Timing is Everything: What we can learn from “survey procrastinators”

Presented by:

Lauren M. Conoscenti, Ph.D.
Tufts University
Office of Institutional Research & Evaluation (OIR&E)

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Tufts, like many institutions, relies heavily on online survey platforms to collect data.

Online survey platforms have many advantages over paper-and-pencil surveys.
- Inexpensive
- Easy to use
- Improved distribution
- Bells-and-whistles
A major advantage: busy respondents can complete surveys at their convenience.
- More time = better data?
- Comfy students = better data?
- Tech-savvy = better data?

A major disadvantage: Low response rates.
Response Rates

- Response rates are going down... everywhere. (e.g. Jans & Roman, 2007)

- Low response rates are ok if sample is representative...
  ...but most aren’t.

- **Nonresponse Error**: When survey responders differ from nonresponders in key ways, leading us to draw erroneous conclusions.
Why Don’t They Participate?

- Have we traded data quality in favor of ease and price?
- Why don’t students take web surveys?

(Stay tuned, Tuesday at 10:30am)
Online non-response might be because...
- Unread email routed to spam folder
- Student temporarily too busy (e.g. exams)
- Student forgot
Why Don’t They Participate?

- Online non-response might be because...
  - Unread email routed to spam folder
  - Student temporarily too busy (e.g. exams)
  - Student forgot

...Passive nonresponders.

We assume they want to take the survey.
Online non-response might be because...

- Student doesn’t want to participate

...Active nonresponders

- We hope they are a small fraction of our sample!
Survey Reminders

- We send reminders to intervene in passive nonresponding...
  - ...and maybe a little active nonresponding, too.

- We assume people who complete a survey after the reminder are similar to those who completed it before the reminder.

- Is that a valid assumption?
Late Responders

- Non-responders are different from responders
  - Male (McCabe, et al., 2002; Porter & Whitcomb, 2005b)
  - Nonwhite (Couper, Traugott, & Lamias, 2001)
  - Lower GPA (Porter, et al., 2004; Woosley, 2005)

- Could late responders – or “procrastinators” be different, too?
Past research on this topic has found differences...
- But most is based on mail surveys...
- ...and findings are mixed.

Some evidence that late responders display more problem behavior.
Late Responders

- Who is a survey procrastinator?
  - Most survey responses are submitted within 12-24 hours of an email.
  - Survey A: 89.5% within 24 hours of email
  - Survey B: 82.8%
  - Survey C: 87.6%
  - Survey D: 87%
Late Responders

- We send reminders to help the passive nonresponders
- Procrastinators: respondents who wait until a reminder is issued to start a survey.
Research Questions

- Are procrastinators different from “regular” responders?
  - Demographic, academic, and survey variables

- How does the survey incentive impact procrastination (and the procrastinators)?
Research Method

- Analyzed data from two undergraduate surveys at Tufts

Tufts University...
- Private Research University – Very high activity
- Entering class size ~1300
- Competitive admissions
- 4-year Liberal Arts & Engineering undergraduate schools
The Surveys

- Sophomore Survey
  - Administered sophomore spring

- 2012 Survey:
  - Highly incentivized
  - Initial email & 2 reminders
  - Advising, majors, student life, services, civic engagement

- 2013 Survey
  - Low incentive
  - Initial email & 6 reminders
  - Added “flourishing scale”, removed advising questions
The Students

- **2012**: 1073 Liberal Arts sophomores
  - 93.3% Response Rate (LA class size: 1151)
  - 54.5% female
    - Not different from population
  - GPA not significantly different

- **2013**: 718 Liberal Arts sophomores
  - 64% Response Rate (LA class size: 1123)
  - 61% female
    - Different from population
  - Mean GPA higher than nonresponders
Percent of Procrastinators

2012 (High Incentive)

2013 (Low Incentive)
Started before a reminder issued: 58.7%

Procrastinators (41.3%):

- More males ($t = 4.52, p < .01$)
- More nonwhite students ($t = 3.80, p < .01$)
- Lower GPA ($t = 7.35, p < .001$)
Procrastinators:

