An Automated Refusal Conversion Strategy for Web Surveys

Federal Committee on Statistical Methodology (FCSM) Research and Policy Conference
Washington, DC
March 7, 2018

Taylor Lewis¹ and Mark Gorsak¹, U.S. Office of Personnel Management
Naomi Yount, Westat

¹The opinions, findings, and conclusions expressed in this presentation are those of the authors and do not necessarily reflect those of the U.S. Office of Personnel Management.

²The authors would like to thank Laurie Schwede, Jennifer Childs, Gerson Morales, and Paul Beatty from the U.S. Census Bureau and Andrea Contratto from the U.S. Economic Development Administration for their input and feedback in the development of the opt out survey.
I. Background
   – Federal Employee Viewpoint Survey (FEVS)
   – Refusal conversion

II. 2017 FEVS Opt Out Experiment
   – Motivation and Experimental Design
   – Key Findings

III. Summary and Ideas for Further Research
Background on the FEVS

• The Federal Employee Viewpoint Survey (FEVS) is an annual, Web-based survey of full- and part-time, permanent federal employees administered by the U.S. Office of Personnel Management (OPM)

• As of 2017 FEVS: stratified, single-stage sample design of ~1.1M individuals from over 80 agencies → response rate around 45%

• Personalized survey link sent via email, with five weekly reminders sent to nonrespondents – six week field period in all

• Instrument consists mainly of attitudinal items (e.g., perceptions of leadership, job satisfaction) on a Likert-type scale, but also captures about a dozen demographics
Background on Refusal Conversion

• Ample evidence that refusal rates to surveys are increasing, in turn increasing risk of nonresponse bias:
  – Groves and Couper (1998)
  – Atrostic et al. (2001)
  – Curtin et al. (2005)
  – Brick and Williams (2013)
  – Dutwin et al. (2014)

• Survey organizations typically attempt refusal conversion for interviewer-administered surveys (often excluding “hard” refusals), with success rates of 10 – 30%

• Not as straightforward to do in self-administered surveys because of ambiguity differentiating a refusal from other forms of nonresponse
Offering a Way to Opt Out

• Argument in literature (e.g., Sudman, 1985; Mullen et al., 1987) that offering the respondent a way to opt out engenders trust and empathy with researcher, has potential to increase likelihood of participating.

• In similar vein, Anderson (2015) argues administrators of online panels should abide by CAN-SPAM Act or 2003 statute requiring unsolicited emails to contain a visible unsubscribe link.

• Our idea: use the opportunity to opt out of Web-based FEVS via link in email invitation that launches a short survey with two purposes:
  1. Ascertain why the individual has chosen not to respond
  2. Attempt a last-moment appeal (i.e., refusal conversion) based on the nonresponse reason cited.
Opt Out Experimental Design

• Approximately 10% of 2017 FEVS sample (small/independent agencies excluded) was designated for opt out, with a link in initial invitation and reminders labeled “Click here if you are considering not participating in the FEVS”

Your opinions matter! Let your leadership know how you feel about your job, your supervisor, and your agency. The Federal Employee Viewpoint Survey provides a safe and confidential way for you to voice your opinions.

Click here to access your survey

If the link does not take you directly to the survey, copy and paste the following into a browser window: <PERSONALIZED URL HERE>

Click here if you are considering not participating in the FEVS

Please DO NOT forward this e-mail, as it contains your personalized link to the survey. Answering the questions will take about 25 minutes, and you may use official time. While participation is voluntary, your feedback is important.

• Opt out link not present for those not designated for experiment
Upon clicking on the opt out link, respondent is taken to following landing page:

Purpose of this question: gauge nonresponse conviction level (i.e., a proxy for hard vs. soft refusal)

Regardless of answer, all individuals see the following question...
• After answer this question, a predetermined 25% of individuals receive a confirmatory message that official FEVS emails will stop.
• Complementary 75% of individuals given last-moment appeal tailored to the response given.
• For example, if “I am too busy to take the survey” is chosen, the individual sees the following...
“Other” responses received generic appeal, and write-ins were independently coded by two team members; 128 differences reconciled

Research objective: quantify the effectiveness of last-moment appeal (i.e., conversion rate) by nonresponse conviction level and primary reason cited
Opt Out Experiment Results

