

# Results from Smartphone Survey Experiments

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# Objectives

- Conduct a series of mobile phone survey experiments to . . .
  - Test various question types and formats on a mobile survey platform
  - Test mobile phone surveys versus surveys done on a computer
  - Gain a better understanding of what does and doesn't work with mobile surveys and how they can be optimized

# Current Approach

- App-based mobile survey (SODA by Techneos)
- Developed for Android, BlackBerry, iPhone devices
- Large, national sample of smartphone users
- 24 behavioral questions – online, TV viewing, consumer
- Each section contained 8 questions (5 experimental, 3 filler)
- Experiments from previous mobile web, online, and mail surveys
- Parallel set of experiments with online web survey takers

# Study Design

Panel	Mode	Survey version	
Knowledge Networks (KN)	Mobile app	A	B
	Web	A	B
Nielsen Online			
	Web	A	B

- Respondents: smartphone users
- Field period: Nov 4 – Nov 13, 2011

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# Experiment #1: Low vs High Frequency Scale

Verizon 3G 4:41 PM 96%

Back *i* Next

How many hours a day do you watch television?

Up to ½ hour

½ to 1 hour

1 to 1½ hours

1½ to 2 hours

2 to 2½ hours

More than 2 ½ hours

Verizon 3G 4:43 PM 96%

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How many hours a day do you watch television?

Up to 2½ hours

2½ to 3 hours

3 to 3½ hours

3½ to 4 hours

4 to 4½ hours

More than 4½ hours

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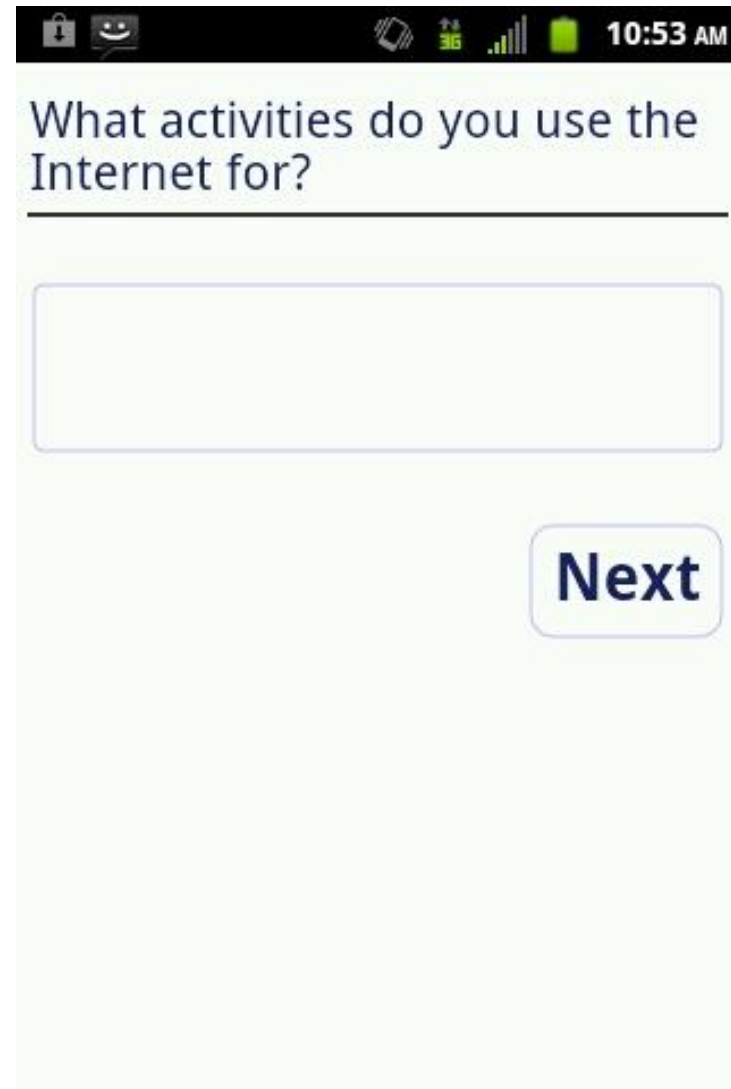
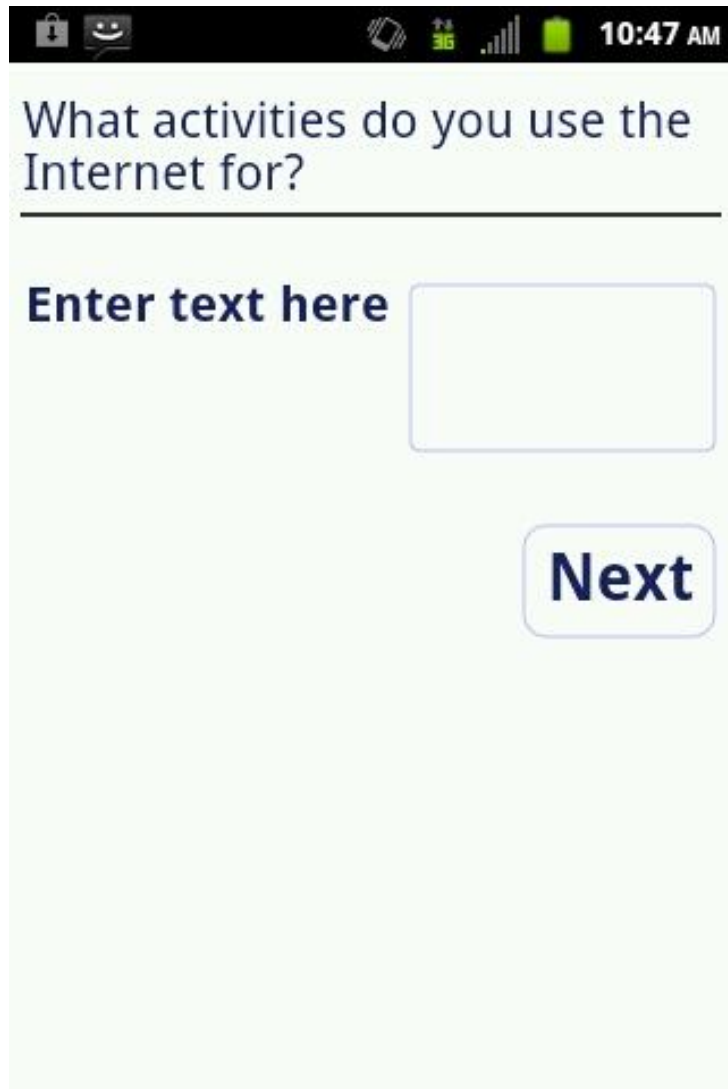
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# Experiment #2: Small vs Large Text Box (Android)





