

# Is Bigger Better?

## Text Box Size in Online Surveys

---

Jennifer A. May & Lauren M. Conoscenti

Tufts University

Office of Institutional Research & Evaluation

June 2, 2016

# First, a Thank You!

*This project was made possible by a NEAIR Research Grant. Thank you for your support.*

*We would also like to thank our Research Assistants Dana Silverberg and Christian Testa.*

# 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 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 open-ended questions present special challenges to researchers and survey respondents alike, they also serve important purposes.
  - Collect data closed-ended questions cannot collect
  - Exploratory analysis of unfamiliar concepts
  - Opportunity to explain responses
  - Answering “why”
  - “Venting”

# 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.



# 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 (non-narrative) 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 can also yield extraneous information (*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 conducting meaningful qualitative analysis

# Question and Methods

---

# 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

# Initial 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 (Fall 2014)

## Orientation Survey

- 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

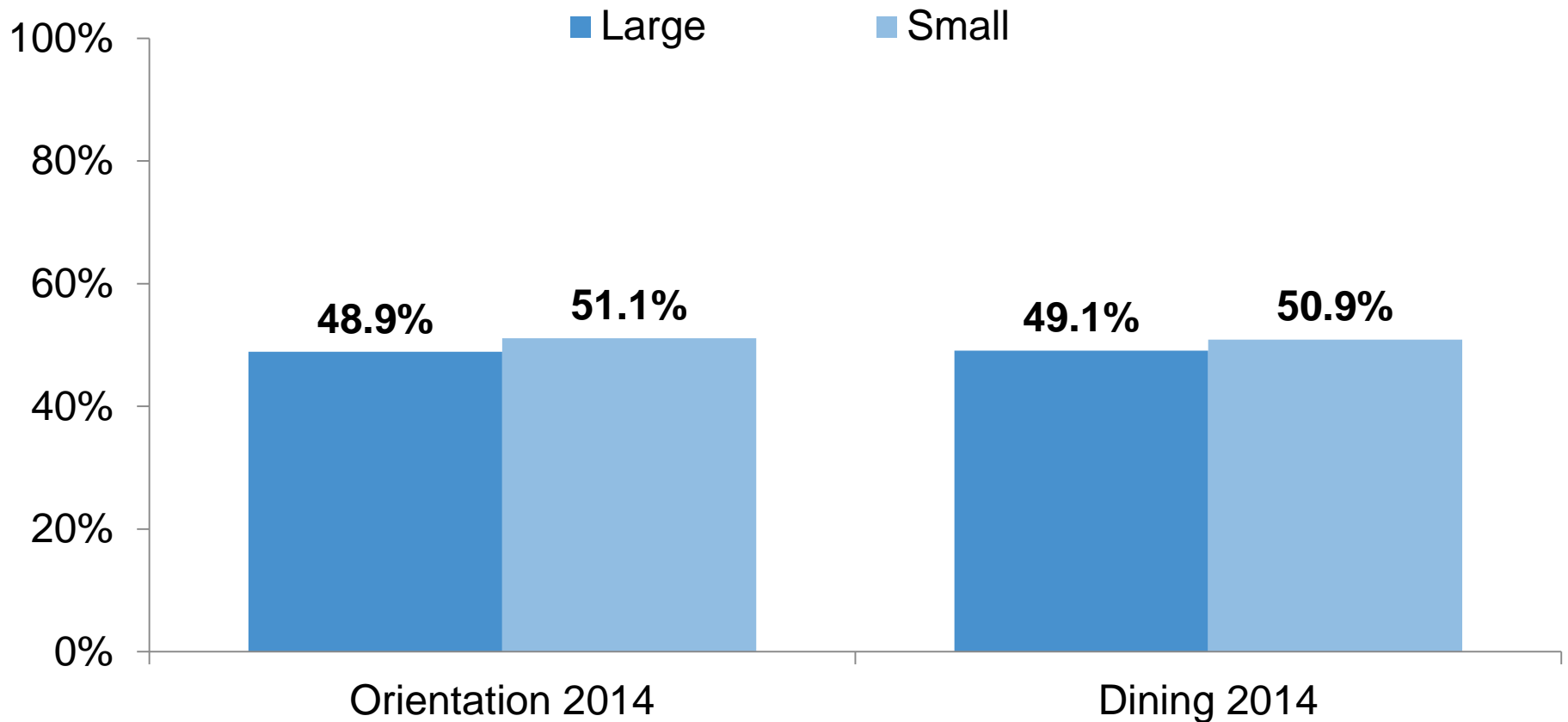
## Dining Services Satisfaction Survey

- 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



# Results

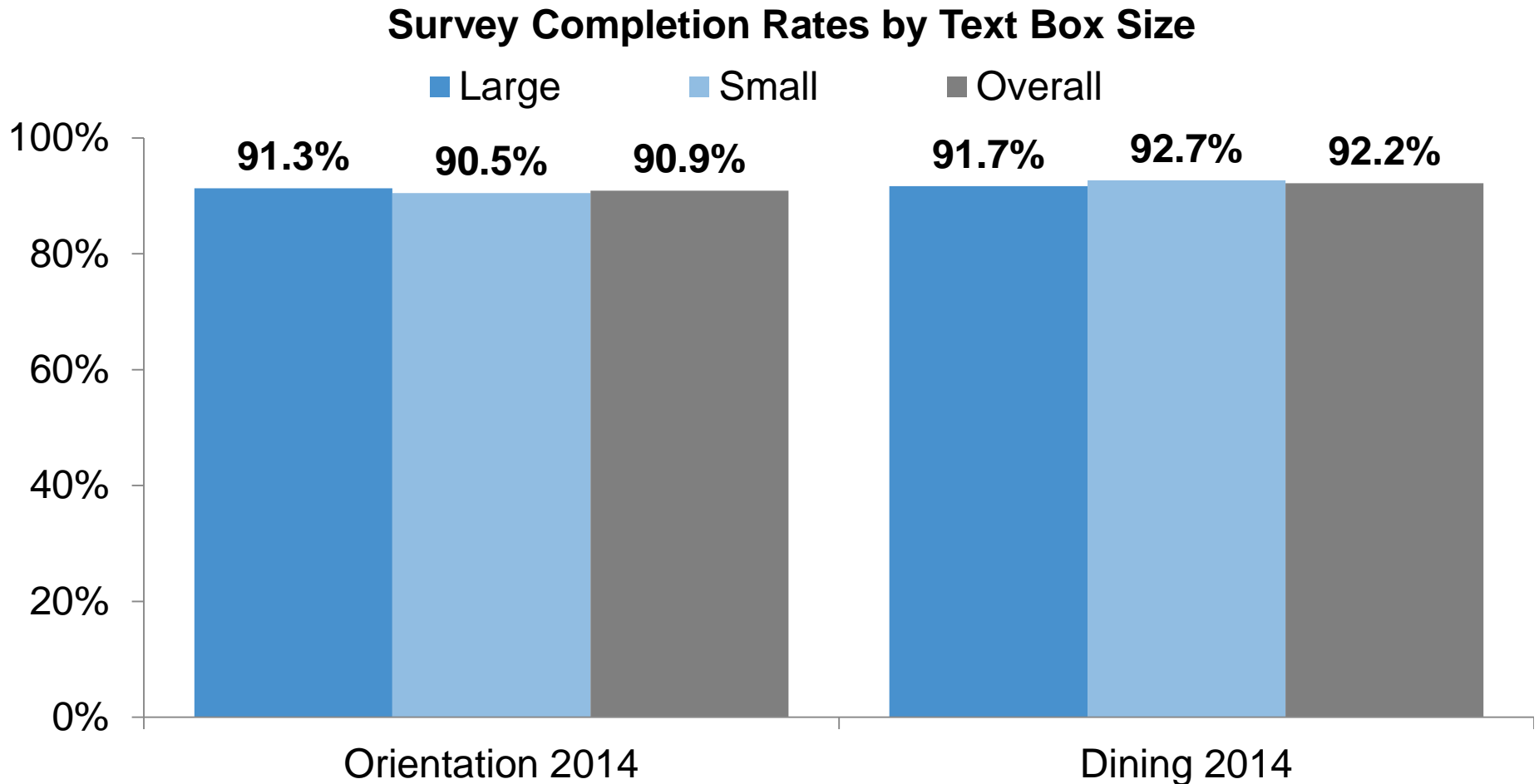
---

# 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 = Saw at least one open-ended item and completed survey

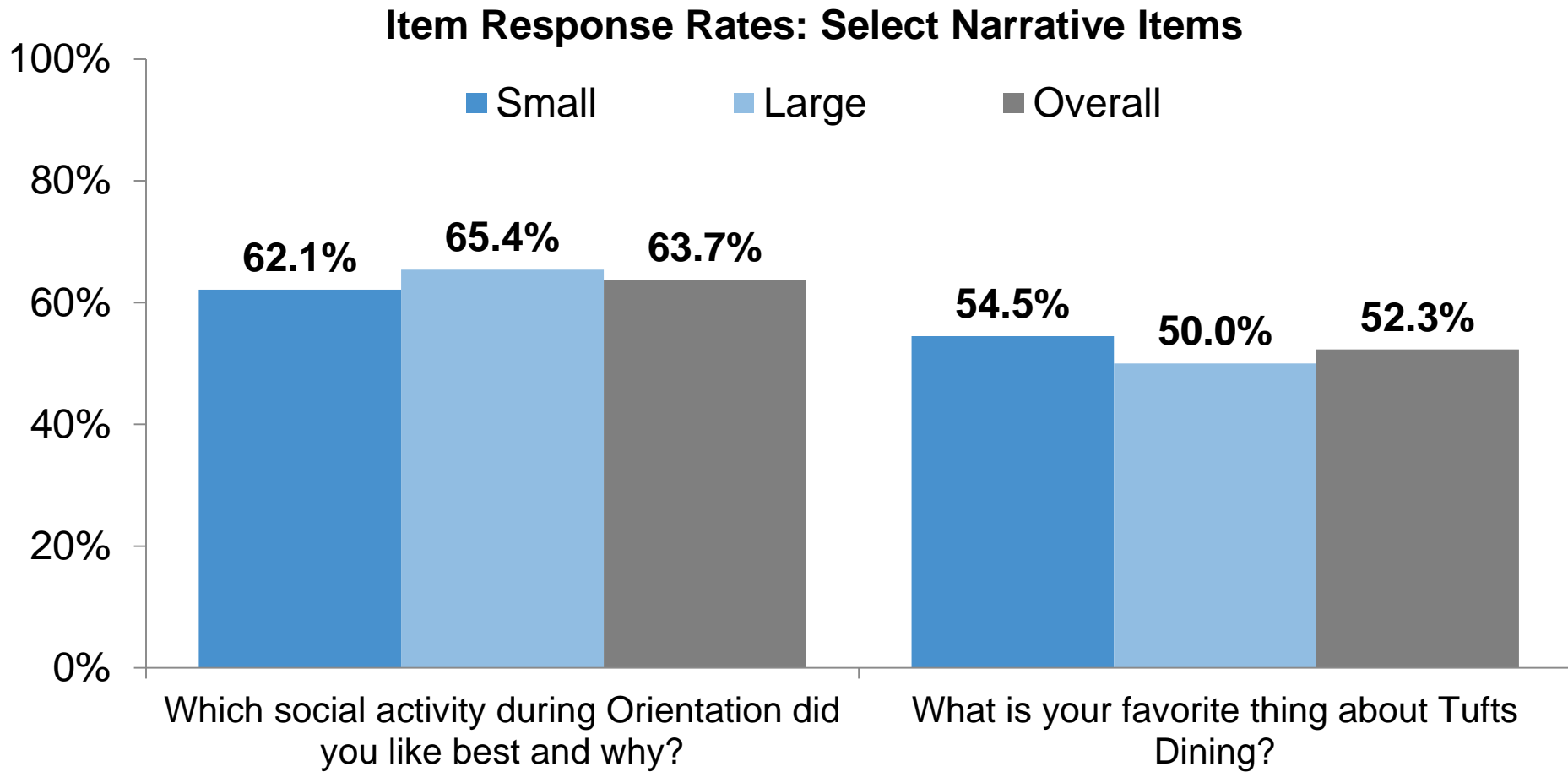
# Results: Quantitative Measures of Response Quality

- 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



# Results: Quantitative Measures of Response Quality

- Survey completion rate: **No**
- Item response rate: **No**
- Length of responses