Comments:

- Surprisingly low rate of individuals clicking on opt out link (~1.5%)
- Individuals who launched the opt out survey were about twice as likely to respond to FEVS than opt out
- Ultimately, response rate 9 percentage points higher for those who clicked on the opt out link relative to those who did not: 54.2% vs. 45.2%.
## Conversion Rates by Nonrespondent Type

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count of Individuals</th>
<th>Conversion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonresponse Conviction Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsure about participating</td>
<td>325</td>
<td>62.8</td>
</tr>
<tr>
<td>Do not want to participate</td>
<td>551</td>
<td>20.3</td>
</tr>
<tr>
<td><strong>Nonresponse Reason</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too busy</td>
<td>118</td>
<td>22.9</td>
</tr>
<tr>
<td>Receive too many survey requests</td>
<td>80</td>
<td>20.0</td>
</tr>
<tr>
<td>Survey results are not used to change anything</td>
<td>226</td>
<td>25.2</td>
</tr>
<tr>
<td>Confidentiality concerns</td>
<td>186</td>
<td>47.3</td>
</tr>
<tr>
<td>Participation not supported by agency leadership</td>
<td>12</td>
<td>58.3</td>
</tr>
<tr>
<td>Survey results never shared with employees</td>
<td>24</td>
<td>29.2</td>
</tr>
<tr>
<td>Recent employment change</td>
<td>29</td>
<td>37.9</td>
</tr>
<tr>
<td>Dislike format / technical issues</td>
<td>34</td>
<td>32.4</td>
</tr>
<tr>
<td>Indifference</td>
<td>9</td>
<td>0.0</td>
</tr>
<tr>
<td>Claim already completed survey</td>
<td>7</td>
<td>57.1</td>
</tr>
<tr>
<td>Other</td>
<td>50</td>
<td>40.0</td>
</tr>
</tbody>
</table>

**Comments:**

- To be expected, conversion rate was much higher for individuals unsure about participating
- Varied success amongst the various nonresponse reasons
## Conversion Rates by Appeal Type

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Count of Individuals</th>
<th>Conversion Rate</th>
<th>Count of Individuals</th>
<th>Conversion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonresponse Conviction Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsure about participating</td>
<td>91</td>
<td>52.7</td>
<td>234</td>
<td>66.7</td>
</tr>
<tr>
<td>Do not want to participate</td>
<td>124</td>
<td>13.7</td>
<td>427</td>
<td>22.2</td>
</tr>
<tr>
<td><strong>Nonresponse Reason</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too busy</td>
<td>22</td>
<td>9.1</td>
<td>96</td>
<td>26.0</td>
</tr>
<tr>
<td>Receive too many survey requests</td>
<td>21</td>
<td>9.5</td>
<td>59</td>
<td>23.7</td>
</tr>
<tr>
<td>Survey results are not used to change</td>
<td>21</td>
<td>9.5</td>
<td>59</td>
<td>23.7</td>
</tr>
<tr>
<td>anything</td>
<td>54</td>
<td>18.5</td>
<td>172</td>
<td>27.3</td>
</tr>
<tr>
<td>Confidentiality concerns</td>
<td>35</td>
<td>20.0</td>
<td>151</td>
<td>53.6</td>
</tr>
</tbody>
</table>

**Comments:**

- Only shown are results where counts for both appeal types at least 20
- For all combinations, tailored appeal increased the conversion rate
- Effect higher for individuals unsure about responding relative to individuals not wanting to participate: 14 percentage point increase vs. 8.5
- Biggest increase for those indicating concerns over confidentiality; smallest for those believing results not used to change anything (only increase not statistically significant)
Summary and Ideas for Further Research

• Including opportunity to opt out was a net positive feature: led to increased response rate and a glimpse into distribution of reasons for nonresponse

• Surprisingly low rate (~1.5%) of individuals clicking link to opt out → to capture more people, future study could consider:
  – Place opt out opportunity in separate email or mode
  – Different wording or location within email body

• Conversion rates varied notably by tailored appeal type, suggesting more room for improvement in wording; focus groups could lead to more persuasive messaging in bullet points
References


