

Surely shorter is better? A questionnaire length experiment in a self-completion survey

**Tim Hanson, Eva Aizpurua,
Rory Fitzgerald, Marta Vukovic**

ESS Conference, Lisbon
8 July 2024

europeansocialsurvey.org

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What I will cover

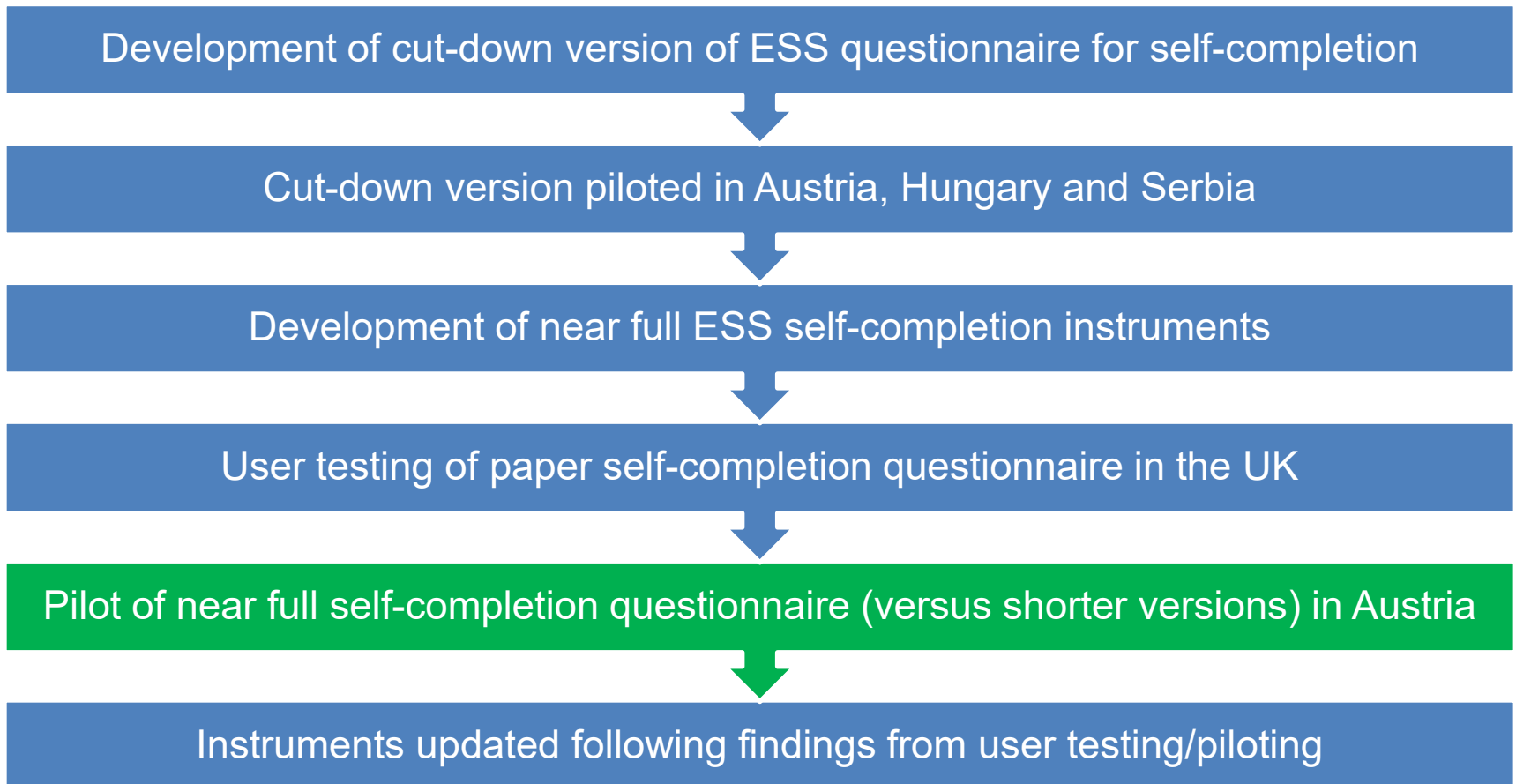
- Context / background to experiment and research questions
- Experiment design
- Experiment results
- Conclusions / future implications

Context and background to experiment

ESS Round 10 and COVID-19

- Fieldwork for Round 10 of ESS was due to run from September 2020 to January 2021 using the usual face-to-face approach in all countries
- COVID-19 pandemic presented major challenges to deliver usual face-to-face approach
- Contingency measures introduced – including **preparing a self-completion approach** to be implemented by any countries that could not deliver face-to-face fieldwork (no mixing of modes permitted)
- Developmental and experimental work carried out to inform and prepare the self-completion approach

Development stages for self-completion approach



Can we develop a self-completion version of ESS that includes the majority of content from the face-to-face survey (with limited adaptation) while delivering 'acceptable' response rates, sample composition and data quality?