# Length of Responses (Word Count)

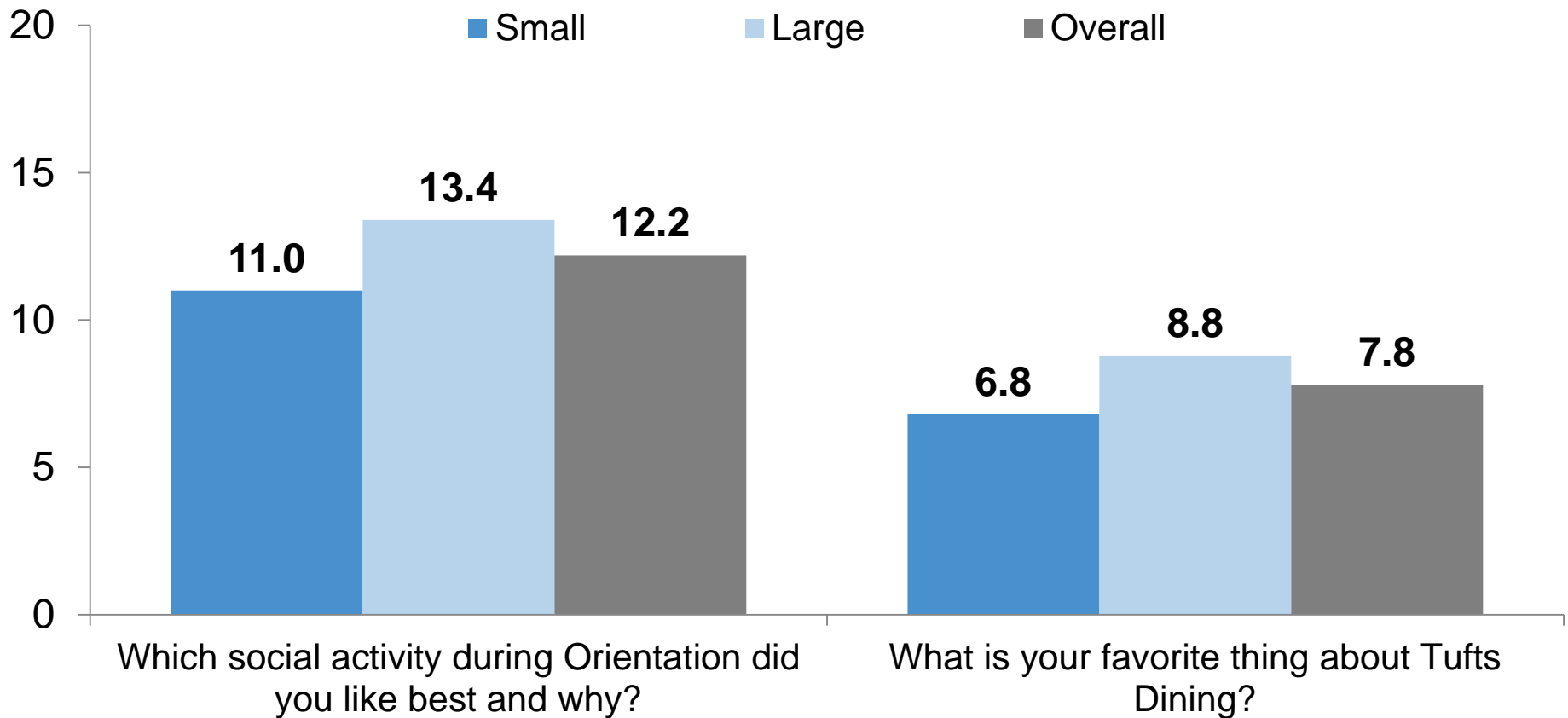
*Larger text boxes systematically yielded longer responses.*

- 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!

# Length of Responses (Word Count)

*Larger text boxes systematically yielded longer responses.*

## Response Length: Average Word Count



Note: WC < 50

# 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?”

# Content of Responses

*Qualitatively, large text boxes yielded different responses than small text boxes.*

- Respondents who saw large text boxes responded differently than did those who saw small text boxes
- Respondents who saw large text boxes were significantly more likely to explain their answers – they answered both “what” and “why”



