

Understanding Society Innovation Panel Wave 15

Technical report

March 2023

JN 40323130

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Introduction

The UK Household Longitudinal Study (UKHLS) is known to sample members as *Understanding Society*. This major longitudinal household panel survey started in 2009, and is the largest study of its kind, with around 40,000 households interviewed at Wave 1. The study collects data from household members aged 10 and above on an annual basis.

It is commissioned by the Economic and Social Research Council (ESRC) and led by the Institute for Social and Economic Research (ISER) at the University of Essex.

Main fieldwork is complemented by an Innovation Panel which tests significant innovations in methods of data collection and study delivery such as mixed-mode interviewing, differential incentives, question layout and question wording experiments.

This report provides an account of the fifteenth wave of the Innovation Panel (IP15) of Understanding Society, which was undertaken by Kantar Public and NatCen Social Research, working in consortium.

Overview of methodology

IP15 households were issued to one of two modes:

- CAWI first (60% of households)
- CAPI first (40% of households)

CAWI first households that did not fully complete online, were issued to interviewers for follow up by CAPI. During the CAPI stage, interviewers were able to conduct interviews by telephone if that was the preference of the respondent. The web survey also remained open throughout CAPI fieldwork.

The different elements of the study were broadly consistent with previous waves:

- A household enumeration questionnaire, completed once per household to confirm who is currently living there
- A household questionnaire, completed once per household to gather some household level information
- An individual questionnaire, completed by anyone aged 16 or more in each household
- A paper self-completion questionnaire, completed by children aged 10 to 15

In addition, where interviewers were conducting interviews by CAPI, during individual interviews they conducted some physical measures (including height and weight).

Outputs

Data from Understanding Society is deposited at the UK Data Archive after each wave is completed.

1. Sample composition

The sample for the Innovation Panel is entirely separate from that of the main study. Originally selected from the Postcode Address File (PAF), the IP sample is representative of households in Britain. Unlike the main study it does not cover Northern Ireland.

There have been refreshment samples at several previous IP waves to increase the overall sample size: IP4, IP7, IP10, IP11 and IP14, and the sample for IP15 included a mixture of households from the original (wave 1) IP sample and each of these refreshment samples.

In total, 2,578 'active' households were issued at IP15. This included:

- 583 households from the original (wave 1) IP sample
- 267 households from the IP4 refreshment sample
- 316 households from the IP7 refreshment sample
- 240 households from the IP10 refreshment sample
- 403 households from the IP11 refreshment sample
- 769 households from the IP14 refreshment sample.

The number of individuals in the issued sample is shown in table 1.1.

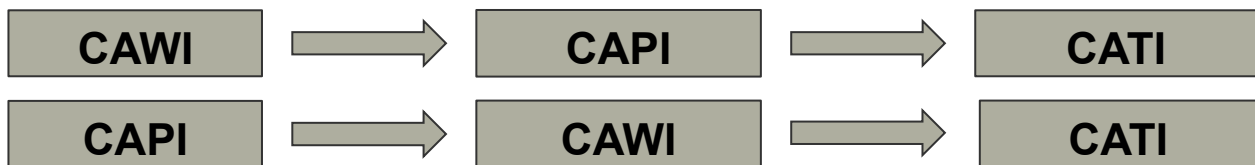
Table 1.1 Number of individuals in the issued sample, by sample type

	Adults (16+)	10 – 15s	Under 10s
Original IP sample	1,146	97	97
IP4 refreshment sample	521	45	39
IP7 refreshment sample	627	55	75
IP10 refreshment sample	458	38	57
IP11 refreshment sample	781	77	101
IP14 refreshment sample	1,451	100	191

2. Fieldwork design

2.1 Fieldwork structure

Fieldwork took place between 15th June and 25th November 2022. Households were allocated to one of the two modes, CAWI-first or CAPI-first, then followed the mixed mode design shown below.



Fieldwork for the CAWI first sample followed a sequential mixed mode design. Households were initially invited to take part online. At the end of the initial web fieldwork period any individuals or whole households that had not taken part online were issued to a face-to-face interviewer. From this point on most of the interviewing was completed face-to-face although the web survey remained available for sample members to complete that way. A small amount of telephone interviewing (CATI) was also undertaken to 'mop up' any remaining individuals that had not taken part towards the end of fieldwork.

For the CAPI first groups the majority of fieldwork was completed using face-to-face interviewing (CAPI), supplemented by a small amount of web interviewing (CAWI) and telephone interviewing (CATI) later in fieldwork to 'mop up' individuals and households that had not taken part. During face-to-face fieldwork the web survey was technically available to these groups (and some sample members requested web login information so they could complete online), but was not offered until the last 3 weeks of fieldwork when anyone who had not yet taken part (and did not have an unproductive outcome that would make it inappropriate) was sent a letter (and email, if an email address was available) inviting them to take part online.

For IP15, all health-related measurements were undertaken by interviewers who had been accredited in how to take these measurements. Interviewer fieldwork in England and Wales was split between Kantar Public and NatCen, and Kantar Public undertook all interviewer fieldwork in Scotland.

2.1.1 Fieldwork timings

The CAWI first sample had an initial web fieldwork period of five weeks. At the end of this period any households that had not completed online were issued to a face-to-face interviewer. The time allowed for face-to-face fieldwork was 17 weeks, with a focus on using telephone to 'mop up' any hard to reach cases in the last three of these weeks. Details are included in table 2.1 below.

