Improving Panel Maintenance Success on a Longitudinal Study

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Overview

- Study background
- Goals
- Approach
- Field test experiment and results
- Full-scale study implementation and results
- Considerations and future research possibilities
Education Longitudinal Study of 2002
Third Follow-up (ELS:2002/12)

- Funded by the National Center for Education Statistics (NCES), within the U.S. Department of Education
- Nationally representative longitudinal survey of tenth-graders (spring 2002) and twelfth-graders (spring 2004)
- Sample members in their mid-20s, about 8 years removed from high school
- Third follow-up samples: approximately 16,000 in full-scale study and roughly 1,000 in field test
ELS:2002/12 (continued)

- Base-year (2002): in-school student data collection; parent data collection
- First follow-up (2004): in-school student data collection for those still at same school; out-of-school data collection for others
- Second follow-up (2006): web-based multi-mode data collection (self-administration; CATI; CAPI)
- Third follow-up (2012): 6 years later
Minimize Sample Member Attrition on Longitudinal Studies

• Keeping in touch with sample members over time reduces costs
  – Contacting efforts during the next round of data collection
  – Minimizing the costs of tracing sample members that cannot be contacted

• Decrease nonresponse bias
  – Avoid a scenario where the sample members dropping out from the panel are different from the ones who stay in for all rounds.
Effort to Reduce Attrition

- Periodically contact sample members between data collection rounds
  - More time in between contacts increases the risk sample members have moved

- ELS:2002 sent sample members several “contact information update” mailings
Experiment with ELS:2002 Field Test Sample

• Would a $10 incentive produce higher participation rates during the panel maintenance contact information update than no incentive?

• Would the $10 incentive produce higher participation rates differentially across groups of sample members based on characteristics?
Desired Outcomes

- Improve the response rate of the contact update mailing
- Response to panel maintenance in turn would increase likelihood of response to next survey
Methods

• Field test sample randomly split in half - treatment (offer of $10) and control ($0)
• Letters mailed to sample member and one parent; included the most up to date contact information on record
• Treatment group
  – $10 check promised if they (or their parents) confirmed or updated their contact information
• Only difference between the mailings was the $10 offer in the treatment group letters
Methods (continued)

- Response methods – web, mail, telephone
- Requested information
  - for sample member and a parent
  - names, addresses, cell/landline numbers, e-mail addresses
- Sample members and/or parents could respond
  - parents had different IDs from sample members
  - information could be updated (new contact information) or confirmed
- For treatment group, single $10 payment to sample member whether sample member, parent, or both responded
- No payment to control group respondents
Field Test Experiment Results

Panel participation rate

Overall *: 20% Control ($0), 25% Treatment ($10)
F2 R *: 24% Control ($0), 31% Treatment ($10)
F2 NR: 4% Control ($0), 8% Treatment ($10)
F2 early R *: 33% Control ($0), 44% Treatment ($10)
Field Test Experiment Results (continued)

Panel participation rate

<table>
<thead>
<tr>
<th></th>
<th>Control ($0)</th>
<th>Treatment ($10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>22%</td>
<td>25%</td>
</tr>
<tr>
<td>Male *</td>
<td>18%</td>
<td>26%</td>
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<tr>
<td>HS diploma *</td>
<td>25%</td>
<td>33%</td>
</tr>
<tr>
<td>Postsec *</td>
<td>27%</td>
<td>35%</td>
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</tbody>
</table>
Field Test Experiment Results (continued)

• Provided new information not already in the study database
  – 82 percent provided at least one new address, phone number, or email address for either the student or parent (or both)

• Provided information for students
  – 74 percent provided new information for the student as opposed to only providing parent contact information
Full-scale Panel Maintenance by Year

Panel participation rate

- 2007: 12%
- 2008: 11%
- 2010: 25%
- 2011: 29%
Third Follow-up Full-scale Interview Results

Interview response rate

- Total: 84%
- Panel R: 97%
- Panel NR: 75%
Full-scale Results

• 41 percent of sample members participated in one or more of the 2010, 2011 or 2012 rounds of panel maintenance

• 97 percent of those sample members completed the third follow-up full scale interview
Summary

• Importance of panel maintenance for keeping track of sample members

• Ultimate benefit: improving participation rates in later rounds of longitudinal study

• Incentives boosted panel maintenance participation overall and for subgroups

• ELS:2002 panel maintenance respondents yielded markedly higher interview response rates
Considerations
Future Research

• Examine whether panel maintenance response affected production interview costs
  – Tracing effort
  – Contact attempts

• Examine the cost-benefit tradeoffs of using panel maintenance incentives (and the amount of such incentives) on longitudinal studies
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