

Using an adaptive design in gaining cooperation



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Enhancing the recruitment success in a mobile phone panel survey

Outline:

1. Background
2. Hypothesis
3. Methods
4. Results
5. Conclusions



1. Background

Non-Response in the „Experimental Mobile Phone Panel“



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Non-Response in telephone surveys:

- Rising non-response rates threaten all kinds of surveys (deLeeuw & de Heer, 2002)
- Especially telephone surveys (Bataglia et al., 2008; Holbrook et al., 2008)
- Germany 2008: landline telephone surveys more severe than cell phone surveys → novelty effect (Häder & Häder, 2009)

1. Background

Non-Response in the „Experimental Mobile Phone Panel“



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Non-Response in panel surveys:

- Non-response rates from the recruitment study result in smaller sample sizes in every following panel wave
- High non-response rates might lead to high non-response biases
- Non-response biases induced with the starting panel composition are carried forward to the following waves

1. Background

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→ **When recruiting for a mobile phone panel it is necessary to avoid initial recruitment refusals by increasing cooperation with effective recruitment questions!**

2. Hypothesis

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- Respondents with negative survey attitudes are more prone to refuse panel participation than respondents with positive survey attitudes.
- By assignning each respondent a recruitment question in response to his/her specific survey attitudes the overall recruitment success can be improved.

3. Methods

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- Mobile phone panel survey in Germany
($N_{\text{recruitment}} = 1577$)
- Sampling procedure developed for mobile phone frames in Germany
- Recruited in cell phone frame, winter 2010/11
- Response Rate (AAPOR):
RR1: 11.5%; RR3: 17.7%
- Weighted by design weight

3. Methods

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Recruitment question	Non-response reason linked	Survey attitude linked
(...). This would be very important for our research informing politics and economy about recent trends. (...)	Lack of information about usage of survey results	Surveys are important for science, politics and the economy.
(...). With our surveys we aim at ascertaining how mobile telephony changes in time. We strongly stick to Data Protection Act. (...)	Lack of information about the survey; privacy concerns	Topics are addressed in surveys that don't concern anybody else.
(...). This survey is sponsored by the German Research Foundation and is conducted with strict scientific standards. (...)	Survey organization not trustworthy	Most surveys are carried out in a reliable and responsible way.
(...). The upcoming survey will last only 5 minutes to reduce your burden. (...)	Time burden	Surveys only keep you from doing more important things.

4. Results

Non-Response in the „Experimental Mobile Phone Panel“

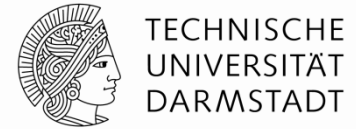


Recruitment success depending on recruitment question version:

	Yes [%]	No [%]	Total [%]
Recr.09: <i>our research informing politics and economy</i> (n=368)	93 (348)	7 (25)	100*** (373)
Recr.10: <i>With our surveys we aim at (...) stick to Data Protection Act</i> (n=391)	90 (352)	10 (41)	100*** (393)
Recr.11: <i>German Research Foundation (...) strict scientific standards</i> (n=418)	89 (374)	11 (47)	100*** (421)
Recr.12: <i>survey will last only 5 minutes</i> (n=383)	90 (349)	10 (40)	100*** (389)

4. Results

Non-Response in the „Experimental Mobile Phone Panel“



Recruitment success depending on survey attitude:

	Negative survey attitude [%]	Positive survey attitude [%]	Total [%]
<i>Surveys important for science, politics, economy</i>			
Recruited	87	94	90***
<i>Topics don` t concern anybody else</i>			
Recruited	85	93	91***
<i>Surveys carried out reliable & responsible</i>			
Recruited	89	94	91**
<i>Surveys keep you from doing important things</i>			
Recruited	81	93	90***

4. Results

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Recruitment question version		Disagree- ment [%]	Agree- ment [%]	Differ- ence [%]	Total [%]
Survey attitude 09: <i>important for science, politics, economy</i>					
Recr.09: <i>our research informing politics and economy (n=368)</i>	Yes	88	97	+9	93***
Recr.10: <i>With our surveys we aim at (...) stick to Data Protection Act (n=391)</i>	Yes	86	93	+7	90*
Recr.11: <i>German Research Foundation (...) strict scientific standards (n=418)</i>	Yes	87	90	+3	89 n.s.
Recr.12: <i>survey will last only 5 minutes (n=383)</i>	Yes	85	94	+9	90**

