Response Quality and Demographic Characteristics of Respondents Using a Mobile Device on a Web-based Survey

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In spring of 2011:

- 537,605 undergraduate respondents
- 683 colleges and universities in the U.S.
- 68 universities in Canada
Server-side Paradata
HTTP user-agent

Mozilla/5.0 (Windows; U; Windows NT 6.1; en-US; rv:1.9.2.16) Gecko/20110319 Firefox/3.6.16

Mozilla/5.0 (iPad; U; CPU OS 3_2_2 like Mac OS X; en-us) AppleWebKit/531.21.10 (KHTML, like Gecko) Version/4.0.4 Mobile/7B500 Safari/531.21.10

BlackBerry8330m/4.5.0.169 Profile/MIDP-2.0 Configuration/CLDC-1.1 VendorID/189
Research questions

1. How many respondents used mobile devices?
   a. Who are they and how do they compare to the general population?

2. Did they provide responses of a lower quality?
   a. Did they abandon the survey more frequently or earlier?
   b. Did they skip more questions?
   c. Did their responses match the institution-provided data?
   d. Did they provide responses with lower non-differentiation?
How many used a mobile device?

- Exclusively iPad: 1,576
- Exclusively smartphone: 15,650
- Other: 396,830
Who are they?

- **Men:** 39% Pew smartphone ownership (May 2011), 4% NSSE11 smartphone usage
- **Women:** 31% Pew smartphone ownership (May 2011), 4% NSSE11 smartphone usage
Who are they?

- 18-29 years old: 52% Pew smartphone ownership (Apr-May 2011), 3% NSSE11 smartphone usage
- 30-49 years old: 45% Pew smartphone ownership (Apr-May 2011), 2% NSSE11 smartphone usage
- 50-64 years old: 24% Pew smartphone ownership (Apr-May 2011), 1% NSSE11 smartphone usage
- 65+ years old: 11% Pew smartphone ownership (Apr-May 2011), 1% NSSE11 smartphone usage
Who are they?

- African American/Black: 44% (Pew smartphone ownership) 4% (NSSE11 smartphone usage)
- Caucasian/White: 30% (Pew smartphone ownership) 4% (NSSE11 smartphone usage)
- Hispanic: 44% (Pew smartphone ownership) 5% (NSSE11 smartphone usage)
How many abandoned?

- Exclusively iPad: 12%
- Other: 13%
- Exclusively smartphone: 27%
Did they abandon earlier?
Did they skip more questions?

- Exclusively iPad: 0.60
- Other: 0.80
- Exclusively smartphone: 0.53
Did their responses match the institution-provided data?
Did they provide responses with lower non-differentiation?
Did they provide responses of a lower quality?

a. Who abandoned most frequently?  Smartphones
b. Who abandoned soonest?   No one
c. Who skipped the most questions?  “Others”
d. Who had most data mismatch?  No one
e. Who had lowest differentiation?  Smartphones
Conclusion

• Who are they?
  – Who we would expect but fewer of them

• Do they provide responses of lower quality?
  – By most measures, iPad and “other” respondents provided data of similar quality.