Does Size Matter?:
Text Box Size in Online Surveys

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First, a Thank You!

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Why Text Box Size?

Lauren: “I think these text boxes are too big, they are intimidating.”

Jenn: “I like the big text boxes; they let students know we are listening.”
Why Text Box Size?

• Does text box size impact what survey respondents think or how they respond in some way?

• Would respondents find the large text boxes scary or welcoming?

• If they saw a large text box, would they feel compelled to write a lot – even if they didn’t have much to say?

• If we made the text boxes small, would respondents feel disappointed that they had so little room to express their views?
Why Text Box Size?

Describe your experience today:

Why were you unsatisfied with this order?
- Item arrived late
- Seller unresponsive
- Item not as described
- Incorrect item shipped
- Other

Exhibit Feedback

1. Please explain below:
   What did you think overall?
   What would you improve?

1. What is your favorite movie in the following genres?
   - Drama
   - Comedy
   - Foreign
   - Western
Literature
What We Know From the Literature

- Most surveys use a combination of closed-ended and open-ended questions.
- Although it can be difficult to extract meaning from large numbers of open-ended questions, it can be valuable to include these items.
  - Collect data closed-ended questions cannot collect
  - Exploratory analysis of unfamiliar concepts
  - Opportunity to explain responses
  - “Venting”
  - Answering “why”
What We Know From the Literature

• There’s a lot of research about how to best format/ask closed-ended questions. (e.g. Dillman, Christian, & Smyth, 2009; Tourangeau, Couper, & Conrad, 2004)

…Less so for open-ended questions. (And much of the research explores controversial survey items or non-narrative open-ended questions.)
What We Know From the Literature

• Respondents take cues from visual elements of surveys (e.g., Christian & Dillman, 2004; Couper, Tourangeau, & Kenyon, 2004; Couper, Conrad, & Tourangeau, 2007; Dillman, Christian, & Smyth, 2009; Toepel & Couper, 2007)

• Text box size influences responses for open-ended date and numeric questions (Christian, Dillman, & Smyth, 2007; Couper, Kennedy, Conrad, & Tourangeau, 2011; Dillman, Christian, & Smyth, 2009)

• Larger text boxes = more words and more topics per response (Christian & Dillman, 2004; Behr, Bandilla, Kaczimrek, & Braun, 2014)
What We Know From the Literature

• But is more better?

  • Evidence that larger text boxes yielded more words…but no new information \((Behr, Bandilla, Kaczimrek, & Braun, 2014)\)

  • Larger text boxes for open-ended date and numeric questions yielded extraneous information (approximations, context, etc.) \((Christian, Dillman, & Smyth, 2004)\)
What We Know From the Literature

- Often, major recommendation is to **avoid** open-ended questions due to:

  - Concerns about survey fatigue
  - Doubts about the value of open-ended questions
  - Difficulty in conducting meaningful qualitative analysis
Guiding Question

• Does the size of a text box influence **quantitative and qualitative** measures of data quality?

• **Quantitative** measures of data quality:
  • Survey completion rate
  • Item response rate
  • Length of responses

• **Qualitative** measures of data quality:
  • Content of responses
  • Tone or valence
Methodology
Design

- Experimental design:
  - Random half of the population received large text boxes
    - 600 pixels wide by 90 pixels high
  - Remaining half of the population received small text boxes
    - 400 pixels wide by 30 pixels high
  - Experimental manipulation applied to all text boxes in survey except for the “other, please specify” boxes.

- All other elements of the survey remained the same

- Analysis:
  - SPSS and Excel for quantitative measures
  - Linguistic Inquiry & Word Count (LIWC) software for qualitative measures
The Text Boxes

Large

Do you have any additional comments about Orientation?