Table 2.1 Fieldwork timing

CAWI first	CAPI first
Web only fieldwork	
5 weeks	
Face-to-face fieldwork (web survey remains open)	Face-to-face fieldwork
14 weeks	14 weeks
Telephone mop up	Telephone mop up
3 weeks	3 weeks

2.1.2 CATI mop up fieldwork

In the last three weeks of fieldwork, outstanding cases could be contacted by telephone. Not all live sample was transferred to the CATI mop up, some face-to-face interviewing was still carried out during these last three weeks. Interviewers were also able to offer telephone interviews at any point during face-to-face fieldwork if that was the respondent preference.

2.2 Contact with sample members – continuing sample

Understanding Society puts much effort into contacting respondents and keeping them engaged with the study. As well as contact for each year’s interview, there are also between wave mailings and emails to sample members to feedback findings from the study and encourage people to keep their contact details up to date. This section describes the contact strategy for IP15.

2.2.1 Advance mailing

The advance mailing varied a little depending on issue mode and experiment allocation.

For the CAPI first sample, all eligible sample members aged 16 or over were sent a letter shortly before the start of face-to-face fieldwork. The letter explained that an interviewer would visit soon and would take their height and weight measurements. Additionally, participants were also provided a tape measure and were asked in the advanced letter to undertake their own waist and hip measurements. The advanced letter requested that, once participants had undertaken the measurement, they were to write down their results in a leaflet that accompanied the letter. A change of address card was attached to the bottom of the letter, and the mailing also included a freepost return envelope for the change of address card.

For the CAWI first sample, all eligible sample members aged 16 or over were sent a letter on the first day of web fieldwork asking them to complete the survey online and providing the web address and their login details for doing so. Additionally, the CAWI first sample were also provided a tape measure and asked to record their hip and waist measurements in a leaflet. They were later asked to enter these measurements during their interview. The letter also explained that, if they were unable to complete the survey online, an interviewer would contact them as usual. The letters also included a change of address card and freepost return envelope. If an email address was available, these sample members were also sent an email with a unique link to start the web survey.

Both CAPI first and CAWI first letters also included an information leaflet that gave more details about their annual interview. Information regarding the focus on health for IP15 was highlighted in the advanced letter. Lastly, there was a Covid leaflet which highlighted how the study was working in-line with Government and Market Research Society guidelines to minimise the risk of Covid-19 transmission.

There were 44 different types of advance letter. This number was required because of the various different experiments included on the study. For all addresses in Wales, the letter was sent in both Welsh and English. All letters were designed with Understanding Society branding and were signed by the Director of Understanding Society.

2.2.2 New entrant letters

For the households issued CAWI-first at IP15, it was necessary to have a mechanism to contact individuals who had been added to households during household grids done on the web. Letters were sent to these individuals to provide them with their web login details and ask them to take part in the study online. These letters also included a change of address card and freepost return envelope.

2.2.3 Reminder letters and emails

Adults were sent four reminder emails (if an email address was available) and two reminder letters if they had not completed online by the time these reminder mailings were being prepared. These reminders were sent during the initial five-week CAWI fieldwork period before households were issued to an interviewer.

2.2.4 Interviewer contact attempt with sample members

Where households had been productive at the previous wave, interviewers were instructed to attempt first contact by telephone so they could make an appointment to complete the survey. This can be more convenient for respondents and more efficient for interviewers.

For households that had not taken part at the previous wave, first contact was attempted face-to-face. Households that have not taken part at the previous waves are less likely to take part at the current wave, and an in-person visit from an interviewer is less likely to elicit a refusal than a telephone call. Where interviewers had made repeated unsuccessful face-to-face contact attempts, they would start attempting contact by telephone.

3. Experiments

The focus on IP15 was on health, as such many of the experiments included in the study had a health focus. Health related experiments included were:

- Body Volume Index App
- Other Body Mass Biomarkers:
 - Height and weight
 - Body fat and water percentage
 - Hip and waist circumferences (self measured before interview and within-interview with interviewer for CAPI)

In addition, there were a number of other non-health related experiments at IP15:

- Mixed modes (CAWI/CAPI/CATI)
- Twitter consent
- Spending and saving choices (marginal propensity to consume)
- Informal care
- Asking for Parent Living Apart for other parents' details
- CASI: Alcohol consumption
- Consent to HMRC data linkage
- Improving mobile contact details and consent to send SMS
- National identity

In addition to this, there was the incentive experiment which had continued across multiple waves of the Innovation Panel. Most respondents received a £20 incentive, with just those that had previously been in the £30 incentive group continuing to receive £30, as a reduction to their incentive may adversely impact response rates.

Each of the experiments is described below.

3.1 Mixed Modes (CAWI/CAPI/CATI)

Due to Covid, the previous two waves of the IP, all households were initially invited to complete the survey online; non-respondents to the web survey were followed-up with a telephone survey invitation. At IP15, there was a resumption of face-to-face interviewing. About 40% of households were allocated to the face-to-face first design, with the other 60% allocated to the web first design. All households in samples taken prior to the IP14 refreshment sample maintained the allocations made at IP13.