- Reported more difficulty choosing a major \((t = 2.06, p < .05)\)

- Less likely to make an appointment to see academic advisor... \((t = 2.22, p < .05)\)

...and more likely to drop in at the last minute. \((t = 6.81, p < .01)\)

...and more likely to feel the time spent with their advisor was inadequate. \((t = 2.21, p < .05)\)
Procrastinators:
  - Less likely to participate in community service \((t = 2.99, \ p < .01)\)
  - Less likely to feel comfortable asking faculty for help
    - Rec letters \((t = 3.13, \ p < .01)\)
    - Academic advising \((t = 2.13, \ p < .01)\)
Results 2012 (High Incentive)

Procrastinators:

- **Less likely to choose Tufts again** \( (t = 2.02, p < .05) \)

- **Took less time to complete survey** \( (t = 2.53, p < .01) \)
  - Proxy of how engaged they were?
Started before first reminder issued: 48.7%
  Six reminders to get the other 51.3%...

Started before second reminder issued: 67%

Explore procrastination in two ways:
  After one reminder or after two
  ...but they were the same.

(Stats presented will reflect one reminder)
Results 2013 (Low Incentive)

Procrastinators:

- Less likely to engage in academic discussions outside of class \((t = 2.11, p < .05)\)

- Less likely to feel comfortable asking faculty for help
  - Rec letter \((t = 2.17, p < .05)\)
  - Additional educational opportunities \((t = 2.14, p < .05)\)
  - Advising \((t = 1.94, p < .05)\)
Procrastinators:

- Less likely to participate in student organizations and community service ($t = 2.05, p < .05; t = 1.99, p < .05$)

- Feel less able to contribute to the campus community ($t = 2.07, p < .05$)
Results 2013 (Low Incentive)

Procrastinators:

- Less satisfied with sense of community on campus \( (t = 2.89, p < .01) \)
- Perceived prejudice against students from different socioeconomic backgrounds as a campus problem \( (t = 3.07, p < .01) \)
Results 2013 (Low Incentive)

Procrastinators:
- Less time to complete survey \((t = 1.91, p < .05)\)
- Less likely to have left a final comment \((t = 2.11, p < .05)\)

(“Please use this space below to provide any additional comments about your Tufts experience.”)
No differences:
- Likelihood of choosing Tufts again
- GPA
- % Male
- % nonwhite
- Flourishing scale
<table>
<thead>
<tr>
<th>Category</th>
<th>Early Responders 2012</th>
<th>Late Responders 2012</th>
<th>Early Responders 2013</th>
<th>Late Responders 2013</th>
<th>Non-responders 2013</th>
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<tr>
<td>GPA</td>
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<td>39%</td>
<td>52%</td>
<td>37%</td>
<td>41%</td>
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<tr>
<td>% Nonwhite</td>
<td>24%</td>
<td>35%</td>
<td>34%</td>
<td>32%</td>
<td>31%</td>
</tr>
</tbody>
</table>
Tufts University

Percent of Class Nonresponding

2012 (High Incentive)  6.7%
2013 (Low Incentive)  36.1%
Take Home Points

- Procrastinators were different from non-procrastinators
  - More academically adrift
  - Less engaged on campus
  - More dissatisfied

- Those who waited for a reminder spent less time on the survey
Take Home Points

- Procrastinators different from non-responders
- Students who procrastinate in high-incentive situations participate because they have to.
  - They otherwise wouldn’t be doing the survey.
Reminders are good! Send them.

Dissatisfied and less engaged students procrastinate – wait for them!

Plan your survey administration carefully.
  ✦ Incentives?
  ✦ When to send reminders? How many?
Limitations

- Homogenous sample
- Many other variables of interest
  - Qualitative data
  - Majors
  - Prematriculation data
- Why do students procrastinate? Why don’t they take surveys?
  - We know a little, but not all...
That’s all, folks...

Question Time!
Dr. Lauren M. Conoscenti, Research Analyst, Office of Institutional Research & Evaluation, lauren.conoscenti@tufts.edu

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