

## Longitudinal research: Mix it up!

How and why Understanding Society's Innovation Panel is trialling mixed modes in its research



# Since 2009, researchers working on Understanding Society have been trialling cutting-edge mixed-mode research which will help to shape the future of longitudinal studies.

Traditionally, surveys administered by interviewers have been the preferred technique for researchers in the social sciences. The merits of face-to-face data collection are well known but we know less about people's preferences for how they would like to respond to surveys and how these preferences could ultimately improve or damage participation and data quality. With the digital age firmly here, are there alternative ways to collect data and what new possibilities might this open up for the future?

Understanding Society's sample, established in 2009 and representative of the UK population, is spread across the full-age range. Young people aged 10 and over and all adults in the sample households form the panel. This diversity offers tremendous scope for innovation. But it also means that a move to a mixed mode survey method needs to be carefully considered, particularly with the added dimension of surveying every member of the household, where people within households may have different preferences. Annette Jäckle, Innovation Panel Research Director at Understanding Society and her team set out the advantages and disadvantages based on new research.

## Why use mixed modes to collect data?

Using telephone or online surveys may help lower the costs of the survey. Offering different ways in which the survey can be completed, may also make it easier for people to participate, which could improve the quality of the data collected.

With a multi-topic and longitudinal survey like Understanding Society, there is also always pressure to broaden the content or adapt it to the latest economic or social events. The study responds to this challenge by periodically reviewing its long-term content plan whilst maintaining the tremendous benefits that come through asking the same questions over time. Mixed mode could make it more feasible to build associated studies around the core study for specific sub-samples, without significantly impacting on the core study.

## How is mixed-mode research carried out?

The main bulk of Understanding Society participants are currently interviewed face-toface by an interviewer who visits them at home. However, Understanding Society's Innovation Panel (a test bed for all sorts of experiments with questions and procedures that are too risky for the main panel) has done things differently.

The Innovation Panel which is made up of 1,500 households has invited individuals/households to use other modes to answer the survey questions. These innovations have included telephone and online surveys.

To test the effects of using a mix of data collection methods a random set of households were allocated to a sequential mixed-mode design. The adults in these households were first asked to complete their interview by telephone or online. Those who did not respond were then followed up by face-to-face interviewers. The remaining third of households were issued directly to face-to-face interviewers.

## What are the aims of the mixed-mode research for Understanding Society?

The main aim of the research to date has been to test whether using mixed modes would actually save data collection costs for Understanding Society, and whether this can be achieved without reducing the quality of the survey data. The main focus has been on whether comparable response rates can be achieved with mixed modes compared to face-to-face only. However other aspects of data quality such as measurement error also need careful consideration.

## Key findings

So far the Innovation Panel has carried out experiments with mixed-mode data collection in several waves:

- IP1, 3, 4: solely face-to-face
- **IP2 (2009):** phone + face-to-face versus face-to-face only

Making the move from a single face-to-face mode of interview to a mixed-mode design is a bold innovation, not just for Understanding Society, but for longitudinal experts worldwide.

Peter Lynn, Professor of Survey Methodology at Understanding Society

## **RESULTS FROM MIXED MODE RESEARCH (WAVE 5)**



- **IP5 (2012):** web + face-to-face versus face-to-face only
- **IP6 (2013), IP7 (2014):** web + face-to-face + telephone mop-up versus face-to-face + telephone mop-up

The results showed that response rates for mixed-mode designs tended to be lower than face-to-face interviews. It was expected that certain groups would be more likely to complete the survey online than in a face-to-face interview, for example the younger generations or those with a more busy lifestyle. The experimental results however did not confirm this expectation.

The results from the Innovation Panel (Wave 5) however suggested that offering the option of completing the survey by web was helpful in persuading respondents who had not been willing to participate in the previous wave. Also, response rates with the mixed modes involving web were better when participants were offered a substantial voucher to incentivise them to participate.

## **Ongoing research**

The overarching trend is that it is less likely that all household members complete their interviews when mixed modes are used, than when the survey is done face-to-face.

There were some differences in individual response propensities

- Face-to-face response rates were higher in rural areas than urban; with the mixed mode design including online surveys response rates were higher in urban than rural areas
- Face-to-face those who said they would not complete a web survey were most likely to respond; mixed mode they were the least likely

The research is still to continue into future waves and there is hope that the web may disproportionately add young, full-time employed, busy people – who are generally under-represented in surveys – however more research needs to be carried out to test this. People are more likely to agree to take part in a survey if an interviewer has made the effort to visit their home, but this is expensive. Are alternative ways of conducting interviews feasible for large scale high guality surveys?

The information we get from experiments using the Innovation Panel will help us make better informed decisions about what we implement on the main survey and how we go about it.

Jonathan Burton, Survey Manager at Understanding Society

#### Implications for social science methods

With fewer face-to-face interviews, there is an assumption that the data collection will be cheaper; however, there is always an investment needed for infrastructure and new systems. Benefits and disadvantages need to be considered in the round, with a particular focus on where precisely mixed-mode can play a role in improving participation.

The continuation of mixed-mode research will allow researchers to garner more information on cost implications. The changing technologies that can nowadays be used to collect data could forever change the way longitudinal studies are carried out.

Based on the research carried out to date, Understanding Society is using mixed modes as a way of approaching non-respondents (those who did not give an interview in the previous year) and those who did not respond to the current face-to-face survey invitation. These participants are sent an invitation to complete the survey online and eventually they are called by telephone interviewers.

### Further information and resources

For a comprehensive list of references, please see https://www.understandingsociety.ac.uk/case-studies/mixed-modes

CAWI in a mixed mode longitudinal design by Martin Wood & Sarah Kunz, NatCen Social Research.

Motivational statements in web instrument design to reduce item missing rates in a mixed-mode context by Tarek Al Baghal and Peter Lynn, Institute for Social and Economic Research, University of Essex

Going online with a face-to-face household panel: initial results from an experiment on the Understanding Society Innovation Panel <https:// www.understandingsociety.ac.uk/research/ publications/working-paper/understandingsociety/2013-03> by Annette Jäckle, Peter Lynn and Jon Burton, Institute for Social and Economic Research, University of Essex

If you would like a more detailed briefing on this research or to discuss commissioning research using Understanding Society please email info@understanding society.ac.uk

Understanding Society Institute for Social and Economic Research (ISER) University of Essex Wivenhoe Park Colchester CO4 3SQ Tel: +44 (0) 1206 872957

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