3.2 Twitter Consent

This experiment repeated consent asked at IP10, aiming to look at the feasibilities and practicalities of linking social media (Twitter) and survey data in a longitudinal context, and how they can be combined to improve the quality of both. Respondents were asked whether they use Twitter, and if so, their willingness to link their Twitter account to their survey responses.

The main purpose of the research was to obtain consent to linkage. Given this was asked at IP10, this enabled for testing in change of consent for those asked previously, as well as asking consent for the first time to IP11 and IP14 refreshment samples.

In addition to wording updates, an experiment on additional consent information placement was included. Half of the respondents were provided 'Help' links between the text and before the consent question, all in a single page. The other half were able to indicate whether they wanted more information before deciding and then eight help links were presented on a separate page with the consent question.

3.3 Spending and Saving Choices (Marginal propensity to consume)

This experiment was designed to explain the large differences in findings across different studies regarding consumers' spending, saving and debt responses to income changes. This experiment sought to understand differences in behaviour through eliciting individuals' responses to hypothetical income windfalls.

Participants were asked how they would respond if they were to receive a one-time downpayment of either £500 or £2,500. The condition of the amount was then crossed with a second condition, varying the duration that windfall payment would be spent over, either 3 or 12 months. For both conditions, respondents were equally allocated to the respective conditions. Respondents were asked whether they would spend more, less or the same based on the amount and duration. Thereafter, if their spending habits would be altered based on the amount and duration, how much more or less would this amount be.

3.4 Informal Care

Measurement of informal care is problematic for several reasons. Caregiving is a complex concept and ontologically vague. Linguistically speaking, 'care' can refer to emotions and/or practices and, in common parlance, 'caregiving' tends to embody a nebulous set of activities. Informal care is often defined as unpaid, non-contractual or that which happens outside of formal employment, which may seem straightforward, but this can also pose measurement challenges where boundaries of paid/unpaid, job/non-job-related are blurred. Furthermore, personal identities can often shape whether individuals recognise themselves as unpaid carers and/or recipients.

Three different sets of questions were used to identify informal caregivers to help pinpoint the best use of informal caregivers to use for Understanding Society for future studies.

1. The first version utilised the current version of the Caring module and had no change or additional questionnaire time as it is the core content and used as the 'control' set of questions.
2. The second version is a revised version of the Caring module, with amendments to wording to better reference all types of caring.
3. The third version is a combination of existing questions in the Disability module and the ADL/IADL questions in the Social Care module.

The condition for the questions is designed to ask comparable questions of co-residents: recipients and providers. For receipt, individuals got the ADL/IADL questions if they had any health problems or if aged 65 or over. For provision, individuals were asked a tailored question on health problems to see if anyone in their household has difficulties. If so,

questions followed-up about what support they provide, if any, in terms of ADLS/IADLS. That way the questions on both sides would be broadly the same.

3.5 Asking for Parents Living Apart other parents' details

At IP13 and IP14, respondents with partners that live apart in different abodes were asked for additional contact details for their partners. The additional questions collected contact details of these partners in a manner like questions asked in Stable Contact Details. The request made clear the information collected will potentially be used to invite these partners to answer a survey, with no information about the respondent being given other than to say they gave the contact details.

At IP15, as a continuation of the preparation for the Significant Others Survey on the main Understanding Society study, asking for other contact details was done for parents living apart. In the survey, when a respondent identified as having children they do not live with, follow-up questions were asked about those children, including who they live with. As respondents may have multiple non-resident children with multiple partners, the questions looped all non-resident children with different parents, so respondents could potentially have been asked for multiple contact details.

As outlined, as this experiment was intended as a pilot exercise test the feasibility of asking contact details for parents living apart in this manner.

3.6 CASI: Alcohol Consumption

A review of Understanding Society questionnaire identified that the usage of the Audit-C alcohol consumption questions differed somewhat from what the NHS use for their measurements. The difference is how the surveys ask about alcohol in either drinks or units, with the latter being a specific amount of alcohol.

Understanding Society surveys have asked those who have had a drink in the past 12 months about how often they have a drink with alcohol, how many drinks they have on day they have alcohol, and how often they have 6+ (for women) or 8+ units (for men) of alcohol on days they are drinking, a drinks-drinks-units pattern. The NHS asks similar questions but asks for them in terms of drinks-units-units. An alternative hypothesis, based on psychological research in survey response, suggests that given people may not think in terms of units, drinks may be more intuitive and conform to how respondents formulate responses.

This experiment sought to assess whether asking respondents about alcohol consumption in terms of either “drinks” or “units” alters responses significantly. To test this hypothesis more clearly, the NHS version is tested to a version asking these same questions in a drinks-drinks-drinks pattern.

This module was asked in self-completion section in face-to-face surveys, to minimise social desirability bias, and was asked of all respondents. The controlling variable, determining which of the two sets of questions respondents will be received was equally and randomly allocated at the household-level.

3.7 Consent to HMRC Data Linkage

This experiment sought to examine reasons why consent rates are much lower in web than face-to-face surveys. Respondents were asked a single consent question (tax record linkage) with some follow-up questions about how the respondent made the consent decision. Some of the questions were previously implemented in IP11. This experiment sought to exploit the mixed-mode design of IP15 (Web and CAPI), as well as the self-completion element (CASI) within the CAPI interview.

