BOOSTING RESPONSE RATES IN ONLINE LONGITUDINAL STUDIES: A DOSE OF FUNNY

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BACKGROUND

• Online surveys have become increasingly common, yet consistently suffer from lower response rates when compared to other modes.

• Low survey response rates can reduce sample size and statistical power.
PURPOSE

To understand whether the tone of language in survey reminder emails plays a role in response rates among young adults.

Bro... I am off tomorrow.. suggest me an out of office reply na

Write - “You are receiving this automatic notification because I am out of the office. If I was in, chances are you wouldn’t have received anything at all.”
LEGACY YOUNG ADULT COHORT STUDY

• Wave 5: 5,626 young adults (aged 18-34)
• Seven waves completed:
  – Wave 1 – July 2011
  – Wave 6 – Feb/March 2014
  – Conducted every 6 months
• KnowledgePanel by GfK
  – Address-based sampling
  – Includes cell phone-only households
  – Provides households without internet access with a free netbook computer and internet service to reduce response bias
• Oversampled African American & Hispanic young adults
• Weighted to provide nationally-representative estimates
STUDY DESIGN

Wave 5 sample = 5,190

Cases eligible for email experiment = 2,963

Cases who responded to initial email invitation and completed the W5 survey = 2,227
(RECEIVED 0 REMINDERS)

CONTROL
n=732

186 cases completed survey

HUMOROUS
n=1,089

323 cases completed survey

STATS
n=1,142

332 cases completed survey

HUMOROUS
n=810

221 cases completed survey

STATS
n=766

209 cases completed survey

CONTROL
n=546

142 cases completed survey

1,550 total nonresponders and 1,413 total responders across 1st and 2nd reminders
# BACKGROUND CHARACTERISTICS BY STUDY GROUP: 1st REMINDER (n=2,963)

<table>
<thead>
<tr>
<th>Background Characteristics</th>
<th>Control (n=732)</th>
<th>Humorous Group (n=1,089)</th>
<th>Stats (n=1,142)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Less than high school</td>
<td>7.0</td>
<td>10.1</td>
<td>9.3</td>
<td>0.179</td>
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<td>High school</td>
<td>22.3</td>
<td>21.8</td>
<td>23.3</td>
<td></td>
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<tr>
<td>Some college or more</td>
<td>70.7</td>
<td>68.1</td>
<td>67.4</td>
<td></td>
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<tr>
<td><strong>Past 30-day cigarette use</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>No</td>
<td>79.6</td>
<td>80.7</td>
<td>79.4</td>
<td>0.729</td>
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<tr>
<td>Yes</td>
<td>20.4</td>
<td>19.3</td>
<td>20.6</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 - 24</td>
<td>41.0</td>
<td>38.0</td>
<td>40.4</td>
<td>0.861</td>
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<tr>
<td>25 - 34</td>
<td>59.0</td>
<td>62.0</td>
<td>59.6</td>
<td></td>
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<tr>
<td><strong>Gender</strong></td>
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</tr>
<tr>
<td>Male</td>
<td>43.6</td>
<td>41.3</td>
<td>39.9</td>
<td>0.294</td>
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<tr>
<td>Female</td>
<td>56.4</td>
<td>58.7</td>
<td>60.1</td>
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<tr>
<td><strong>Household size</strong></td>
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<td></td>
<td></td>
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<tr>
<td>1-2</td>
<td>32.4</td>
<td>32.3</td>
<td>31.8</td>
<td>0.993</td>
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<tr>
<td>3-4</td>
<td>45.6</td>
<td>46.3</td>
<td>46.7</td>
<td></td>
</tr>
<tr>
<td>5+</td>
<td>22.0</td>
<td>21.4</td>
<td>21.5</td>
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<td><strong>Income</strong></td>
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<tr>
<td>Less than $24,999</td>
<td>26.1</td>
<td>31.6</td>
<td>31.5</td>
<td>0.090</td>
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<td>$25,000 to $49,999</td>
<td>28.4</td>
<td>26.6</td>
<td>25.2</td>
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<tr>
<td>$50,000 to $84,999</td>
<td>22.1</td>
<td>21.7</td>
<td>23.4</td>
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<tr>
<td>$85,000 or more</td>
<td>23.4</td>
<td>20.1</td>
<td>19.9</td>
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<td><strong>Current employment status</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Not working</td>
<td>36.9</td>
<td>37.2</td>
<td>39.1</td>
<td>0.476</td>
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<tr>
<td>Working - employee</td>
<td>59.4</td>
<td>57.9</td>
<td>56.0</td>
<td></td>
</tr>
<tr>
<td>Working – self employed</td>
<td>3.7</td>
<td>4.9</td>
<td>4.9</td>
<td></td>
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<tr>
<td><strong>Race</strong></td>
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<tr>
<td>Black, non-Hispanic</td>
<td>10.7</td>
<td>11.8</td>
<td>9.5</td>
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<td>Hispanic</td>
<td>23.2</td>
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<td>23.6</td>
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<tr>
<td>Other, non-Hispanic</td>
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<td>8.0</td>
<td>6.7</td>
<td></td>
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<tr>
<td>White, non-Hispanic</td>
<td>59.4</td>
<td>56.7</td>
<td>60.3</td>
<td></td>
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<tr>
<td><strong>Wave entered study</strong></td>
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</tr>
<tr>
<td>1</td>
<td>45.1</td>
<td>47.0</td>
<td>46.6</td>
<td>0.481</td>
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<td>2</td>
<td>12.2</td>
<td>13.9</td>
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</tr>
<tr>
<td>3</td>
<td>19.3</td>
<td>19.9</td>
<td>19.7</td>
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<tr>
<td>4</td>
<td>23.5</td>
<td>19.2</td>
<td>20.3</td>
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</tbody>
</table>
Hi. Just wanted to thank you for helping us with our research. We’re guessing you’ve got a lot going on, and that getting surveyed is just about at the bottom of the list of fun things to do. Hopefully the fact that what you say affects millions of people makes you feel kind of special. Not that you’d let that kind of power go to your head or anything. Honestly, we really appreciate you sticking with it and responding in what they call a “timely fashion”. Because with great power, comes great responsibility, and you seem to be nailing both. Thanks again.
We’ve uncovered some really important stuff, and this too...61.3% of respondents would like to explore strange places, but only 22.7% like to do frightening things. So keep it weird, but not scary. Or how bout this: About 53% would like to take off on a trip with no pre-planned routes or timetables, but only about 25% prefer friends who are excitingly unpredictable. So...people enjoy travel that is unpredictable, but not friends who are unpredictable. Or maybe they just want boringly unpredictable friends? (So many questions.)
Thanks for being an integral part of KnowledgePanel®!

