



Sensitive Topics in PC Web and Mobile Web Surveys

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Hypotheses and Experimental Design

Hypotheses (1)

H1: The differences between survey modes

Since *mobile phones* are more likely to be used in *public places*, we hypothesize that surveys completed on *mobile phones* may show higher rates of social desirability bias than those completed on a PC-based browser.

Hypotheses (2)

H2: Context variables

In both survey modes we expect that:

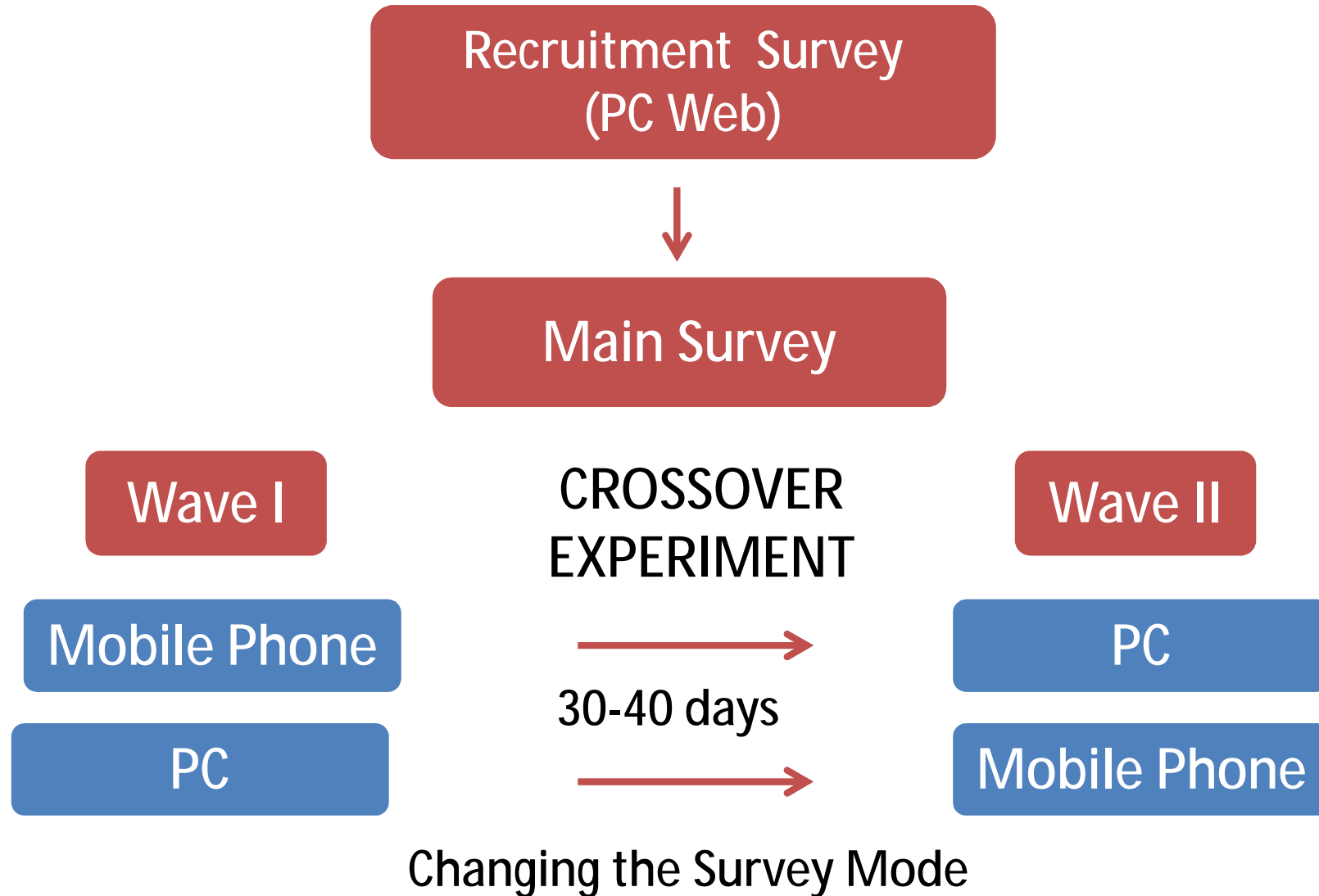
• *higher level of perceived privacy and trust in confidentiality of the survey mode,*

• *home-based setting,*

• *no presence of third persons (familiar/not familiar) during completing the questionnaire*

increase level of reporting.

