

Survey methods research on mode and incentives

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Summary

Project overview

The main aim of this strand of the project was to build the evidence base in two key areas of survey methods: mode, and incentives. We produced a combination of literature reviews and novel research evidence on each area, summarised as follows.

Mode

Most recent sweeps of the CLS cohort studies have used face-to-face in-home interviewing. The main reasons for this are to maximise response rates, maintain longitudinal consistency, to allow sufficiently long interviews to collect a broad range of scientifically valuable information, and to ensure high quality collection of physical measurements, biological samples and direct assessments of cognitive function. Alongside face-to-face interviewing we have increasingly also used the web to enhance our data collections, as part of sequential mixed mode approaches for core interviews (Next Steps and NCDS), or for additional data collection elements (MCS age 14 time-use diaries, MCS age 17 parent and study member web questionnaires, BCS70 dietary diaries). We are considering whether to make use of the web in a mixed-mode content for major sweeps and for shorter between-sweep surveys (see work package 7). The aim of this part of the project was to add to the evidence base in relation to the use of the web, particularly in a mixed-mode context, and to inform our developing forward strategy on mode in the cohorts.

Methods

There are four outputs in this part of the project. Three are new empirical papers based on recent web collections in the CLS cohorts: mixed-mode time diary on age 14 sweep of MCS, and sequential mixed-mode used on Next Steps age 25 sweep and NCDS age 55 sweep. We have also produced a brief review of the literature and evidence on the use of the web and mixed-mode in longitudinal surveys.

Findings

- Literature review: The most relevant literature and evidence on the use mixed-mode involving web in longitudinal surveys shows that although mixed-mode can be effective at boosting response rates there is evidence of mode differences on measurement which are potentially biasing unless appropriately adjusted for by analysts. There is relatively little robust empirical evidence on which to base important design decisions, and the trade-offs in relation to survey errors and costs are different for each survey.
- MCS: A mixed-mode approach to time diary data collection, combining app, web and paper formats, was successfully implemented at the age 14 sweep. Over two thirds of respondents chose to complete the diary using the app. The two online instruments provided data of the highest quality when compared with the traditional paper diary. Differences were observed in the characteristics of respondents choosing to complete the diary in each mode.
- NCDS: A sequential mixed mode data collection, online to telephone, was conducted at age 55 sweep. An embedded experiment shows that relative to telephone-only, the offer of the web increased overall participation rates by approximately 5 percentage points (82.8% vs. 77.9%). Differences attributable to mode of interview were detected in levels of item non-response and response values for a limited number of questions.

- Next Steps: A sequential mixed-mode (web-telephone-face-to-face) design was implemented in wave 8 of the Next Steps cohort study. After controlling for mode selection, we find that a lower proportion of respondents who contribute to item non-response in the web mode than in the telephone and face-to-face modes; and a high-level of measurement equivalence for a multi-item scale across the three modes.

Incentives

An over-riding objective for longitudinal studies is to maintain study participation, and minimise non-response bias, and the use of incentives is one important tool by which studies can seek to achieve this. CLS studies, with the exception of Next Steps, have not hitherto used monetary incentives paid to participants as part of our response maximisation approach for core survey sweeps. The studies have succeeded in maintaining high response rates without this. However, in the context of declining response rates for surveys, including longitudinal surveys, this is something that it is important to consider going forward. We have a particular concern about maintaining high response rates on the Millennium Cohort Study in adulthood, and incentives may be an important part of minimising any drop-off in participation. Next Steps cohort members have received incentives for their participation throughout the study, and we included an incentive experiment at age 25 survey to boost take-up of the web component of the mixed-mode survey. We anticipate that for both Next Steps and MCS, incentive strategy will be crucial for retention going forward. We may consider targeted incentives for certain groups of cohort members, such as those that are at high risk of drop-out and/or of particular scientific value, such as disadvantaged groups. We are also intending to make greater use of the web for data collection between-waves, and potentially in a mixed-mode context for core sweeps, as well as supplemental data collection using new technologies. It is likely that to secure high participation rates in these additional data collection elements, incentives will be needed.

Methods

There are two outputs in this part of the project. One is an empirical papers based the recent incentive experiment to boost web response rate at the age 25 survey of Next Steps, and one is a review of the literature on the use of incentives in longitudinal surveys. This includes their effectiveness in boosting take-up to web and mixed-mode surveys and of targeted incentives for encouraging response from marginal groups. This evidence has informed the design an incentives experiment to be implemented in an MCS web-survey later in 2019.

Findings

- Literature review: Overall, the literature shows that incentives can be effective at increasing response rates in longitudinal studies, with cash (or cash-like, in the form of vouchers) and higher-value incentives being more effective. Incentives especially effective at increasing response rates for survey modes that typically yield lower response rates, like online or mobile web surveys. Incentive experiments in longitudinal surveys do not always find unconditional incentives to be more effective than conditional, and incentives seem to have an enduring, positive effect on response rates in later sweeps.
- Next Steps: An experiment testing the effectiveness of a web-push time-limited incentive was incorporated into the 'soft launch' of Next Steps sweep 8. Participants received a higher value incentive (£20 rather than £10) if the survey was completed via web within three weeks of receiving the survey invite. This was effective in boosting response, and it was subsequently offered to all study members in the main

stage. The time-limited incentive was, however, no more effective than the standard incentive on overall response rates at the end of fieldwork for all modes.

Next steps and recommendations

The three empirical papers will be published as CLS pre-prints, and submitted to appropriate journals for publication. The findings from this work package will be used by CLS to inform the design of future data collection in the cohort studies. These outputs will also be of much wider interest and utility for other large-scale surveys in designing mixed-mode approaches and the use of incentives. We summarise the broader implications of these findings below.

The research suggests that there are benefits to offering the participants the option to complete surveys in more than one mode: mixed-mode design tends to increase overall response rates, important for large-scale longitudinal studies. However, there is also evidence that different people tend to complete surveys in the different modes offered, and mode may affect measurement. As such, more research is needed to understand the implications of these differences for large-scale studies, particularly longitudinal surveys where measurement differences over time are an additional factor

In terms of incentives, there is evidence to suggest that incentives can boost response rates to surveys, and for longitudinal surveys this boost can be enduring across sweeps. However, the exact combination of the components of an incentive (e.g. conditional versus unconditional, the amount), need to be tested further to understand what is most effective in terms of response, but also most cost-effective, for large-scale longitudinal studies.