The follow-up questions were asked at the beginning of the CASI module, immediately after the consent question. Face to face respondents were allocated to one of three groups, varying where the consent question was asked:

1. CAPI: the consent question is the last CAPI question before the start of the CASI module.
2. CASI: the consent question is the first in the CASI module, and
3. Partial CASI: the consent question is the first in the CASI module, but the question is printed on a showcard and read by the interviewer and not displayed on screen, the respondent enters the answer in CASI.

Contrastingly, Web respondents were allocated to one of two groups, varying how the consent question was asked:

1. The consent question included a photo of and message from the study director,
2. The control group only saw the text of the consent question.

The allocation to treatments were made equally across conditions at the household level.

3.8 Improving Mobile Contact Details and Consent to Send SMS

Questions were asked experimentally at IP12 and IP13 to identify the best ways to capture mobile phone contact details of respondents. These details are of particular importance for the Event Triggered Data Collection (ETDC) study, which uses SMS to ask respondents to complete a short survey about life changes, if any, on a month-to-month basis. The first part of this study sought to test amendments to questions in the Contact Details module, with the aim of increasing the reporting and updating of mobile phone numbers.

Households were randomly allocated to one of two treatment groups:

1. The first group got the 'mobile first' version of the questions that was asked in IP12/IP13;
2. The other group received some amended wording to justify/increase compliance with the request for mobile numbers.

This experiment affected the first questions in the 'prioritise mobile number' version of the Contact Details module used in IP12 (for half the sample) and IP13 (for everyone). To use these contact details as part of the ETDC, consent is also required to send SMS for this purpose. This consent was originally asked of everyone with a mobile number in IP13. Consent was tested experimentally at IP13, with half the sample asked early in the Demographics module, the other half late in the Contact Details module. In IP15, updates were made to this by:

- Repeating the consent for SMS questions for everyone who did not consent in IP13;
- The consent question was only asked in the Contacts Details module;

- One follow-up question was added about reasons for not consenting;
- A repeat of a subset of questions initially asked at IP12/IP13 Mobile Device Use module to understand respondents' mobile use.

The SMS consent questions were not manipulated experimentally and asked as further feasibility testing. However, feed forward variable data was used to account for those who did or did not consent to ETDC at IP13. The wording asking for mobile contact details was experimentally allocated equally among households.

3.9 National Identity

National identities inform behaviours and shape social relations, with evidence for changes both in majority and minority identities in recent years with respect to self-reported identity choice and the meaning people ascribe to it. Combining different identity measures and positioning of the questions might help better understand the meaning respondents ascribe to listed identity categories. This experiment sought to use a random split-ballot experiment and a combination of cross-sectional and longitudinal elements, these set of questions sought to assess whether affective priming and question order of a set of national identity variables are associated with a change of identity choice and meaning. It also aimed to shed light on the meaning that survey respondents ascribe to pre-defined identity categories.

One half of the sample were asked a multiple-choice national identity question and, conditionally on that, a question to list 'Other national identity', as in previous sweeps of the Innovation Panel (Group 1). The other half of the sample were asked an affective 'Britishness' question (importance of being British) before being asked the self-reported national identity questions (Group 2). Respondents were then asked follow-up questions on importance of identity and political views on Brexit and Scottish independence. As with all other questions, these questions have been used in Understanding Society at previous waves. The control variable for ordering of these questions were equally allocated at the household-level.

3.10 Body Volume Index App

This experiment was used as field trial for Wave 16, which will be a health-focused survey, collecting a variety of biomarkers. The Body Volume Index (BVI) app uses a smartphone's camera to capture data on a person's body shape and uses various algorithms to estimate indicators of body shape. These metrics relate to the amount of body fat a person has, such as body fat percentage, visceral fat content, and waist/hip ratio.

At IP15, respondents were asked to download this app and use it to capture these metrics on themselves. Respondents were asked to download the app during the interview; however, usage of the app was expected to be done after the interview or otherwise in the absence of an interviewer. The BVI app was also branded as something specific for use in Understanding Society, and available on both Android and Apple app stores.

This module was experimental along two dimensions:

1. The incentive given for using the app (either £5 unconditionally or conditionally based on participation); and
2. How feedback is referenced (whether feedback is referenced in regard to total body fat, feedback referenced in regard to visceral body fat, or no feedback is referenced)

The consent request is based on previous research done in the IP asking respondents to download and use an app. After the consent request, several follow-up questions were asked to identify if a person downloaded the app successfully or reasons why not participating.

The controlling variables for incentives and feedback were crossed and equally allocated at the household-level.

3.11 Other Body Mass Biomarkers

As per the BVI App experiment, in preparation of the Wave 16 collection of biomarkers, other trials were run on IP15 to test feasibility and best practices. These measures focused on respondents' body mass: waist and hip circumferences, height and weight, body fat and water percentage. These measures were collected by nurses at Wave 2 and 3, however, were undertaken by interviewers at IP15. All measurements were collected using direct measurement by an interviewer for face-to-face respondents and self-reports for all measures from all respondents.

As outlined earlier, in the initial invitation letter sent before the survey, all respondents received a metric-only tape measure (150cm long). The mailing included instructions and a request to do a self-measurement of their waist and hips, and a card for respondents to record their dimensions. During the interview, respondents were then be asked if they completed these measures, and if so, to report what these were. If a high proportion of respondents can provide these measures reliably, this adds to the feasibility of conducting biomarker collection via the web.