Experimental Design



Software

Software: KINESIS

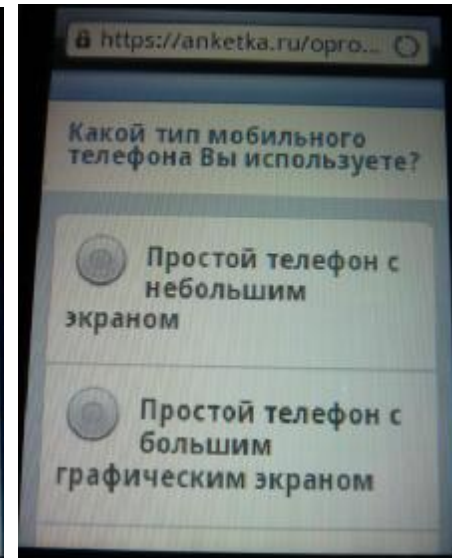
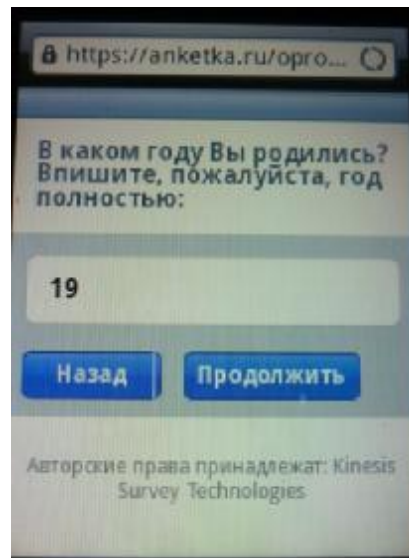
Questionnaire for
PC Web
browsers

Questionnaire for
mobile Web
browsers

Invitation mode

E-Mail Invitation

SMS Invitation



No mobile application

Recruitment

Random invitations among the participants of a volunteer online access-panel (OMI – Online Market Intelligence) stratified according to the demographic profile of the mobile Web population in Russia.

Sent: 75,257
invitations

Start Rate: 28.5%
(21,462)

Completion Rate:
7.8% (5,859)

5,859 respondents, or *7.8%* among invited:

- üwere eligible for the survey,
- üagreed to participate in the experiment,
- üprovided their mobile phone numbers.

Wave 1

	Mobile Web	PC Web
Number of invitations	2,564	1,479
Absorption Rate	88.5% (2,269)	99.4% (1,470)
Start Rate	31.2% (801)	73.8% (1,091)
Completion Rate	27.0% (692)	71.6% (1,059)
Screened out Rate	4.9% (34)	5.2% (55)
Breakoff Rate	13.6% (109)	2.9% (32)
Number of completes	658	1,004
<i>Excluded from the analysis</i>		
Number of screened out (in another survey mode)	7	
Number of breakoffs (tried to start in another survey mode)	24	
Number of completes in another survey mode	61	

Wave 2

	Mobile Web	PC Web
Number of invitations	996	657
Absorption Rate	92.6% (922)	98.9% (650)
Start Rate	38.0% (378)	88.4% (581)
Completion Rate	33.1% (330)	87.5% (575)
Breakoff Rate	12.7% (48)	1.0% (6)
Number of completes	330	575
<i>Excluded from the analysis</i>		
Number of breakoffs (tried to start in another survey mode)	12	
Number of completes in another survey mode	27	

Wave 1 and Wave 2

	Mobile Web	PC Web	TOTAL
Wave I, April 12-April 24, 2012	658	1,004	1662
Wave II, May 29-July 10, 2012	330	575	905

Panel provider managed to identify and link panel data for 884 respondents.

	Mobile Web	PC Web	TOTAL
Wave I	565	319	884
Wave II	319	565	884

Questionnaire

Wave I: 83 items

Wave II: 72 items

ü Attitude towards deviant practices

ü Deviant behavior

ü Alcohol-related behavior

ü Alcohol consumption

ü Monthly household income

ü Mobile Web usage patterns

ü Demographic variables

ü “Context” questions (sensitive questions, level of trust in confidentiality of the survey mode, presence of third parties, place of completing the questionnaire).

Completion Time

ü In both survey modes and in both waves the respondents were invited to the questionnaire with the expected length of 10 minutes.

ü However, here is the factual median completion time:

	Mobile Web	PC Web
Wave I	20.67 min.	9.07 min.
Wave II	15.62 min.	6.62 min.

