



The Effect of Email Invitation Customization on Survey Completion Rates in an Internet Panel

A meta-analysis of 10 Public Affairs Surveys

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Research Question

Does a custom email survey invitation produce a higher completion rate than a generic email invitation in a probability-based internet panel?

Email invitation is composed of two elements:

1. Subject
2. Body

For the purposes of our study, a custom email invitation means that the topic of the survey is specified in both the subject line and the body of the email invitation

Literature on Email Invitations and Effect on Completion Rate

Majority of studies used cross-sectional samples (e.g., students) and not online panel samples

Personalization of the invitation works (e.g., Dear Mario)

Personalization only works, however, when the status of the sender is perceived as high

A study with an opt-in panel had the following subject lines:

- “Participate in an important study on health issues”
- “University of Michigan health study”

No difference in completion rate

- Possible explanation: “The relationship with the sender (panel organization) ... trumps the subject line...” (Couper, 2008, p. 324)

Study Design: Generic vs. Custom Treatment Groups

Study	Generic Email Subject	Customized Email Subject
1	Your Latest KnowledgePanel Survey (<survey number>)	Immigration in the U.S.
2		Tax Time
3		Terrorism and Homeland Security
4		National Security
5		U.S. Foreign Policy
6		Preparing for Disasters
7		Views on Iraq
8		Relations of U.S. with Other Countries Survey
9		Donating Blood
10		Survey About Electing Government Officials

All studies conducted with KnowledgePanel® participants. Data collection done in 2008 and 2009, median survey length: 5 minutes

Generic Email Invitation

Subject: Your Latest KnowledgePanel Survey 12345

Dear *First name*,

Thanks for being an integral part of KnowledgePanel! Your latest survey can be accessed by clicking the following link:

[Click Here to Start Survey](#)

Custom Email Invitation

Subject: Immigration in the U.S. 12345

Dear *First name*,

We have some questions for you about immigration in the United States. We want to hear everyone's opinions about this topic, and appreciate your prompt response to this survey!

This survey can be accessed by clicking the following link:

[Click Here to Start Survey](#)

Separate Analysis for Incentive vs. Non Incentive Samples

Incentive sample: PC households that at the time of recruitment already have a PC and Internet connection

Non incentive sample: households that at the time of recruitment do not have an Internet connection from home

- In this case Knowledge Networks provides them with one

Incentive sample gets a small incentive for each survey they complete (1,000 points)

Non-incentive sample does not get an incentive

Because of the different incentive systems, we run separate analyses for the two groups

Computing Survey Completion Statistic

Exclude respondents with bounce back emails

Exclude respondents who accessed and completed the survey through the member page

Communication Rate formula:

$$\text{Comm. rate} = \frac{\text{Survey completed} - \text{member page completes}}{\text{Invitations sent} - \text{bounce backs} - \text{member page start}} = \frac{n}{N}$$

Descriptive Statistics for the 10 Experiments

	Average	SD
Sample size incentive sample	729	355
Sample size non-incentive sample	357	187
Number of hours survey was in the field	208	61
Median time incentive sample	4.2	2.3
Communication rate incentive sample custom invitation	52.1*	5.6*
Communication rate incentive sample generic invitation	53.0*	7.5*
Incentive sample communication rate difference	-0.9	
Median time non incentive sample	6.4	3.1
Communication rate non incentive sample custom invitation	61.6*	4.4*
Communication rate non incentive sample generic invitation	59.4*	5.0*
Non incentive sample communication rate difference	2.2	

*= Weighted average and SD

Data Treatment: Meta Analysis of the 10 Experiments

Meta-analysis is the statistical combination of results from different studies

Meta-analysis focuses on pair-wise comparisons between one group, generally called the *control group*, and one or more *treatment groups*

Meta-analysis is popular in the fields of medicine (medical trials) and intervention. Recently it is being used more and more in survey research

We focus on *effect sizes* for comparing proportions (communication rates) between the custom email group and the generic email invitation group

Our Survey Statistics

$$\text{Comm. rate} = \frac{\text{Survey completed} - \text{member page completes}}{\text{Invitations sent} - \text{bounce backs} - \text{member page start}} = \frac{n}{N}$$

