pre-survey postcard

Table 1 presents sample outcomes by treatment group (those who received a postcard refusal option and those who did not).

Table 1: Sample Outcomes by Treatment Group

	No Postcard Option		*Postcard Option*	
Interview*	442	30.4%	320	27.9%
Not Able to Trace*	441	30.3%	315	27.4%
Limit*	119	8.2%	73	6.4%
Unpublished Phone Number	162	11.1%	131	11.4%
Non-eligible	130	8.9%	96	8.4%
Ill Respondent	3	.2%	2	.2%
Total Refusals*	158	10.9%	211	18.4%
General Refusal	(72)	(4.9%)	(48)	(4.2%)
Screening Refusal*	(86)	(5.9%)	(38)	(3.3%)
Postcard Refusal	—	—	(125)	(10.9%)
TOTAL	**1455**	**100%**	**1148**	**100%**

* $p < .005$

Overall cooperation rates[1] were different between the two groups (No Refusal Option = 61.5% v. Refusal Option = 53%, $p < .05$). Significant differences were found in total refusals, with those receiving the postcard refusal option refusing at a higher rate (10.9% v. 18.4%, $p < .0005$). Screening refusals were significantly higher in the group that did not receive the postcard refusal option (5.9% v. 3.3%, $p < .005$). Interviews were also slightly higher in this group (30.4% v. 27.9%), but the difference was not statistically significant. The fact that ineligible respondents and non-published phone numbers are not different in the two groups is evidence that the groups did not differ, and that the significant differences can be attributed to the use of the refusal postcard. It also means that the respondents with unpublished phone numbers were no more or less likely to use the refusal option.

Age was a significant factor in use of the postcard refusal. Of those who were offered the refusal option, 2.7% of those 30 years old and younger used it, whereas 13.8% of those over 30 refused with the mail-in postcard. In other words, older respondents used the postcard refusal option at a rate 5 times that of the younger respondents. On the other hand, older respondents had a higher cooperation rate overall than younger respondents (59% v. 53%).

Looking at Table 2, it can be seen that older union members were more likely to complete an interview (32.7% v. 20.2%, $p = .001$), and younger union members were more difficult to locate (NAT's 40.6% v. 24.6%, $p < .0005$). Older respondents also appear to have a higher refusal rate, but it is mediated by the number of respondents that we were unable to trace.

Table 2: Sample Outcomes by Age

	30 Years-old and Under		*Over 30 Years-old*	
Interview*	146	20.2%	616	32.7%
Not Able to Trace*	293	40.6%	463	24.6%
Limit*	76	10.5%	116	6.2%
Unpublished Phone Number	76	10.5%	217	11.5%
Non-eligible*	76	10.5%	150	8%
Ill Respondent	0	0%	5	.3%
Total Refusals*	54	7.5%	315	16.7%
General Refusal *	(23)	(3.2%)	(97)	(5.2%)
Screening Refusal *	(23)	(3.2%)	(101)	(5.4%)
Postcard Refusal*	(8)	(1.1%)	(117)	(6.2%)
TOTAL	**721**	**100%**	**1882**	**100%**

*($p < .05$)

[1] Interviews / (Interviews + Limits + Total Refusals)

Estimating Resource Expenditure

In order to address the issue of cost savings associated with the postcard refusal option, we chose to redistribute the postcard refusers (n=125) into the other sample outcome categories.

Table 3: Redistribution of Postcard Refusers

	Reassignment of Postcard Refusals
Interview	29
Not Able to Trace	33
Limit	21
Unpublished Phone Number	(-4)
Non-eligible	6
Ill Respondent	0
Total Refusals	(-86)
General Refusal	8
Screening Refusal	30
Total	***125****

*Column does not add to 125 due to rounding

Table 3 shows the estimated difference for each sample outcome category. Sample outcome rates for the standard protocol (no postcard refusal option) were applied to the postcard refusers in order to redistribute them into the groups that they would likely have been in had there been no refusal option. This table shows what we lost from each category due to use of the postcard refusal. The implications for cost savings will be addressed below.

Discussion

This analysis found that offering an explicit refusal option up-front significantly affected sample outcomes. The overall refusal rate was increased. In other words, offering an explicit refusal option up front does not simply "clear out" people who would refuse anyway, it actually increases the total number of refusals. It may save time in pursuing reluctant respondents, but it is at the cost of losing interviews. There were significant age differences in use of the refusal postcard option, as well as in other categories of non-response.

In addition to analyzing sample outcomes, we decided to interpret our findings in terms of total survey response and cost savings. In any survey, response rate is a function of effort expended. By offering an explicit refusal option, we reduced the number of cases that needed to be worked, reducing interviewer time and cost. There were 125 people in the sample who did not have to be pursued by interviewers because they opted-out of the study by postcard. This can be thought of in terms of interviewer hours. For example, if each case costs *1 Interviewer Hour* (IH)[2] then 125 IH's were saved by using the postcard. With larger-scale studies, this could result in a significant savings, both in time and money.

This study also underscores the importance of list quality when doing list surveys. The list we received from the union had two problems with it that we did not expect. We had expected everyone in our list to be eligible. The list included a relatively high percentage of respondents who were not eligible because they were currently unemployed or were no longer union members (8.7%). Second, we expected to locate more of our list than we did. We were unable to track down and contact by phone a very large portion of the sample (40.3%). Also, the use of the pre-survey refusal meant that we could not screen for eligibility with those who refused by postcard, and made it impossible to know the eligibility rate.

We recommend against using this methodology with a list study if the eligibility of list members is not certain.

The use of a pre-survey, postcard refusal option has benefits and drawbacks. In this survey, it helped to reduce interviewer time and cost. However, our refusal rate was also affected. In addition, there were significant differences between older and younger respondents in terms of the efficacy of the postcard refusal. Younger respondents use the postcard refusal option at a much lower rate than did older respondents. This meant that we expended the cost of mailing and controlling the postcard refusal option, without receiving any benefit by reducing interviewer cost and time for younger respondents. In short, researchers considering a pre-survey postcard refusal option should take into account the characteristics of their sample (particularly age), and the trade-off between potential increase in refusal rates and reduction of interviewer cost.

Considering the unexpected limitations of our sample, including the need to screen for eligibility and the poor quality of our contact information, this study was not the ideal place to test the postcard refusal option. The next step should be to test this technique in a study with fewer unknowns.

[2]The reader can replace the IH with the actual number of interview hours per case for any specific study.