Sensitive Indices (1)

5 indices

1. The rate of positive attitudes towards deviant practices:

- ü 15 items: whether behaviors, e.g., abortion, cheating on taxes, prostitution, etc. can or cannot be justified.
- ü A rate from 0 (no behaviors justified) to 100 (all 15 behaviors justified).

2. The rate of deviant behavior:

- ü 15 items: whether respondents have stolen anything from a shop, have used marijuana/hashish/ecstasy, etc.
- ü A rate from 0 to 100 .

Sensitive Indices (2)

5 indices

3. The rate of alcohol-related behavior:

- ü 9 items: whether respondents have ever been drunk during several days, have forgotten some events next day after they were drinking alcohol, etc.

4. *Daily alcohol consumption. Quantity-frequency index.*

- ü For 3 types of beverages (beer, wine/sparkling wine, spirits): quantity (closed-ended) and frequency (open-ended).
- ü Consumption = Σ Quantity X Frequency.

5. *Monthly household income (13 income groups).*

Results

Context Variables

		Mobile Web	PC Web	Chi-square, df=1
Place of completing the survey	At home	55.1%	71.0%	48.276***
	Outside the home	44.9%	29.0%	
The presence of bystanders	Not present	70.8%	83.9%	43.476***
	Present	29.2%	16.1%	
Trust in confidentiality	Do not trust	37.2%	25.2%	29.595***
	Trust	62.8%	74.8%	
The sensitivity of the questions	Not sensitive	43.3%	36.5%	8.489**
	Sensitive	56.7%	63.5%	
N		884	884	

p < 0.01, *p < 0.001 (two-tailed)

Measurement Error (1)

Linear Mixed Model Coefficients Predicting Sensitive Indices

	The rate of positive attitude towards deviant practices	The rate of deviant behavior	The rate of alcohol-related behavior	Daily alcohol consumption	Monthly household income
Intercept	43.439 (1.533) ^{***}	31.703 (1.194) ^{***}	36.449 (1.145) ^{***}	5.831 (.730) ^{***}	6.810 (.164) ^{***}
Mobile Web	.010 (.590)	-.179 (.927)	-.375 (.624)	-.705 (.306) [*]	-.173 (.053) ^{**}
First wave	.147 (.590)	1.198 (.927)	-.405 (.624)	-.860 (.306) ^{**}	-.215 (.053) ^{***}
Males	-1.001 (1.250)	1.981 (.897) [*]	11.562 (.897) ^{***}	4.745 (.594) ^{***}	-.123 (.134)
Age group: 18-34	-2.246 (1.426)	-2.668 (1.005) ^{**}	-3.803 (2.086)	-.598 (.678)	-.242 (.154)
N	1,768	1,768	1,768	1,720	1,708

Nonresponse Error

ü Hypothesis: *mobile nonrespondents* (in the wave 2) reported more sensitive attitudes or behavior in the wave 1 when they filled out the questionnaire on *PC*.

ü Contrary to expectations, nonrespondents to the mobile Web survey reported slightly but significantly lower:

ü *monthly household income*

ü *scores on the attitude index*

in the wave 1.

Measurement Error (2)

	The rate of positive attitude towards deviant practices	Daily alcohol consumption	Monthly household income
Intercept	44.088 (1.835) ^{***}	4.858 (.874)	6.882 (.188) ^{***}
Mobile Web	-.867 (.622)	-.812 (.321) [*]	-.173 (.056) ^{**}
First wave	-.041 (.594)	-.767 (.308) [*]	-.211 (.053) ^{***}
Males	-1.471 (1.246)	4.753 (.598) ^{***}	-.131 (.134)
Age group: 18-34	-2.224 (1.416)	-.597 (.679)	-.231 (.154)
Trust in confidentiality of the survey mode	-2.506 (.978) [*]	.196 (.494)	.043 (.094)
Bystanders	2.589 (.978) ^{**}	-.055 (.112)	-.189 (.091) [*]
Completing the questionnaire outside the home	1.634 (.857)	0.936 (.436) [*]	.114 (.080)
Feeling uneasy	-1.565 (1.041)	1.336 (.528) [*]	-.113 (.099)
Sensitive questions	.029 (.868)	.291 (.440)	-.133 (.083)
"Standard" order of the responses++	1.967 (.740) ^{**}		
N ₉	1,768	1,720	1,708

Conclusion

üWe found limited support for the main hypothesis; however, we suggest that differences between PC and mobile-based Web surveys may depend on the *questions being compared*.

üWe observed some differences between the two survey modes in the *alcohol consumption* and *income* respondents reported.