# Content of Responses: “What” and “Why”

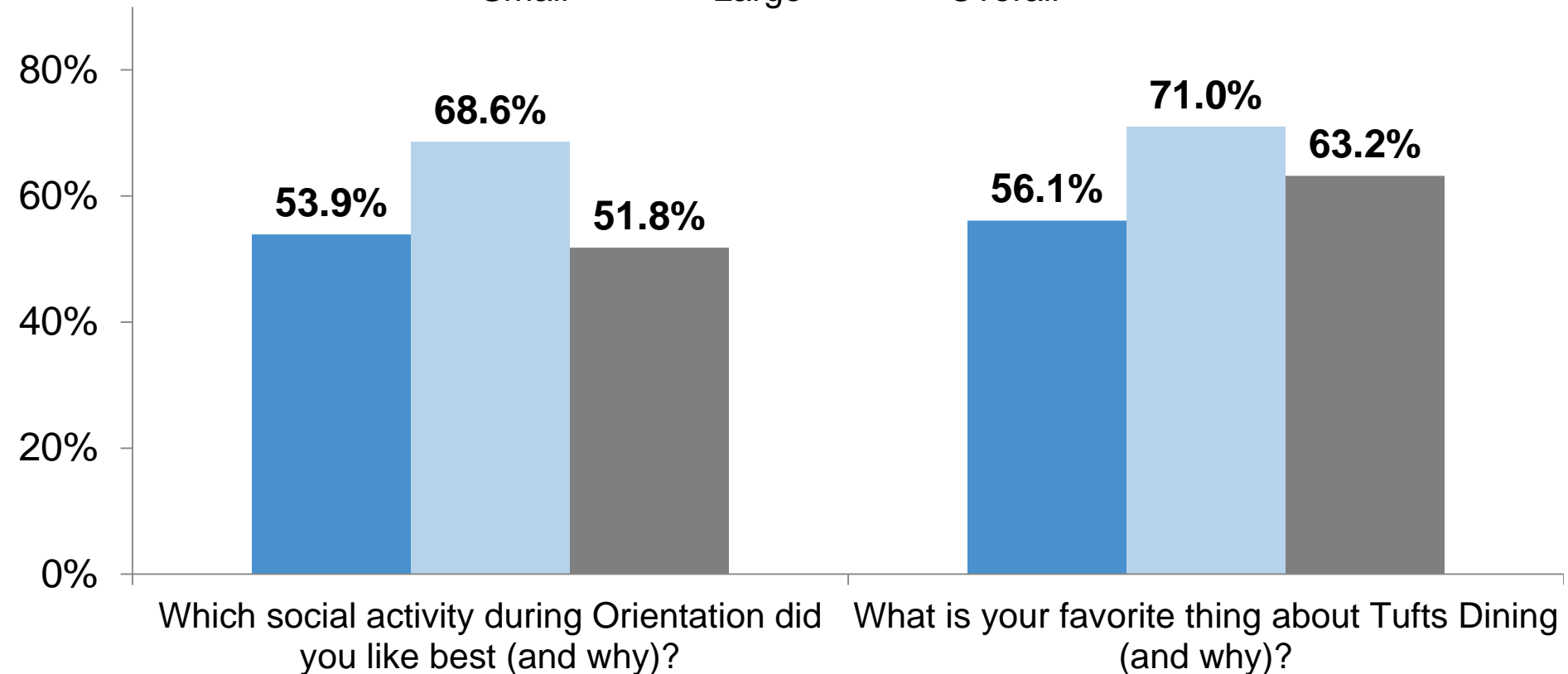
- Example: Which social activity during Orientation did you like best and why?
  - “What” only: Candle lighting
  - “What and why”: Candle lighting because the whole class is there
- Example: What do you like best about Dining Services?
  - “What” only: Food and staff
  - “What and why”: It has delicious food, good variety, and the staff is always so friendly and nice.

# Content of Responses: “What” and “Why”

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

**Percentage of Respondents Providing a “Why”**

■ Small    ■ Large    ■ Overall



# Content of Responses: “What” and “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 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!!
- 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 use them to rant?

# Results: Qualitative Measures of Response Quality

- Content: ***Yes—at least in terms of whether respondents explain their responses.***
- Tone or valence of response: ***Yes—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.***

# Summary

*Like many visual cues, text box sizes in a survey matters – in some ways.*

- Survey completion rate: **No**
- Item response rate: **No**
- Length of responses: **Yes**
- Content: **Yes**
- Tone or valence of response: **Yes**



# A New Question

---

# A New Question

- Our findings on quantitative measures are consistent with the literature on text box size (and other elements of survey research)
- Our finding on content differences (“what” only vs. “what” and “why”) is new
- Was this finding an anomaly or a trend? Do large text boxes systematically yield answer explanations that small text boxes do not?