The reliability of these measures was tested through the in-interview measures of waist and hips led by interviewers. Whilst interviewers did not physically touch the respondent, they did provide the tape measures, lead the respondent through the measurement and visually inspected and recorded the results. In addition to testing interviewer-collection of these measurements, this can also be used as an objective" measures to compare to the self-reported waist and hip measures collected elsewhere in the interview. These interviewer-led measures are also part of the validation of the BVI app data collected. The BVI app provides an estimate of waist/hip ratio, which will also be calculable from the interviewer-led collection.

Similarly, the body mass index measures collected in interview are comparable to BVI data. Interviewers collected height and weight using stadiometers and scales, which was done both at W2/3 and IP12. The IP12 study showed interviewers were able to collect these measures using these tools. The IP15 measurement differed slightly in regard to the scales being used. Regular scales collecting only weight were used at IP12; at IP15 scales also provided measures of body fat and water percent. The body fat percent is directly comparable to the BVI estimate, and the standard BMI measure (captured by height and weight) is more broadly used in comparison to the BVI measures in regard to outcomes.

These request for these measures were not conducted experimentally, but rather as a pilot testing feasibility and quality, and to act as validation indicators for other measures collected in the study.

4. Fieldwork documents

The experimental nature of IP15, and the collection of health measures meant a large number of documents were required to support fieldwork.

4.1 Advance letters

As covered in section 2.2.1, all adults were sent an advance letter to inform them that fieldwork was starting for the study. Included with the letter there was a participant information leaflet to inform study members of the study. Unlike IP12, information regarding the health-focused aspect of the study was included in the content of the advance letter rather than the leaflet, highlighting that participants would be asked for this during their interview.

Alongside the advanced letters, the following materials were sent to participants:

- Information leaflet
- Covid leaflet

4.2 Interviewer materials

As IP15 saw the return of face-to-face fieldwork, there were a number of documents required to support interviewers conduct fieldwork. Prior to beginning fieldwork interviewers received a work pack. Interviewers received Core Instructions – a large document containing core information that covers all waves of Understanding Society and detailed information about a variety of elements of the survey, such as: tracing respondents, maximising response, and practice interviews. Additionally, interviewers also received Project Instructions – which covered elements of interviewing that were specific to IP15. As this was a health-related study and interviewers were required to undertake measurements, interviewers were also provided with two biomedical instructions documents (Biomeasure Protocols document and BVI App User Guide). The following list contains what the initial pack contained, with items in bold unique to IP15:

- | | | |
|----------------------------|------------------------------------|---|
| • Change of Address Card | • Contact Us doc | • BVI App User Guide |
| • Core Instructions | • FAQs doc | • Youth self-completion questionnaire |
| • Project Instructions | • Stable Contact Letter | • Freepost return envelopes for self-completion questionnaires & private and confidential youth envelopes |
| • Generic Advance Letter | • Information Leaflet | • Privacy Notice |
| • Research Case Studies | • BVI App Leaflet | • Info on adding Education records |
| • Thank You Card | • Interviewer Card (Kantar/NatCen) | • Consent info leaflet |
| • MRS Leaflet | • Linking Data Flowchart | |
| • Sample Information Sheet | • HMRC Consent Leaflet | |
| • Assignment Sheet | • Showcards | |
| • Maps | • Biomeasure Protocols | |

4.2.1 Consent Documents

At IP15, all consent was collected verbally. Thus, unlike IP12, there was no requirement for consent forms. Interviewers were instructed to read the relevant text from the CAPI script and then hand the leaflet to the respondent. Thereafter, finally confirming in the script that this had been done.

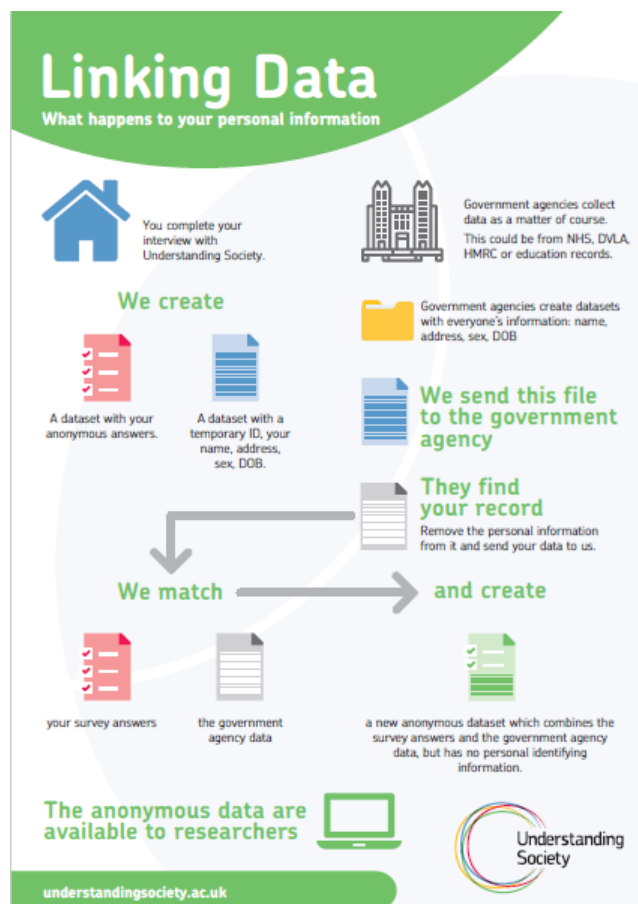
As per each wave, for the Youth Questionnaire – interviewers were required to obtain parental permission for any 10–15-year-olds to complete the questionnaire. Additionally, consent from the 10–15-year-old was also required.

