

Initial Design of the Millennium
Cohort Study annual web survey
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Introduction

As the Millennium Cohort Study (MCS) cohort members make the major life transition from childhood into adulthood, we are planning to continue to follow them up via home visits at key ages, and to supplement this with more frequent data collection between the home-based surveys. This approach will allow us to capture key measures frequently during this dynamic period of life, and to better capture transitions occurring at different times for different cohort members; it will also facilitate the more frequent updating of cohort members' contact details, to help minimise attrition through lack of contact.

However, it is generally the case that web surveys produce much lower response rates than interviewer-administered surveys. This first short web survey of all MCS cohort members provides an important opportunity to test experimentally whether incentivising cohort members to complete the survey increases the response rate achieved to a sufficiently high level for an online-only approach to be scientifically viable.

Literature

The positive impacts of incentives on response rates in interviewer-based and postal surveys are well-documented in the literature (e.g., Church 1993; Edwards et al. 2002; Singer et al. 1999; Singer 2002; Singer and Ye 2013). Research on incentives in web surveys and in surveys using mixed mode designs suggests incentives can help improve response rates, which are typically lower in these modes than in mail and interviewer surveys (Couper 2000).

One key decision in using incentives is whether they are conditional on completion of the survey, or provided to everybody up front, regardless of survey completion. In longitudinal studies of young adults, in Germany and the US respectively, Castiglioni et al. (2008) and Collins et al. (2000) found that conditional incentives performed better than unconditional. However, Jäckle and Lynn (2008) found that on a longitudinal study of youth in England and Wales, unconditional incentives resulted in higher response rates than conditional incentives – although at the expense of higher item nonresponse rates. In an experiment in the British Household Panel Study, unconditional incentives were found to lead to higher response rates to a request for contact updates, but the increased response rates achieved by unconditional incentives (40%, versus 33% for conditional incentives) was deemed to be not sufficiently high to justify their additional cost (Fumagalli et al. 2010).

Some experiments in longitudinal surveys suggest that the amount paid may be more important than whether the incentive is unconditional or conditional (Collins et al 2000; James 1997). However, when considering evidence on the value of incentives, we should be mindful of the fact that whilst incentives are becoming increasingly widespread in the UK, they are also generally of much lower value than in the US (Laurie and Lynn 2009). UK studies (e.g., Laurie 2007, Brown and Calderwood 2014) have found that small increases in incentives of £3-5 can have a similar positive effect on response rates to increases of \$20-40 in the US.

An additional decision is the type of incentive to offer. A review of population-based longitudinal studies found that where cash or gifts of similar value were compared, it was not clear whether cash was more effective (Booker et al 2011). However, charity donations and lotteries or prize draws tend to be less effective than cash (Henderson et al. 2010; Felderer et al. 2017). In an experimental comparison of lotteries and gifts in a web survey, neither

alone were effective, but the two offered in conjunction increased response rates over the no incentive condition (Bosnjak and Tuten 2003).

Several other considerations arise in introducing incentives in a longitudinal study. First, it may form expectations regarding future incentives among cohort members, affecting their future participation. Reassuringly, evidence suggests that receiving incentives does not create a conditioning effect in later waves. Lynn et al (1997) found that incentive effects on response rates may be largely independent between waves – those who received an incentive in an earlier wave did not respond in different proportions in later waves from those who did not receive the incentive originally. Second, survey participation may be intrinsically motivated, arising from an internal desire to take part and contribute, and the introduction of an incentive may displace this and thereby reduce participation. In an incentive experiment in the Health and Retirement Study in the US, enjoyment of the interview at the first wave was related to response propensity at the second wave. However, among those who received a large incentive at the first wave, those who enjoyed the interview were less likely to take part in the second wave. Thus it appears that the large incentive seemed to cancel out the positive effect enjoyment would have had on response (Lengacher et al 1995).

A more comprehensive review of the literature on incentives is contained in the report by Erica Wong, submitted in parallel to ESRC. To summarise, the literature suggests that incentivising a web survey is likely to increase response rates. Whether an incentive should be conditional or unconditional is likely to depend on the specific context of a survey, but differences in effectiveness between the two approaches appear to be small, and conditional incentives are more cost-effective. There is little UK-based evidence on the optimum value of an incentive, but relatively small amounts appear to be effective. Cash tends to be more effective than lotteries or charity donations as an incentive, although there is some evidence that offering a combination of options works relatively well compared to no incentives. Encouragingly, there appears to be little effect on future participation in a study if an incentive is offered on a one-off basis.

Overall design

This report provides our initial thoughts on the design of the first MCS web survey.¹ This will be further developed over the coming months, and the design may change depending on scientific and feasibility considerations.

Content

We expect the survey to be approximately 20 minutes long, and to cover a variety of content, and will update contact details. Decisions around survey content will be taken with a view to choosing measures that lend themselves to long-term online follow-up.

¹ The web-boost implemented at MCS7 was on a select sample of non-responders/non-contacts from the Age 17 Survey.

Participants

Only cohort members, and not their parents, will be eligible to complete the web survey. All those who were invited to take part in the Age 17 Survey will be invited to participate in this web questionnaire, excluding those who have since permanently withdrawn from the study – approximately 13,500 cohort members.

Programming

Subject to feasibility testing, the survey will be programmed using Qualtrics, specialist survey design software which UCL holds a license for and administered in-house at the Centre for Longitudinal Studies (rather than externally by a survey research agency). To maximise response, it will be device-agnostic, and so will be accessible via smartphones, tablets, laptops and PCs, and on a variety of operating systems. Our initial scoping work indicates that Qualtrics will be feasible for this purpose, and a separate report on this has been submitted to ESRC in parallel.

Implementation

Our plan is that cohort members will be invited to take part in the survey in a letter sent directly to them. Two days later, they will receive an email invitation, if we hold an email address for them. We will also send reminders by email, and possibly by post and/or text message.

The letters will contain a URL that will direct respondents to the survey, as well as a unique ID that they will need to enter to begin the survey. Emails will contain a unique link that the respondent will be able to click on to access the questionnaire, without needing to enter their ID.

Incentive experiment

One of the main features of this web survey will be an experiment around incentives. The aim is to understand how to maximise response to the survey through the use of incentives.

With the caveat that this is still in the planning stage, we expect the incentive strategy to be conditional, so incentive receipt will be conditional on completion of the survey.

We expect the experiment to consist of a control group, and three treatment arms. The treatment arms will vary in the type of incentive provided. At present, our preferred design for the incentive experiment is as follows:

1. E-voucher incentive
2. Charity donation incentive
3. Option given to respondent between an e-voucher or a charity donation as incentive

Control groups will not be offered any incentive.

Subject to budget considerations, the value of the incentive will be the equivalent of £10.

Allocation to any treatment arm versus control will be random. We will produce power calculations in advance of group assignment in order to ensure the experiment has sufficient power to detect small differences in response rates across groups.

We will evaluate the incentive experiment by looking at response rates and sample composition in the different groups.

Timetable

It is anticipated that the survey will be carried out across December 2019 and January 2020. The reason for this timing is to coincide with the Christmas and New Year holiday season, when cohort members who are studying away at university are likely to be back at their parents' home. However, the survey is reliant on processing the cohort member contact information collected in the Age 17 Survey. In the event that the contact information cannot all be processed in time, the contact information from cases who are in the first school year in the sample will be prioritised, and those cases will be invited to participate (around 11,500 cases). The remaining 2000 cases, who are in the second school year in the sample, will then be invited to participate as a second batch at a later date.

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