# Design: “What” and “Why” (Fall 2015)

- Surveys:
  - Orientation Survey 2015 (54.3% response rate, N = 452)
  - Dining Services Satisfaction Survey 2015 (42.2%, N = 1,078)
- Experimental design:
  - Manipulated one question and its text box on each to investigate what vs. what AND why
  - All other elements of the survey remained the same – including other text box sizes (all small)
- Analysis: Item response rate, length (word count), “what” only vs. “what” and “why”

# Design: “What” and “Why” Conditions

## Orientation 2015:

Question	Text Box	N
Which social activity during Orientation did you like best?	Small	59
Which social activity during Orientation did you like best?	Large	75
Which social activity during Orientation did you like best <u>and why</u> ?	Small	83
Which social activity during Orientation did you like best <u>and why</u> ?	Large	70

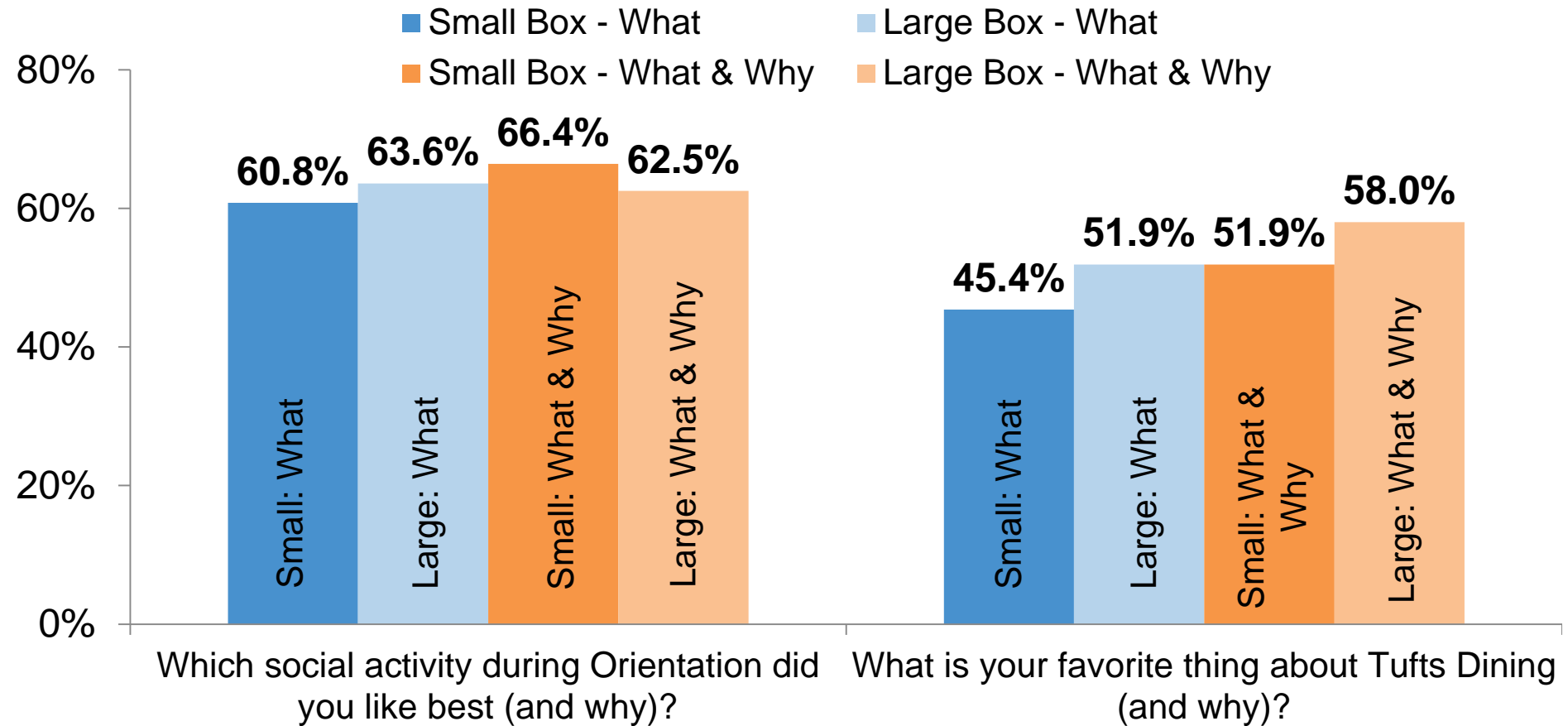
## Dining 2015:

Question	Text Box	N
What is your favorite thing about Tufts Dining?	Small	124
What is your favorite thing about Tufts Dining?	Large	139
What is your favorite thing about Tufts Dining <u>and why</u> ?	Small	139
What is your favorite thing about Tufts Dining <u>and why</u> ?	Large	156

# Results: Item Response Rates

*Again, there was no significant difference in item response rate.*

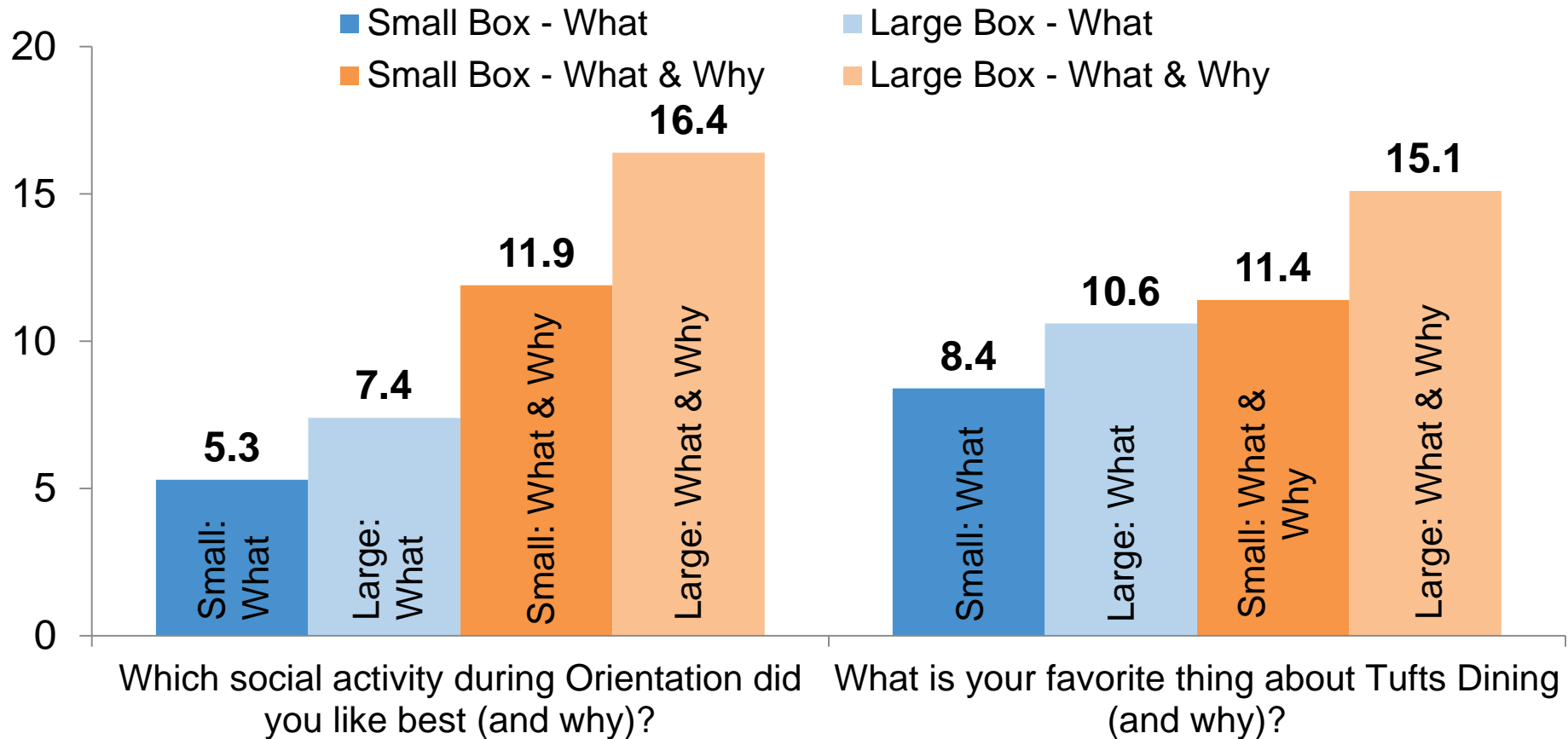
## Item Response Rates



# Results: Word Counts (WC <=50)

*Both asking “why” and providing a larger text box yield significantly longer responses.*