Consent was also asked at IP15 for the following:

- **Employer Link** – Consent to link to records held by the Office for National Statistics (ONS).
- **NEST**: Consent to link to records held by the National Employment Savings Trust (NEST)
- **Education Consent**: Consent to link to records held by Department for Education (DfE). Separate question for child records where also relevant.
- **HMRC**: Consent to link to records held by HMRC.

Interviewers were provided with the consent flowcharts which were to be referenced if the respondent had any questions.

Figure 4.1 Linking Data Flowchart



4.2.2 BVI App Leaflet and User Guide

The BVI app leaflet and user guide provided details on the purpose and the function of the BVI app. Interviewers were provided copies of the BVI App leaflet and BVI user guide for participants. These were also available online on the Understanding Society website, with a link in the leaflet, too.

Figure 4.2 BVI App Leaflet

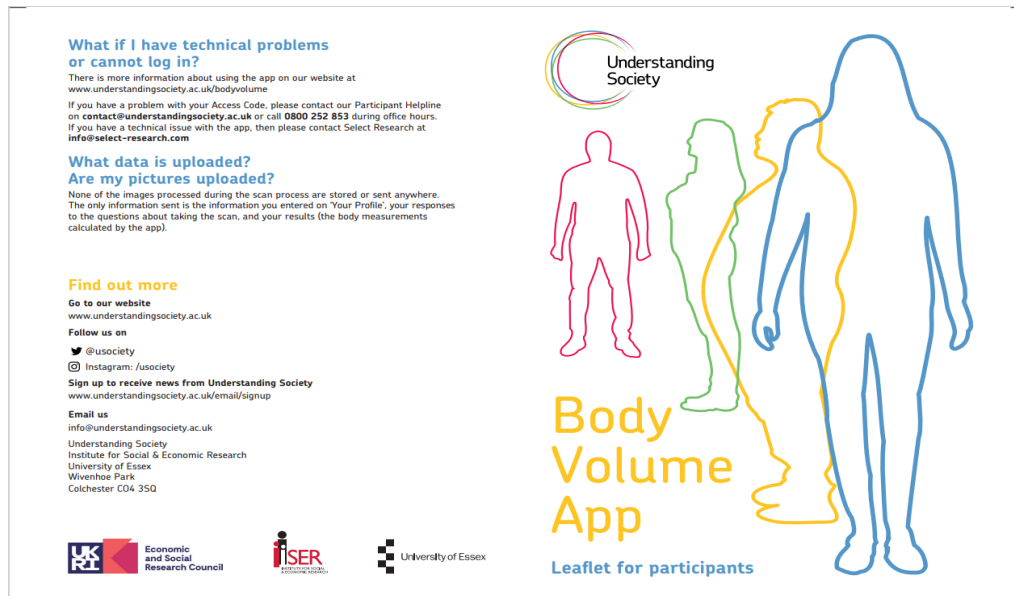
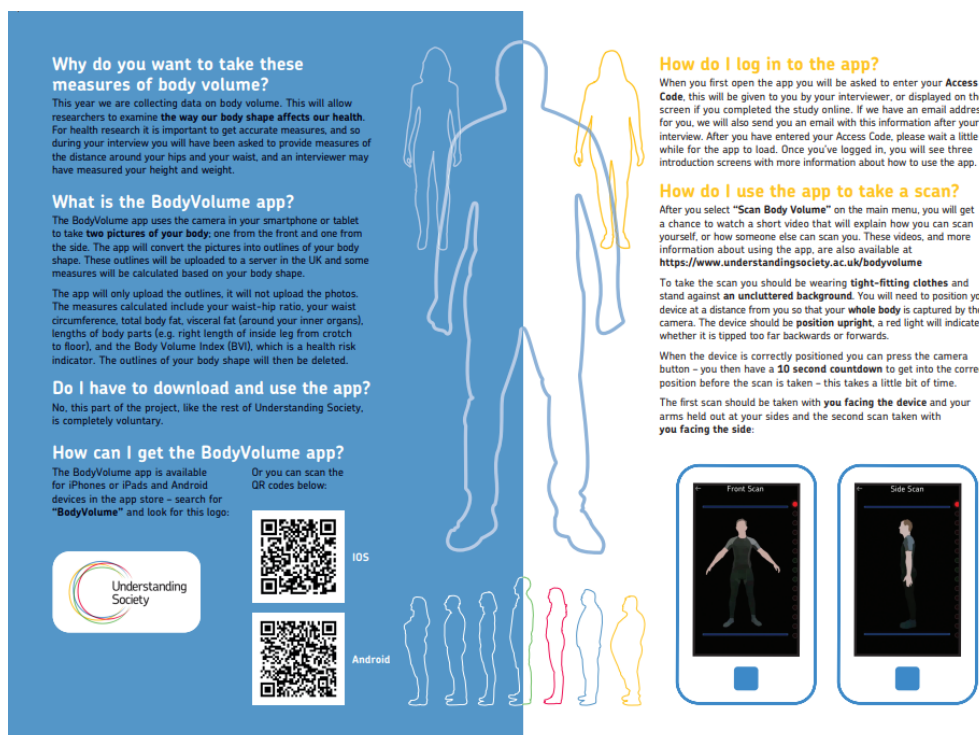


Figure 4.3 BVI App User Guide



4.2.3 Biomeasure Protocol document

Interviewers were provided a protocol document that outlines detailed instruction on how to perform all the biometric measures needed in the IP15 survey. The instructions covered:

- Height measurements
- Weight, body fat and body water measurement
- Waist and hip circumference

Interviewers were instructed to readthrough the document before undertaking accreditation and utilise the document for practice. Additionally, interviewers could also refer to their protocol document during an interview.