P<.001***. p<.01**. p<.05*. p<.1+

4. Results

Non-Response in the „Experimental Mobile Phone Panel“



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Recruitment question version		Disagree- ment [%]	Agree- ment [%]	Differ- ence [%]	Total [%]
Survey attitude 10: <i>topics don` t concern anybody else</i>					
Recr.09: <i>our research informing politics and economy (n=368)</i>	Yes	95	89	-6	93*
Recr.10: <i>With our surveys we aim at (...) stick to Data Protection Act (n=391)</i>	Yes	90	88	-2	90 n.s.
Recr.11: <i>German Research Foundation (...) strict scientific standards (n=418)</i>	Yes	92	80	-12	89***
Recr.12: <i>survey will last only 5 minutes (n=383)</i>	Yes	92	83	-9	90*

P<.001***. p<.01**. p<.05*. p<.1+

4. Results

Non-Response in the „Experimental Mobile Phone Panel“



Recruitment question version		Disagree- ment [%]	Agree- ment [%]	Differ- ence [%]	Total [%]
Survey attitude 11: carried out reliable & responsible					
Recr.09: <i>our research informing politics and economy</i> (n=368)	Yes	92	96	+4	94 n.s.
Recr.10: <i>With our surveys we aim at (...) stick to Data Protection Act</i> (n=391)	Yes	88	94	+6	91 +
Recr.11: <i>German Research Foundation (...) strict scientific standards</i> (n=418)	Yes	86	93	+7	89*
Recr.12: <i>survey will last only 5 minutes</i> (n=383)	Yes	89	91	+2	90 n.s.

P<.001***. p<.01**. p<.05*. p<.1+

4. Results

Non-Response in the „Experimental Mobile Phone Panel“



Recruitment question version		Disagree- ment [%]	Agree- ment [%]	Differ- ence [%]	Total [%]
Survey attitude 12: keep you from doing important things					
Recr.09: <i>our research informing politics and economy</i> (n=368)	Yes	96	81	-15	93***
Recr.10: <i>With our surveys we aim at (...) stick to Data Protection Act</i> (n=391)	Yes	93	79	-14	90***
Recr.11: <i>German Research Foundation (...) strict scientific standards</i> (n=418)	Yes	92	78	-6	89***
Recr.12: <i>survey will last only 5 minutes</i> (n=383)	Yes	91	87	-4	90 n.s.

P<.001***. p<.01**. p<.05*. p<.1+

4. Results

Non-Response in the „Experimental Mobile Phone Panel“



Recruitment question version	Phi			
	S.A.09 (important for ...)	S.A.10 (topics, DPA)	S.A.11 (respons able)	S.A.12 (time)
Recr.09: <i>our research informing politics and economy</i> (n=368)	.19***	-.12*	.08 n.s.	-.24***
Recr.10: <i>With our surveys we aim at (...) stick to Data Protection Act</i> (n=391)	.12*	-.03 n.s.	.10+	-.20***
Recr.11: <i>German Research Foundation (...) strict scientific standards</i> (n=418)	.06 n.s.	-.17***	.11*	-.18***
Recr.12: <i>survey will last only 5 minutes</i> (n=383)	.16**	-.13*	.04 n.s.	-.06 n.s.

$P < .001$ ***. $p < .01$ ** . $p < .05$ *. $p < .1$ +

5. Conclusions

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- Respondents with positive survey attitude show significantly higher agreement rates to all recruitment question versions and vice versa

5. Conclusions

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- Respondents with positive survey attitude assigned to a recruitment question emphasizing a survey attitude aspect favoured by them are more easily convinced of panel participation
- For respondents with negative survey attitude assigned to a recruitment question emphasizing a survey attitude aspect favoured by them panel refusal tendencies are diminished

5. Conclusions

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- For increasing the success of a mobile phone panel recruitment study an adaptive design could increase the recruitment success by developing different recruitment question versions and assigning them to each respondent on basis of previously gained information
- Apart from survey attitudes basis could be sociodemographics or other auxiliary variables

Literature

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Thank you!

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