Previous research on questionnaire length

- Several previous studies have looked at the impact of questionnaire length (minutes, number of pages, number of questions) on outcomes – mostly in relation to response rates
- Most (though not all) have found lower response rates as questionnaire length increases; some also found lower quality for longer questionnaires – most experiments based on quite short questionnaires (e.g. 5 vs 15 minutes)
- Recent evidence that ‘reasonable’ response rates can be achieved for quite long surveys – e.g. European Values Study, Gender and Generations Survey

The role of our experiment

- We wanted to expand on the existing evidence in three main ways:
 1. Compare two questionnaire lengths that might traditionally be seen as long for self-completion (35 and 50 minutes)
 2. Test across a combined web and paper self-completion design
 3. Extend analysis beyond response rates – also looking at sample composition and data quality
- More broadly, we wanted to open more of a discussion on trade-offs associated with length and outcomes

Research questions and hypotheses

| Research question | Hypothesis |
|--|--|
| 1. How does survey length influence response rates? | We expect that response rates will be lower for the lengthier questionnaire. |
| 2. Are there differences in sample composition depending on survey length? | We expect that the usual underrepresentation of certain subgroups (e.g. younger people, those with lower levels of education) will be compounded by the longer questionnaire length. Overall, we expect the sample composition to be closer to the population for the shorter rather than longer length condition. |
| 3. Are there differences in data quality based on survey length? | We expect respondent burden to increase as questionnaire length increases, resulting in greater satisficing behaviours for the longer questionnaire. In particular, we expect item nonresponse and non-differentiation to be higher in the lengthier questionnaire. |

Experiment design

Experiment design (1)

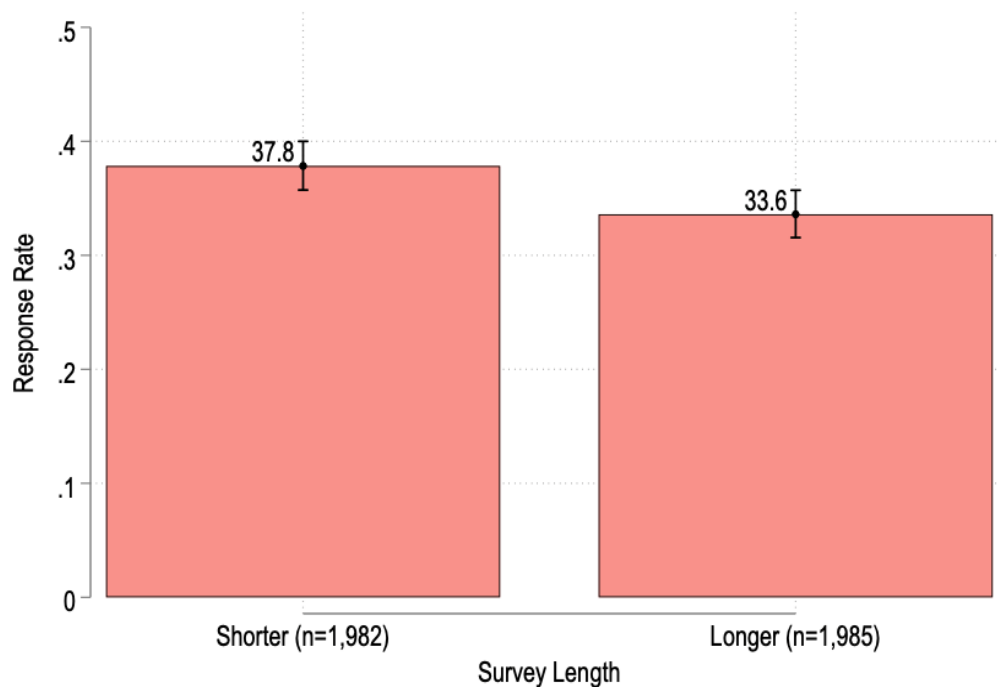
- Probability-based sample of households in Austria
- Within sampled households, one adult aged 18 or over was (quasi) randomly selected (by next birthday instruction)
- Sampled households randomly assigned to receive either a ‘shorter’ (35 minutes) or ‘longer’ (50 minutes) version of the ESS questionnaire
- ‘Shorter’ version comprised 182 questions, longer version 274 questions; difference between versions was the inclusion/exclusion of the two ESS Round 10 rotating modules (92 questions in total)
- Length experiment crossed with conditional incentive experiment, but length results consistent across incentive conditions (combined for this analysis)