4.2.4 Core and Project Instructions

As in all USOC waves, interviewers were provided with the Core Instructions and the wave specific (IP15) Project Instructions that covered all IP15 specific information relation to modules and bio measures.

5. The interview

The main component of the IP15 interview was the individual adult questionnaire. This was administered using a CAI script, and interviews were attempted with all individuals aged 16 or more in the household. The majority of interviews (71%) were conducted online, with 27% completed by CAPI and the remaining 2% conducted by CATI.

Other elements of the IP15 interview were:

- The household enumeration grid and household questionnaire (completed once per household)
- The youth self-completion questionnaire for 10-15 year olds (on paper)
- A proxy interview for adults that were unable or unwilling to complete a full interview

5.1 Interview length

Median interview lengths are given separately for different modes in table 5.1.

Table 5.1: Median interview lengths (hours, minutes and seconds) by interview type

Questionnaire element	CAWI interviews	CAPI interviews	CATI interviews
Household questionnaire (including enumeration)	0:12:16	0:14:39	0:12:49
Individual adult questionnaire – total (CAI +CASI)	0:38:31	1:04:08	0:39:47
CAI proxy questionnaire	n/a	0:04:31	n/a

5.2 Questionnaire programming

The CAI instrument was programmed using Unicom Intelligence software (previously known as IBM Data Collection), which is able to handle the complexity of the Understanding Society questionnaire. The same script was used for CAWI, CAPI and CATI, with some minor modifications to allow for mode type. Two scripts were created, the first was at household level and included the household enumeration grid, the household questionnaire and administrative content such as call records. The second was the individual level script which included the adult interview, proxy interview and administration of the youth self-completion questionnaire.

5.3 Youth self-completion questionnaire

Youth questionnaires for sample members aged 10 to 15 were completed on paper. These were sent by Kantar Public's head office to respondents along with a £10 voucher.

Where the household completed the survey online or by telephone, questionnaires were posted to a parent (who had completed online) with a request to ask their child to complete and return the paper questionnaire. For face-to-face interviews, interviewers provided 10-15-

year-olds the paper questionnaire and a blank self-addressed envelope to seal the completed questionnaire within. Incentives were sent by Kantar Public's head office once a youth self-questionnaire was completed.

5.4 Translations

The CAPI questionnaire and documents were translated into Welsh. However, no respondents required a Welsh interview.

6. Briefings

All interviewers working on the study were fully briefed in virtual briefings before the start of fieldwork. In addition to the standard briefing, interviewers were also required to undertake an accreditation session to test they were able to undertake the measurements correctly and safely.

6.1 Interviewer briefings

Although most interviewers who worked on IP15 had prior experience working on Understanding Society, the briefings covered all aspects of general fieldwork procedures. However, briefings were primarily focused on elements that were new or unique to the study. Briefings lasted for an average of 4 hours and covered:

- Information on the Innovation Panel
- Overview of IP15 experiments
- Biomeasures
- Interviewer task for IP15
- Audio recording
- Interviewer materials
- Practice script setup
- Maximising responses
- Field admin
- Accreditation process

The Biomeasures component of the briefing detailed the measurements that were required to be taken for IP15. Interviewers were provided with information on the equipment required to undertake the measurements, how these were supposed to be undertaken and tutorials for each type of measurement.

6.2 Accreditation Process

Interviewers were required to undertake an accreditation process after the briefing. Kantar Public and NatCen organised an accreditation session in which interviewers arrived with their equipment to the training location to complete accreditation.

Accreditations involved observing each interviewer complete the following:

- Height measurements
- Weight with body fat and body water %
- Waist and hip circumference
- Organisation and packing away equipment.

Interviewers would pass the accreditation if they made no mistakes, or a small number of minor mistakes (such as forgetting to ask the respondent to empty their pockets before being weighed). On passing, any minor mistakes were fed back to the interviewer to remind them

of the correct procedure. If they made several minor mistakes or a major error (such as incorrectly recording a reading) the interviewer would have to repeat the accreditation for that measure later in the day.

7. Response

7.1 Household level response rate

Of the 2,578 households issued for IP15, 14 were ineligible but an additional 80 eligible 'split off' households were created during fieldwork¹, meaning there were 2,644 eligible households in total. Of eligible households, 65% were productive, but this varied for the different samples included, as shown in table 7.1 below.