Your latest survey can be accessed by clicking the following link:

">Click Here to Start Survey<
(If it does not work automatically from email, please copy the below link to your Internet browser).
[link]

Our Panel Member Support Center is available if you have questions or comments. You can contact us at our toll free 1-800-782-6899 number, or simply reply to this email invitation. In order to better serve you, please be sure to include reference <###> in the Subject of your message. We are always happy to hear from you!

Thanks,
KnowledgePanel Support Team
DATA ANALYSIS

• All analyses were performed using the SAS/STAT© software, version 9.3

• Bivariate associations

• Multivariable logistic regression
MEASURES

OUTCOME VARIABLES

1) Completion of the Wave 5 survey after the 1st reminder
2) Completion of the Wave 5 survey after the 2nd reminder

COVARIATES

- Past 30-day cigarette use
- Email reminder group assignment (control vs exp and control vs each exp group)
- Number of emails received
- Wave entered study
RESULTS

• The humorous email was more effective than the stats email compared to control
  – Receiving the humorous email first increased odds of response by 24%

• Those in the experimental condition (humorous or stats) were 23% more likely to respond than those in the control group

• The reminder condition worked the same for all respondents
RESULTS

Significantly more likely to respond after email #1
- Entered the study at waves 1-3 (vs wave 4)
- Non current cigarette user (vs past 30 day users)
- Those in households with 1-4 people (vs 5+)
- White non-Hispanic Ethnicity (vs Hispanic Ethnicity)

Significantly more likely to respond after email #2
- Entered the study at Wave 1 (vs wave 4)
- Less than a high school education (vs some college or more)
SUMMARY

• Young adults aren’t using email as their preferred form of communication.
  – However, 92% of adults use email, with 61% using it on an average day.

• Using humor to tailor email reminders to study participants increases the response rate
CONCLUSION

• Understanding strategies for increasing survey response rates in a young adult population is critical to research regardless of the outcome of interest

• Using humor for email reminders is one way (cheap & easy) to increase response rates in an online survey for a young adult population
THANK YOU
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