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# Moving a long survey online

## Problems and some potential solutions

For more info and background:  
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# Outline



“Keep it short!”

- ◆ Evidence for problems when fielding long web surveys
- ◆ What is then the optimal length?
- ◆ Implications for design?

# What are the (potential) problems?



1. Nonresponse
2. Breakoffs
3. Worse answers in longer surveys
4. Not participate next time (in panel)
5. People may not participate in other survey

# 1. Long survey -> more nonresponse?

- ◆ When people expect it long they don't start
  - Meta-analysis postal surveys: odds ratio = 1.15
    - » e.g. 30% (short) vs. 27% (long) (Edwards et al, 2009)
  - Non-experimental evidence from 25k SurveyMonkey surveys (Liu & Wronski, 2018):
    - » 5 pages: 88% response rate
    - » 50 pages: 82% response rate

Postal surveys and nonexp suggest a small effect

# 1. Long survey -> more nonresponse?

Experimental evidence on stated length:

- ◆ 10 vs. 30 minutes: 4% difference (Guo et al (2011))
- ◆ 10 vs. 30 minutes: 2% difference (Kaplowitz et al (2011))
- ◆ 10 vs. 30 minutes: 13% difference (Galesic et al 2009)
- ◆ 15 vs. 60 minutes: 12% difference (Marcus et al 2007)
- ◆ Vague vs 25 minutes: 3% difference (Heerwegh and Loosveldt, 2006)

Longer surveys have a small effect on nonresponse

## 2. Breakoffs



- ◆ Study by Yan et al (2011)

<b>Real duration</b>	<b>Stated duration</b>	<b>Break-offs</b>
Long	40	
(25 min)	10	
Short	25	
(16 min)	5	

## 2. Breakoffs

- ◆ Study by Yan et al (2011)

<b>Real duration</b>	<b>Stated duration</b>	<b>Break-offs</b>
Long	40	14%
(25 min)	10	19%
Short	25	13%
(16 min)	5	10%

**Break-off effects are also small**

- ◆ Problem with mobile phones (Mavletova & Couper, 2015)

# 3. Worse answers in long surveys?

- ◆ Questions Late in questionnaire (vs. early):
  - Shorter answers, more nonsubstantive answers (Andreadis & Kartsanidou, 2020)
  - Lower variance in grids (Galesic and Bosnjak, 2009; Neuert 2021)
  - MTMM studies: probably worse quality (Scherpenzeel & Saris, 1997)
  - Higher bias and MSE (Peytchev & Peytcheva 2017)
  - Inconsistent findings on speeding and straightlining (Zhang & Conrad, 2014; Liu and Wronski, 2018)

Evidence for worse answers in longer surveys



# 4. Not participate in next wave



- ◆ Little evidence

- Wave 1: Understanding Society: no effects of short vs. long survey (Lynn, 2014)
- *Experience* survey in wave 1 to be longer -> less likely to participate (Gummer and Daikeler, 2020)

No evidence

## 5. Not participate in other survey

- ◆ “Survey climate” hypothesized cause of declining response rates
- ◆ Sinibaldi and Karlsson (2017)
  - Iceland population small: repeated surveys
  - Burdensome (HBS) survey 1<sup>st</sup> -> higher likelihood in wave 2
  - Same survey twice -> lower likelihood

No direct evidence

# So, what is optimal length?




- ◆ Asking respondents suggests 10-20 minutes  
(Revilla & Ochoa, 2017)
- ◆ Surveys longer than this have:
  - Small effects on nonresponse, breakoffs
  - Some effect on measurement error
  - No evidence for effects on later participation
- ◆ Other aspects seem more important
  - A good questionnaire, incentives, visual design

# Modularisation



- ◆ One way to reduce length of very long surveys
  - More waves
    - » Popular in developmental studies (planned missingness)
  - Not ask all questions to everyone in 1 wave :
    - » Filters and routing
    - » Randomize items -> modularization

# The idea of a modular design



Questionnaire version	Core module	Module A	Module B	Module C	Module D
1	Shaded	Shaded	Shaded	Shaded	White
2	Shaded	White	Shaded	Shaded	White
3	Shaded	Shaded	White	White	Shaded
4	Shaded	Shaded	White	Shaded	White
5	Shaded	White	Shaded	White	Shaded
6	Shaded	White	White	Shaded	Shaded

# Modularisation - findings



- ◆ No big effects for nonresponse
  - European Value Survey (Pollien et al, 2018)
  - Increased nonresponse due to non-completion of some modules (Toepoel & Lugtig, 2018; Peytchev et al 2020)
- ◆ Some positive effects on measurement (Peytchev & Peytcheva , 2017; Andreadis et al, 2020)
- ◆ Complications
  - Routing
  - Imputations needed

# In conclusion



- ◆ **Keep it short** good for questionnaire design
- ◆ Long surveys
  - Slightly more nonresponse
  - Slightly more dropout
  - Some more measurement error
- ◆ **Surveys can probably be longer than 10-20 mins**  
**survey methodologists often advise**
  - Other aspects are more important
  - Modularisation not a panacea

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