LORE methodological note 2014:20

Day of the week for survey dispatch: effects on participation rates

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ABSTRACT

This note examines if what day of the week a web survey is dispatched affects participation rates. Participation rates are measured during four different periods in the fieldwork cycle. The results show that it is only in the short run that day of the week for dispatch matters for the participation rate, and that these differences disappear in the longer run; after six days or more. Saturdays and Sundays reach the lowest response rates 24 hours after dispatch, but these differences disappear within six days. All days of the week seem to yield more or less the same participation rates in the long run. After 14 field days the participation rates deviates at most two percentage points from the means.

Introduction

It has long been assumed within LORE that survey dispatches are best scheduled in the beginning of a week rather than by the end of a week in order to produce the highest net participation rate (NPR). It has been assumed that respondents are more prone to participate in surveys fielded on Mondays-Wednesdays, when they are assumed to be more active and/or might be more likely to sit in front of a computer at work, and that they are less inclined to answer a survey during the weekends, as they may be more occupied with their hobbies and/or less likely to sit in front of a computer during their leisure time. This assumption have had implications for survey projects as survey dispatches are locked to the beginning of a week, instead of a more flexible survey fielding procedure.

Data and results

A sample of 11,600 respondents was drawn from the Citizen Panel and respondents were then randomly assigned to one out of seven treatment groups, one group for every day of the week. The sample consisted of a mix of self-recruited and probability recruited respondents. Starting with the first dispatch on Wednesday the 15th of October 2014 at 8 am, the dispatches then followed with one dispatch per day until Tuesday the 21st of

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October. Participation rates are calculated for four separate periods for each treatment group: NPR 24 hours after the initial dispatch; NPR six days after dispatch; NPR eight days after dispatch, where a reminder had also been sent out 24 hours before (the reminder was sent out exactly one week after the initial dispatch); and finally the NPR after 14 days of initial dispatch. E-mail bounces are removed from the sample.

For each dispatch day of the week, Table 1 shows the NPR in percent during the four different periods during the field work. Of 21 possible group comparisons for every measured period, only seven statistically significant differences in NPR are found (the differences are significant at the 99% confidence level), all when the participation rates are calculated 24 hours after first dispatch. These seven initially significant differences in NPR even out as the field period proceeds, and after six days of fieldwork no statistically significant differences between the NPR of different days of the week can be found. Neither an extra reminder, nor more than an extra week of fieldwork changes these findings.

Table 1. Day of the week for dispatch: effects on net participation rate after 24 hours; 6 days; 8 days; and 14 days after dispatch. (percent)

	NPR, 24 hours	NPR, 6 days	NPR, 8 days (24 hours after first reminder)	NPR, 14 days	N
Monday	38	53	61	65	1 604
Tuesday	36	50	60	64	1 613
Wednesday	39	53	63	68	1 622
Thursday	37	51	60	65	1 618
Friday	35	53	61	66	1 612
Saturday	29	52	58	66	1 614
Sunday	33	54	61	68	1 611
Total	35	52	61	66	11 294

Comment: Net participation rate are here defined as those respondents who click on the link to the survey and start the questionnaire, rather than respondents completing the survey. Numbers are presented in percent of total sample (N). Bounces are excluded from the analysis.

After 24 hours, when the mean NPR for all days is 35%, Saturday yields the lowest NPR with 29% compared to Wednesday's 39%, as can be seen in the first column of Table 1. A one-way ANOVA comparing the seven groups' NPR after 24 hours, and the 21 possible combinations of these groups' NPR, shows that the statistically significant differences are found when comparing Saturday with the weekdays (all five), and when comparing Sunday with Monday and Wednesday. The ANOVA is significant on the 99% confidence level ($F(20, 11{,}294) = 8.61$, $p = 0.00$). Monday to Thursday reaches a NPR about 2-4 percentage points above the mean of 35%, Friday has a NPR equal to the mean, while Saturday and Sunday reach the lowest NPR with six and two percentage points beneath the mean, respectively.

The one-way ANOVAs for the following measuring periods show no statistically significant differences between any of the groups: after six days no differences can be found any longer ($F(20, 11{,}294) = 0.99$, $p = 0.43$), after eight days and one reminder the differences in NPR that were initially found after 24 hours are not reproduced ($F(20, 11{,}294) = 1.27$, $p = 0.27$), and with 14 days of fieldwork the compared groups are stable around the mean of 66% in NPR ($F(20, 11{,}294) = 1.54$, $p = 0.16$).

In sum, the results show that in the long run the choice of which day to launch a survey does not matter for the participation rate. Only when speed is important some days tend to be worse than others. After 24 hours especially Saturdays have a lower response rate than ordinary weekdays. This allows for a more flexible approach to when to dispatch online surveys.

The Laboratory of Opinion Research (LORE) is an academic web survey center located at the Department of Political Science at the University of Gothenburg. LORE was established in 2010 as part of an initiative to strengthen multidisciplinary research on opinion and democracy. The objective of the Laboratory of Opinion Research is to facilitate for social scientists to conduct web survey experiments, collect panel data, and to contribute to methodological development. For more information, please contact us at:

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