Effect sizes for comparing proportion is the logged odds ratio

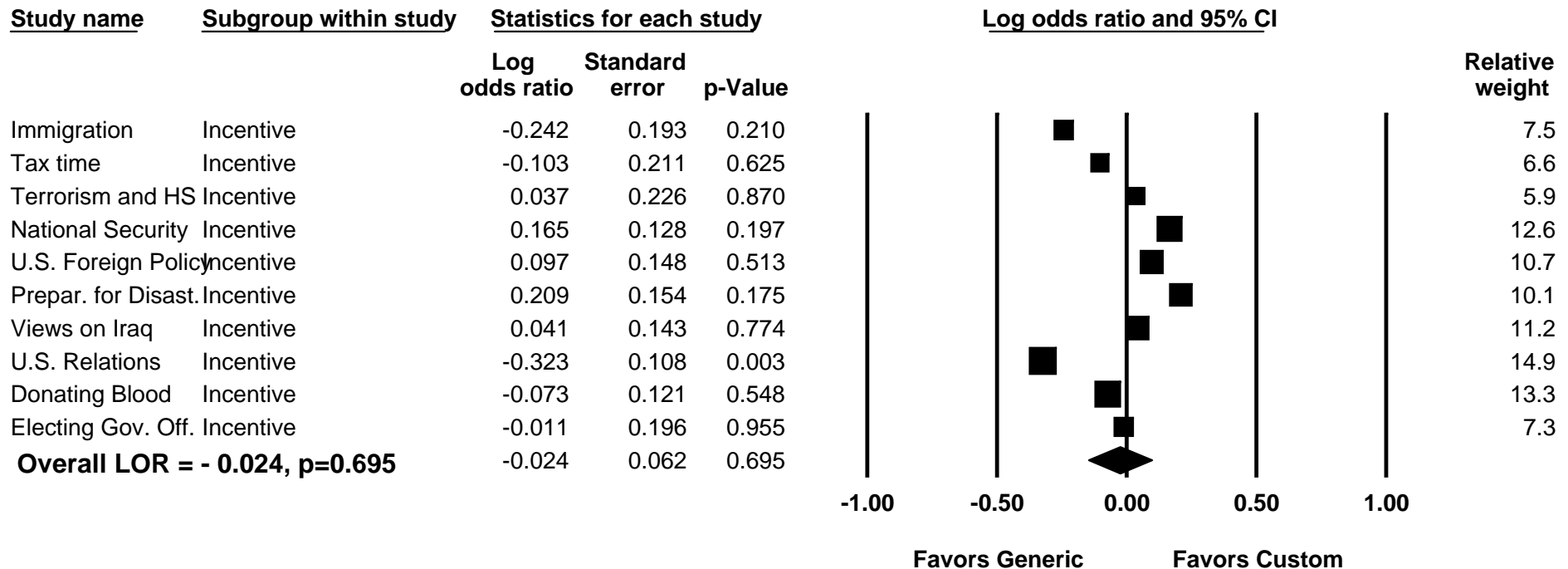
$$LOR = \ln \left(\frac{n_{Cust} (N_{Gen} - n_{Gen})}{n_{Gen} (N_{Cust} - n_{Cust})} \right)$$

- Gen= Generic email invitation
- Cust= Custom email invitation

A **positive** LOR signifies that the effect favors the Custom email invitation group

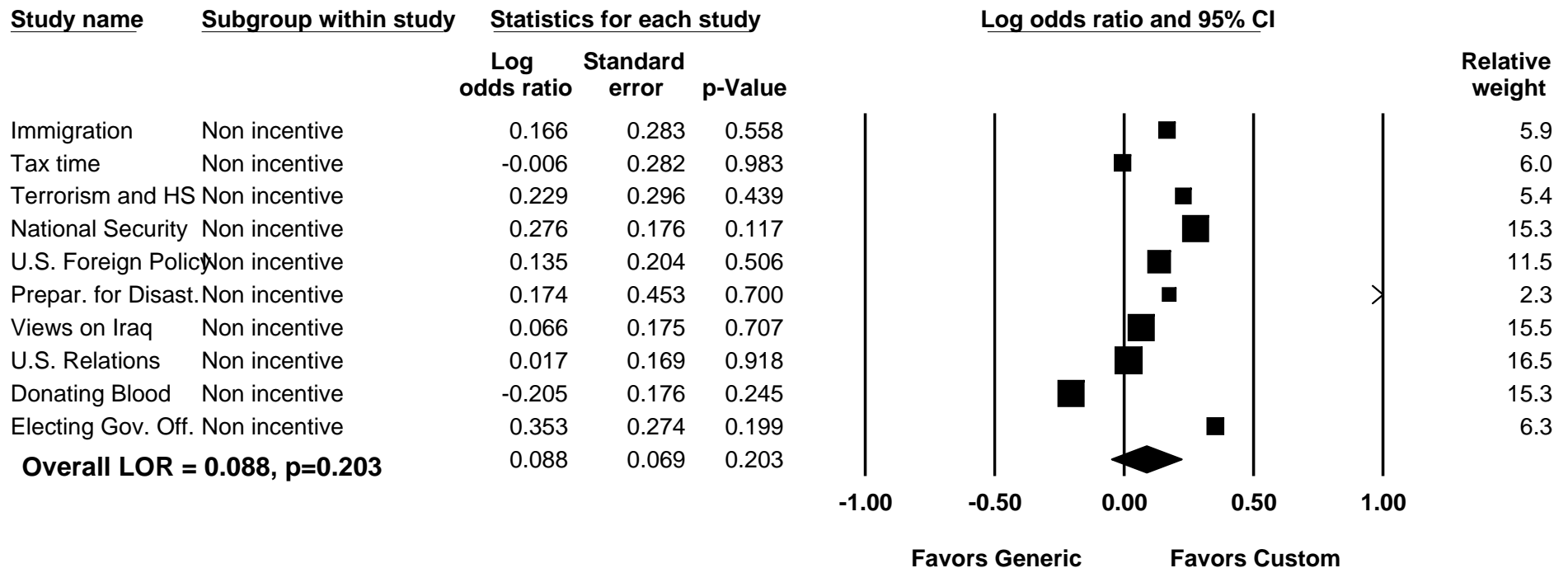
A **negative** LOR signifies that the effect favors the Generic email invitation group