Small

Do you have any additional comments about Orientation?
About the Surveys

**Orientation Survey**
- Administered Fall 2014
- Random sample of half of all new first-year students
- 49.6% response rate (N = 331)
- 25 open-ended items
  - 8 narrative items
  - 17 follow-up probes

**Dining Services Satisfaction Survey**
- Administered Fall 2014
- Random sample of half of all undergraduates
- 39.9% response rate (N = 1,019)
- 16 open-ended items
  - 6 narrative items
  - 10 follow-up probes
About the Surveys

Survey Respondents by Text Box Size

<table>
<thead>
<tr>
<th></th>
<th>Large</th>
<th>Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td>48.9%</td>
<td>51.1%</td>
</tr>
<tr>
<td>Dining</td>
<td>49.1%</td>
<td>50.9%</td>
</tr>
</tbody>
</table>
Results
Results: Quantitative Measures of Response Quality

- Survey completion rate
- Item response rate
- Length of responses
Survey Completion Rate

There were no significant differences in survey completion by text box size.

Survey Completion Rates by Text Box Size

Orientation

- Large: 91.3%
- Small: 90.5%
- Overall: 90.9%

Dining

- Large: 91.7%
- Small: 92.7%
- Overall: 92.2%

Survey Completion = Saw at least one open-ended item and completed survey
Results: Quantitative Measures of Response Quality

- Survey completion rate: No
- Item response rate
- Length of responses
Item Response Rates

- No significant differences or discernible patterns in item response rates by text box size
  - Large text boxes yielded higher response rates on 17 out of 41 items
  - Small text boxes yield higher response rates on 21 items
  - 3 items had equal response rates
  - No pattern observed by type or content of the items!

- Probes are difficult to evaluate because they are generally only shown to a minority of respondents
Item Response Rates: Narrative Examples

Item Response Rates: Select Narrative Items

Which social activity during Orientation did you like best and why?
- Large: 65.4%
- Small: 62.1%
- Overall: 63.7%

What is your favorite thing about Tufts Dining?
- Large: 50.0%
- Small: 54.5%
- Overall: 52.3%
Item Response Rates: Follow-Up Probe Examples

If you did not apply to and/or participate in a Pre-O program, why not?

- Large: 30.2%
- Small: 31.4%
- Overall: 30.8%

If you were dissatisfied with your experience at Dewick-MacPhie, please indicate why.

- Large: 28.7%
- Small: 32.1%
- Overall: 30.5%
Results: Quantitative Measures of Response Quality

- Survey completion rate: No
- Item response rate: No
- Length of responses
Length of Responses (Word Count)

Larger text boxes systematically yielded longer responses.

- Large text boxes yielded longer responses to 23 out of 26 questions
  - Difference was statistically significant in 5 cases
- Same pattern for narratives and follow-up probes
- Large text box responses were up to *twice* as long as small text box responses!
Results: Quantitative Measures of Response Quality

• Survey completion rate: *No*

• Item response rate: *No*

• Length of responses: *Yes—Larger boxes tended to yield longer responses.*
Summary: Quantitative Measures

- Text box size did not impact:
  - Survey completion rate
  - Item response rate

- Larger text boxes systematically resulted in longer responses

- Implications:
  - Make the boxes as big as you like – it won’t impact response rates…
  - …but expect people to write more in them.
  - Consider: Do you need more information?
Quantity vs. Quality?

Jenn: “So students do respond to larger text boxes by writing more.”

Lauren: “Yes, but are these extra words meaningful or extraneous?”
Results: Qualitative Measures of Response Quality

- Content of responses
- Tone or valence
Content of Responses

• If past studies of text box size considered the content of responses, they focused on the number of themes/topics discussed (Behr, Bandilla, Kaczimrek, & Braun, 2014)

• But IR surveys often are not designed to inspire complex, multifaceted responses
  • There is only so much you can say in response to “What other foods or beverages would you like to have available at Hodgdon?”
This led us to . . .

- What versus Why:

- Do respondents provide only the “what” when responding to survey questions? Or do they also provide the “why”?
“What” vs. “Why”

- Example: Which Social Activity Did You Like Best and Why?

  - “What” only: Candle lighting

  - “What and why”: Candle lighting because the whole class is there
"What" vs. "Why"

Large text boxes yielded significantly more "why" responses.

Which social activity during Orientation did you like best and why?

- **Answered "What" Only**
  - Large: 31.4%
  - Small: 46.1%

- **Answered "What" & "Why"**
  - Large: 68.6%
  - Small: 53.9%
“What” vs. “Why”

- Example: What do you like best about Dining Services?
  - “What” only: Food and staff.
  - “What and why”: It has delicious food, good variety and the staff is always so friendly and nice.
“What” vs. “Why”

Large text boxes yielded significantly more “why” responses—even when the question did not ask “why”!