Experiment design (2)

- Data collected between April and June 2021 (after COVID lockdowns had ended in Austria but with some restrictions still in place (e.g. mask wearing))
- Sequential approach (web -> paper)
- Invitation and three reminders; paper questionnaire sent with 2nd reminder; 3rd reminder was a postcard
- Letters included a URL to a landing page, which linked to the web questionnaire (programmed in Qualtrics)
- Survey materials based on principles and direct advice from Don Dillman

Experiment results

Response rates



- 4.2 percentage point difference between conditions
- Significantly higher response rate for shorter questionnaire (small effect size)
- No difference in proportion of web and paper responses between conditions

Sample composition

| Variable | Shorter (35 mins) | Longer (50 mins) | Differences | ESS R9 un-weighted (2018) | Statistics AT (2019) |
|---|-------------------|------------------|-------------|---------------------------|----------------------|
| Sex | | | | | |
| Female | 53.9 | 53.2 | 0.08 | 54.1 | 51.3 |
| Male | 46.1 | 46.8 | | 45.9 | 48.7 |
| Age | | | | | |
| 18-29 | 11.2 | 10.0 | 0.59 | 13.3 | 17.7 |
| 30-49 | 30.7 | 31.6 | | 30.7 | 32.7 |
| 50-64 | 30.5 | 31.0 | | 28.2 | 26.6 |
| 65+ | 27.6 | 27.3 | | 27.8 | 23.0 |
| <i>Average age</i> | 51.8 | 51.8 | 0.07 | 52.2 | - |
| Formal education (average years) | 13.7 | 13.7 | -0.35 | 12.6 | - |
| In paid work | 57.3 | 59.7 | 0.79 | 55.0 | 49.6 |
| Citizenship | | | | | |
| Austria | 93.7 | 94.4 | 0.34 | 93.9 | 83.4 |
| Non-Austrian | 6.3 | 5.6 | | 6.1 | 16.6 |

- No significant differences observed between length conditions
- Both versions underrepresented young adults and non-Austrian citizens compared with the benchmark data

ANOVA tests for average age and years of education; all others based on chi-square tests

Data quality

| Measure | Result |
|---------------------|---|
| Item nonresponse | <ul style="list-style-type: none"> • Looked at ask-all items included for both conditions • No significant differences between length conditions • For both conditions, higher rate of skipped questions on paper compared with web |
| Non-differentiation | <ul style="list-style-type: none"> • Based on Schwartz Human Values Scale – included at end of questionnaire • No significant differences between length conditions (based on coefficient of variation) • No significant differences between web and paper |
| Concurrent validity | <ul style="list-style-type: none"> • Examined two items for which a negative correlation was expected. • Negative and moderately strong correlation found, and no differences between length conditions. |

Conclusions and implications

Conclusions and implications

- Slightly higher response rate for shorter questionnaire – but no differences based on sample composition and data quality indicators
- Overall, experiment provides evidence that it is possible to field a fairly long questionnaire in a self-completion environment and achieve reasonable outcomes (backed up by ESS Round 10 results)
- Some differences from other studies – importance of context and design?
- Substantial reduction in content to reach shorter questionnaire – removal of rotating modules – adopting this permanently would mean closing opportunities for researchers to add questions to ESS, less data for users, and reduced value for money; matrix or modularised designs could be considered but adds complexity to data (and limited benefits?)
- Results from experiment (and wider evidence) have reassured us that we can retain most of the ESS questionnaire with the move to self-completion

Thank You



Contact

✉ tim.hanson@city.ac.uk

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