## Response Length: Average Word Count

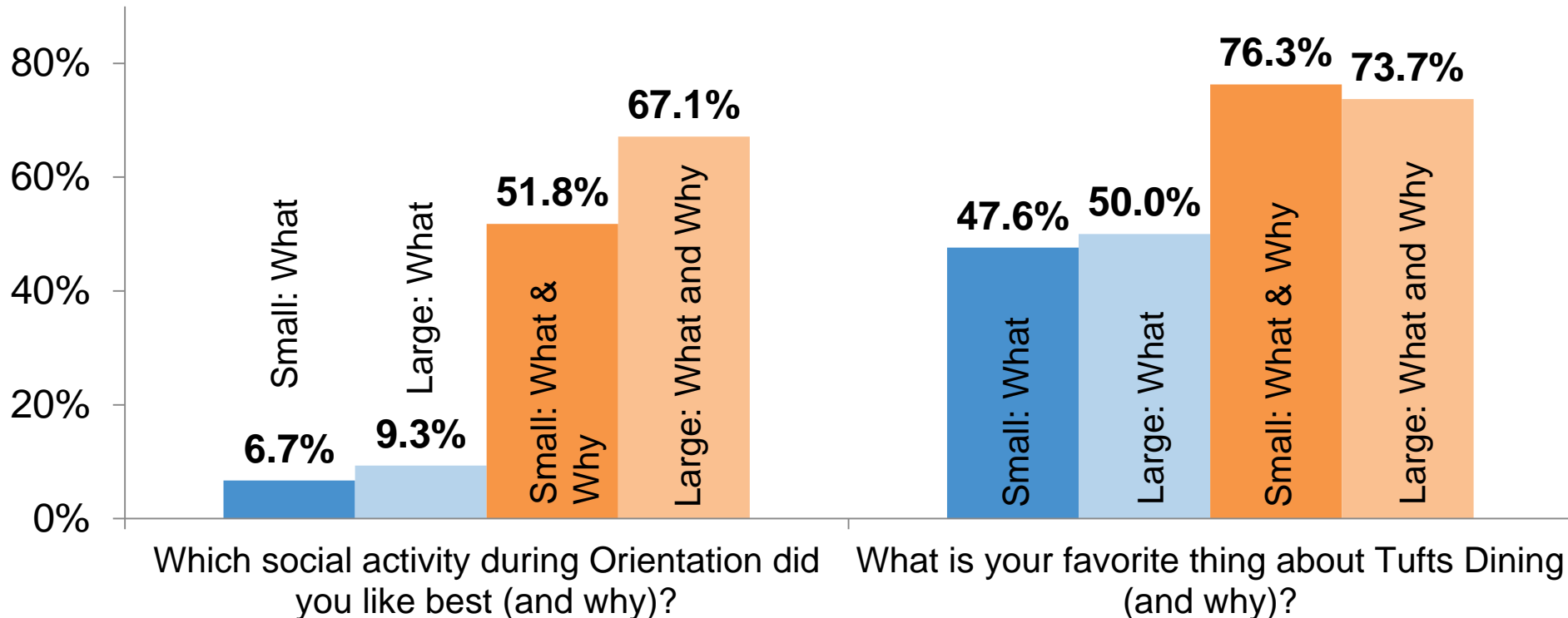


# Results: What vs. Why

*Prompting "why" produces results, independent of box size.*

## Percentage of Respondents Providing a "Why"

- Small Box - What
- Small Box - What & Why
- Large Box - What
- Large Box - What & Why



# 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?
- Only need a one- or two-word response? ***Design a small space – You will have less clutter when cleaning your data.***
- Want to know why a respondent answered in a certain way? ***Design a large space – You are more likely to have the elaboration you need.***

# Implications for Survey Research: Reminders

- Visual cues are important considerations in survey research
- Visual cues that are not consistent for the survey or question can be confusing
- Question wording matters – Asking “why” had a greater impact on the length and content of responses than did the text box size
  - But text box size still had an impact

# Future Research

---

# Consider . . .

- What happens when a respondent receives differently-sized text boxes throughout a survey?
- Does text box size matter for surveys taken on a mobile device? If so, how?
- Does class year act as a potentially 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?
  - [jennifer.may@tufts.edu](mailto:jennifer.may@tufts.edu)
  - [lauren.conoscenti@tufts.edu](mailto:lauren.conoscenti@tufts.edu)
- A copy of this presentation will be available on:
  - AIR Forum website
  - Tufts' website <http://go.tufts.edu/oire>