# Experiment #3: Randomized vs Alphabetized Response List

AT&T 3G 3:53 PM 53%

Back *i* Next

Which of the following have you purchased ONLINE in the past 30 days?

Home electronics	<input type="checkbox"/>
Toys	<input type="checkbox"/>
Event tickets	<input type="checkbox"/>
Airline tickets	<input type="checkbox"/>
Clothes (including shoes)	<input type="checkbox"/>
None of the above	<input type="radio"/>

AT&T 3G 4:05 PM 82%

Back *i* Next

Which of the following have you purchased ONLINE in the past 30 days?

Airline tickets	<input type="checkbox"/>
Clothes (including shoes)	<input type="checkbox"/>
Event tickets	<input type="checkbox"/>
Home electronics	<input type="checkbox"/>
Toys	<input type="checkbox"/>
None of the above	<input type="radio"/>

# Survey Response Statistics

Panel	Mode	Completes	Participation rate	Break-off rate	Median completion time
KN	Mobile app	705	58%	4%	5.5
KN	Web	711	61%	2%	5.8
Nielsen	Web	565	10%	5%	5.6

- Break-off rate for mobile survey is very low (can be as high as 30%+)
- Very small percentage of people did not answer questions (less than 2%)

# Experiment #1: Low vs High Frequency Scale

How many hours a day do you watch television?