What do you like best about Dining Services?

- Answered "What" Only
  - Small Text Box: 36.3%
  - Large Text Box: 26.7%

- Answered "What" & "Why"
  - Small Text Box: 63.7%
  - Large Text Box: 73.3%
“What” vs. “Why”

- Large text box responses were significantly more likely to contain a “why” in addition to a “what”
  - 15% more respondents included the “why” for this question.

- Most interesting: This is unprompted!
  - It makes sense if the question asked respondents to specifically give a “what and why.” But this one did not!
Results: Qualitative Measures of Response Quality

• Content: *Yes—at least in terms of whether respondents explain their responses.*

• Tone or valence of response
Tone or Valence

- Tone or valence of response
  - Can use “positive emotion” and “negative emotion” word counts from LIWC… although be careful – “no” is considered negative!
  - Can categorize comments according to the overall tone

- Also a difficult task considering many questions do not require a valence, or ask respondents to provide comments of a particular valence.
  - “What’s your favorite thing about Dining Services?” (prompts positive valence)
  - “If you were disappointed, please explain why…” (prompts negative valence)
  - “What foods would you like to see served in Dewick-MacPhie?” (does not prompt a valence)
Tone or Valence

• “Any other comments about Dining?”
  • Small text boxes contained significantly fewer words but…
    • …significantly more positive comments
    • …and used “I” (as in “I think…” and “I wish…”) more frequently.
  • And large text boxes had significantly more negative comments!!

• Also true for comments about Orientation (overall), Orientation Leaders and RAs, and Pre-Orientation Leaders
  • But these findings were not statistically significant

• Thoughts . . .
  • Maybe people with small text boxes realize they have one last chance to say something, and choose to use it constructively or positively?
  • Maybe people with large text boxes get in the habit of being ranty?
Results: Qualitative Measures of Response Quality

- Content: Yes—at least in terms of whether respondents explain their responses.

- Tone or valence of response: For questions where responses can have varying valences, large text boxes tended to yield more negative responses and small text boxes tended to yield more positive responses.
Implications
Implications for Survey Research

• Good news: Size of the text box does not appear to contribute to survey fatigue as measured by item response rates and survey completion rates.

• Respondents appear to take cues from the text box size as to how to answer questions; larger boxes tend to encourage:
  • Longer responses
  • Elaboration/explanation
  • Negative tone
Implications for Survey Research

• Carefully consider the intent of the open-ended question:
  • What is the goal? What kind of response would help achieve this goal?
  • Do you want to know “what” or “what” and “why?”
  • Is the size of your text box aligned with your intent? With the wording of the question?

• The curious case of “additional comments”
Implications for IR

• Have a question? Design an experiment!
  • Think about ways to embed your experiment in the work you already do

• Indications of questions most salient to students
  • Orientation follow-up probes pertaining to academic advising and registration yielded 100% response rates; most others did not
  • Dining follow-up probes on dissatisfaction with major dining locations yielded higher response rates than others

• LIWC data tended to provide a good overall sense of the “pulse” of a set of comments
  • Perhaps a way to analyze all open-ended survey items?
Next Steps
Next Steps

• Continue research on text box size

• Manipulations:
  • Multiple text box sizes per respondent
  • Varying text box size *and* prompt
    • Which social activity during Orientation did you like best (and why)?
    • What is your favorite thing about Tufts Dining (and why)?

• Explore impact of mobile device use
  • Does text box size matter in the context of a mobile device?
Next Steps

• Examine other qualitative elements, such as:
  • Prevalence of nonresponsive answers (e.g. “N/A”, “none,” “I don’t know”)

• Examine class year as potential moderating variable
  • Do seniors – who have done lots of surveys – tend to write less because they’re tired of surveys? …Or maybe they write more because it’s their last chance?
Final Thought

Whatever story you want to tell, tell it at the right size.

-Richard Linklater
Thank You! Questions?

- Questions, Comments?
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- A copy of this presentation and accompanying paper is available on:
  - NEAIR website
  - Tufts’ website http://go.tufts.edu/oire