Incentive Sample: Forest Plot Chart



No statistically significant difference among groups for the overall effect size

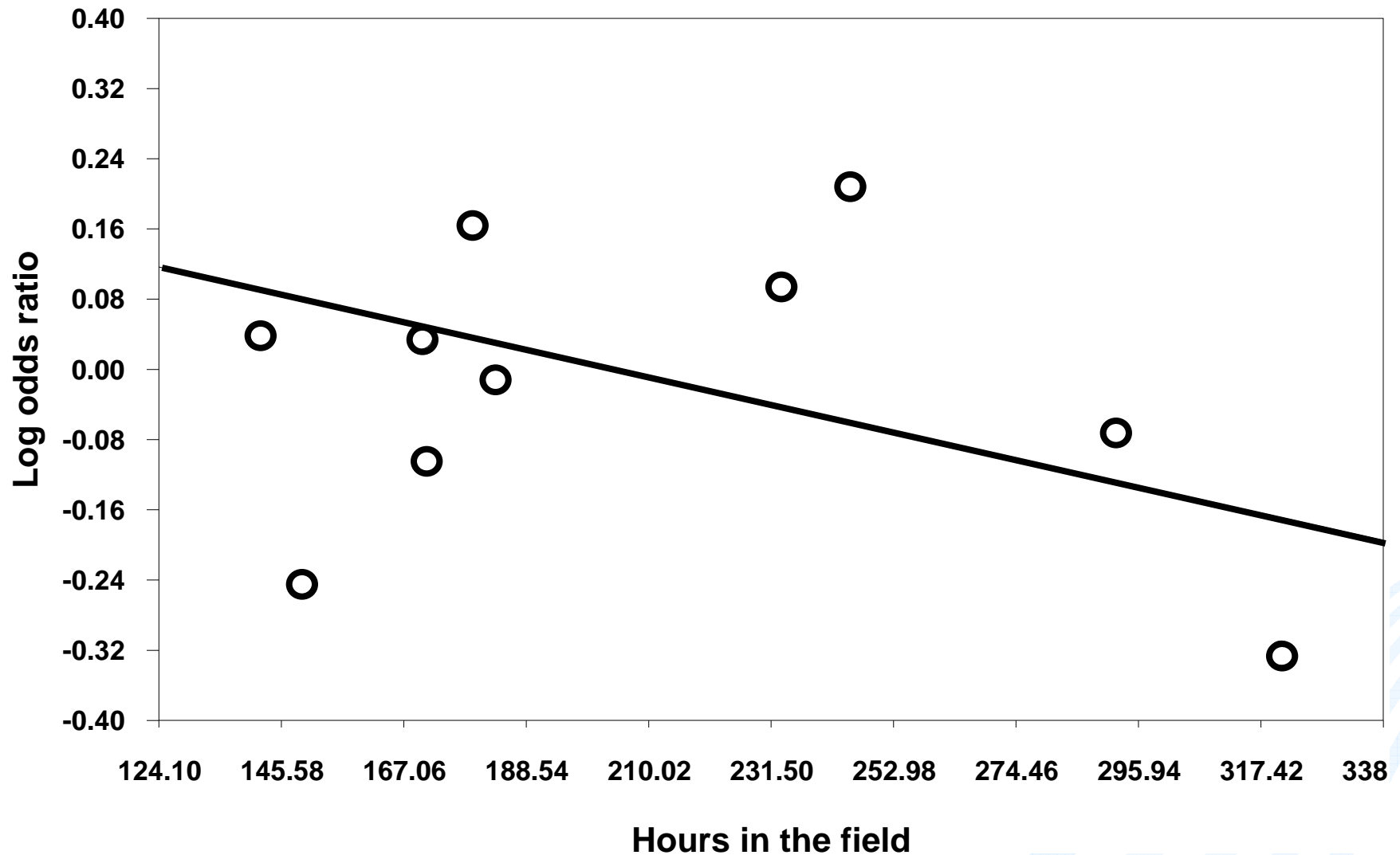
Non Incentive Sample: Forest Plot Chart



No statistically significant difference among groups for the overall effect size

Moderator Analysis for Incentive Sample: Field Period

Regression of Hours in the field on Log odds ratio



Discussion

Having access to our survey database made it possible to measure the effect of a generic versus a custom email invitation with as few confounds as possible

For surveys on public affairs topics we did not find any differences in terms of completion rates

We cannot generalize these findings to other survey topics (e.g., a survey about car preferences)

Difficult to know if these findings apply to opt-in panels

These results do not address possible self-selection bias (further analyses are needed)

Thank you!