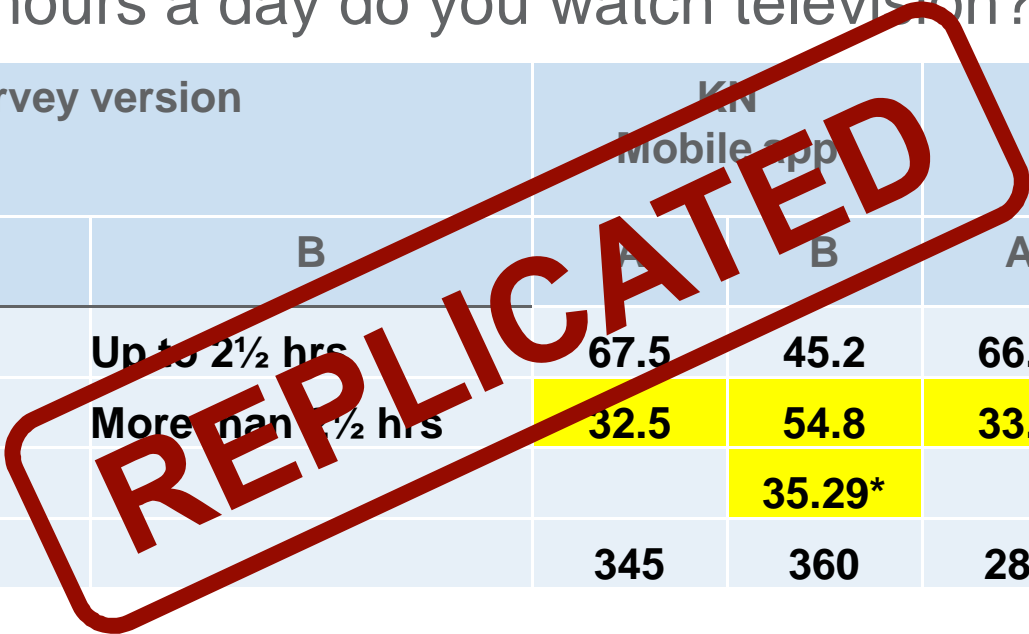
Survey version		KN Mobile app		KN PC web	
A	B	A	B	A	B
Up to 2½ hrs	Up to 2½ hrs	67.5	45.2	66.4	42.0
More than 2½ hrs	More than 2½ hrs	32.5	54.8	33.6	58.0
chi-square (1 df)			35.29*		32.99*
Sample size		345	360	281	269

- Replicated previous findings from mobile web and mail surveys
- Higher frequency scales generate higher reported frequencies
- Predominant finding, some mixed results

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# Experiment #2: Small vs Large Text Box

What activities do you use the Internet for?

Survey version			KN Mobile app		KN PC web	
A	B		A	B	A	B
Small text box	Large text box	Mean # of characters	32.8	38.4	34.5	48.5
		t statistic		2.09*		4.45*
		Sample size	190	208	281	269

- Replicated previous findings from online and mail surveys
- Respondents infer desired amount of information from size of text box
- Predominant finding, some mixed results

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**REPLICATED**

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## Experiment #3: Randomized vs Alphabetized Response List

Which of the following have you purchased ONLINE in the past 30 days?

Possible Response Options	Randomized List (Survey Version A)	KN Mobile app	KN PC web
Airline tickets	Position 1	20.0	19.9
Clothes (including shoes)	Position 2	20.0	22.4
Event tickets	Position 3	18.3	20.3
Home electronics	Position 4	17.7	21.4
Toys	Position 5	22.6	19.2
None of the above	None of the above	41.6	40.1
	chi-square (4 df)	1.27	0.43
	Sample size	345	281

- No evidence of primacy effects in Version A
- Robust finding -- same pattern across mode, panel, and question
- Results NOT consistent with previous findings from online, mail surveys

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# Main Findings and Implications for Researchers

- Replicated some previous experimental findings, not others
  - Responses to open-ended items may not be so burdensome
  - Absence of primacy effects may reflect short response lists
- Optimized mobile app surveys can have desirable properties that can reduce respondent burden
  - Short questions
  - Short response lists
  - Minimal scrolling
  - No grid items
  - Short survey length
- An optimized mobile app survey can produce high quality data
  - High participation rate
  - Low break-off rate

# Thank you for attending!

Tom Wells

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