Table 7.1 Household level response rate, by sample type

	Original IP	IP4 refresh	IP7 refresh	IP10 refresh	IP11 refresh	IP15 refresh	Total
Any productive	71.1%	67.1%	67.2%	59.8%	55.0%	65.2%	64.9%
Fully productive	48.7%	50.2%	44.5%	39.4%	39.6%	43.9%	44.7%
Partially productive	22.4%	17.0%	22.7%	20.3%	15.4%	21.2%	20.2%
Any unproductive	28.9%	32.9%	32.8%	40.2%	45.0%	34.8%	35.1%
HH element(s) only	2.8%	2.9%	1.5%	4.1%	1.5%	4.4%	3.1%
Refusal	11.5%	12.6%	16.6%	16.6%	24.4%	13.6%	15.4%
Non-contact	6.7%	7.6%	6.1%	10.8%	7.6%	7.1%	7.3%
Other unproductive	7.8%	9.7%	8.6%	8.7%	11.5%	9.7%	9.3%
<i>Base</i>	<i>599</i>	<i>277</i>	<i>326</i>	<i>241</i>	<i>409</i>	<i>792</i>	<i>2,644</i>

¹ A split off household is created when an original sample member moves out of the household they had been living in.

There was a big difference in response rates dependent on whether the household had taken part at the previous wave: 78% of households that had been productive at IP14 were productive again at IP15, but only 25% of households that had not been productive at IP14 were productive at IP15. This is shown in table 7.2.

Table 7.2 Household level response rate, by previous wave participation

	Households productive last wave	Households not productive last wave	Total
Any productive	78.4%	25.4%	64.9%
Fully productive	54.7%	15.3%	44.7%
Partially productive	23.7%	10.1%	20.2%
Any unproductive	21.6%	74.6%	35.1%
HH element(s) only	3.1%	2.8%	3.1%
Refusal	9.4%	32.8%	15.4%
Non-contact	4.0%	17.1%	7.3%
Other unproductive	5.1%	21.8%	9.3%
<i>Base</i>	<i>1971</i>	<i>673</i>	<i>2644</i>

7.2 Individual level response rate

There were 5,062 eligible adults issued for IP15 (including new entrants). Of these, 2,654 (52%) completed a full adult interview and a further 34 partially completed an adult interview. There were also 36 proxy interviews (0.7%). The response rate was again much higher for adults that had taken part at the previous wave (75%, including partial interviews) than those that had not (18%). This is shown in table 7.3.

Table 7.3 Individual level response rate, by previous wave participation

	Adults productive last wave	Adults not productive last wave	Total
Full adult interview	74.5	17.1	52.4
Partial adult interview	0.8	0.5	0.7
Proxy interview	0.4	1.3	0.7
Unproductive	24.3	81.2	46.2
<i>Base</i>	<i>3,115</i>	<i>1,947</i>	<i>5,062</i>

In households where at least one adult took part in the survey, there were 257 eligible 10 to 15 year olds. Of these, 138 (54%) completed a youth paper questionnaire.

8. Data

8.1 Combining CAWI and CATI data

At IP15 there were two sources of CAI data to be merged – CAPI and CAWI². This meant the first stage of data processing was combining the CAPI and CAWI data together.

There were measures in place within the electronic sample management system to minimise the chances of duplicate interviews being conducted on CAPI and CAWI. Data was passed between the CAPI and CAWI systems daily but the transfer of information to and from CAPI was reliant on interviewers synchronising their laptops. In general, interviewers would synchronise each day that they worked on Understanding Society, but there could be circumstances under which they did not. There were therefore a very small number of duplicate interviews across CAPI and CAWI and the data merging process needed to take account of these. If both interviews were fully complete, then the more recent interview was usually selected.

While IP15 used the same CAI script across modes (with routing to tailor question wording depending on the mode), there were some questions which had to be scripted separately for different modes because different question layouts were used. For example, at some questions the CAWI script made use of drop down lists rather than standard response lists. In raw data there would be two versions of the question, one for CAPI and one for CAWI so the formatted data needed to draw data from both of these.

8.2 Data scanning and reconciliation

The vast majority of Understanding Society data was collected using CAI scripts. The scripts made use of consistency checks and range checks to clarify any data discrepancies with respondents as they arose. This meant there was little need for any cleaning or editing of the data after fieldwork.

The exception to this was the data from the youth self-completion questionnaires.

As these were completed on paper there could be data inconsistencies such as missing data, routing errors, multiple answers at single choice questions, and values out of range. Questionnaires were scanned to capture the data, and then a series of checks were undertaken to find any inconsistencies. Rules were agreed for how to handle data inconsistencies and edits applied in accordance with these rules.

Scanned data from youth self-completion questionnaires needed to be reconciled against CAI data to ensure data was attributed to the correct sample member. This was done using serial number, name, date of birth and gender.

8.3 SIC and SOC coding

Questions from the employment and proxy sections of the questionnaire were coded to 4 digit SIC and SOC codes. The codes and verbatims were included in the data.

² Whilst some interviews were conducted by CATI, this was done by interviewers using CAPI systems, so the CATI data was held in the same place as CAPI data and therefore did not present an additional source of data that required merging.

8.4 Data checking

Once data from all sources had been combined and formatted, a series of checks were undertaken to validate the data and ensure consistency of format. Three rounds of checking were employed:

- Administrative checks on individuals and households – these were to ensure that all households and individuals were included in the data with a final outcome, that individuals were finally located in one household, that outcomes were consistent with the presence of raw data, and that joiners added to the household grid were accounted for.
- Structural checks on all files – these checked the format of files, and also that the right households and individuals were included in each file.
- Routing checks – these checked, for every variable, that a response was present when there should be a response, and not present where there should not be a response, according to questionnaire routing.