New for IP12

OVERVIEW GUIDE FOR DATA USERS

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Understanding Society

Economic and Social Research Council

Contents

New for Wave 12

The *Innovation Panel* (IP) develops and tests leading-edge survey methods for longitudinal survey research and informs the main *Understanding Society* (UKHLS) parent survey.

The IP experiments in Wave 12 focus on health and include the collection of biomarkers and medical measures by three different modes. These included traditional interviewer and web designs with extra biomarkers collected by nurse-led interviews. Bio-medical Health Assessment measures were last collected in Wave 2 and 3 of the main UKHLS Survey.

Fieldwork

IP12 consisted of five samples: the original sample from IP 1 and refreshment samples included at IP4, IP7, IP10, and IP11, totalling 1408 households and 2,162 interviewees with an individual response rate of 78.7%.

Due to the change in design and focus at IP12, all sample house holds were reallocated one of the three interview designs, independent of the household's past mode allocation. This new allocation at IP12 assigned households in equal proportion to the three modes:

- face-to-face with a nurse
- face-to-face with an interviewer
- self-completed online

Further reading is contained within the Fieldwork Documents.

Response mode

Any household who did not respond online was then re-assigned to an interviewer (not a nurse). Subsequent mop-up interviews, for non-respondents, allowed all samples to respond via the web or telephone regardless of their allocated mode.

Tips for analysts:

The experiment was designed without the use of telephone mop-up interviews. Therefore, the small amount of interviews collected by telephone should be analysed along with web respondents, as the documentation and method of remote delivery used were the same.

Table 13.29. Mode of individual response and total overall, including the mop-up phase.

Responding Mode	Nurse	Interviewer	MM	Total
Nurse	95.5% *677*	---	---	31.3% *677*
Interviewer	---	85.0% *562*	26.4% *209*	35.7% *771*
Web	4.5% *32*	15% *99*	73.7% *583*	33% *714*
Total Ind.	**709**	**661**	**792**	**2162**

Tips for analysts:

Variables indicating the device used to capture the online interview are available from the seventh wave in the data file **INDRESP**: w_deviceused, w_deviceos, w_devicemodel, w_browserused, w_browserversion, w_screenresolution, in the file w_indresp_ip. Note the initial w_needs to be replaced with the wave-specific initial letter.

Biomarker and sample collection experiment in IP12

IP12 collected a number of biomarkers throughout the survey. Which biomarkers are collected and how, is determined by mode of completion. The exception is self-collected blood pressure – all respondents regardless of mode were asked to complete these measures in the same way. Full details of the protocol for each measurement by mode are included in the Ip12 protocol paper, and are highlighted below.

Nurse and mixed mode allocation

The goal of this IP was to compare interviewer and participant data collection to a standard of nurse-collected biomarkers. Both interviewer- and nurse-led data collections included measurements of blood pressure and height and weight. Nurse-led interviews included an additional collection of full blood, dried blood spots and a hair sample.

Interviewer-led and web respondents were given a kit containing materials to enable dried blood spots and hair samples to be taken independently and returned at a later time.

All participants were asked to collect a blood pressure measurement prior to completion of visit or web data collection, incorporating an experiment to examine prosocial vs informational content on response and quality of measurement.

Tips for analysts:

The variable used for allocation to mode **ff_gridmodew12** is in the data file **HHSAMP.** Variable **l_actual_mode** in **INDRESP** indicates whether the interviewer, nurse or participant conducted the individual survey. Variable **l_indmode_int_type** also specifies the **type** of interview including telephone and proxy interviews.

Face-to-Face (nurse, interviewer)

- **Blood pressure**. In the interview, both nurses and interviewers asked respondents consent to take blood pressure readings. Blood pressure cuffs were provided to nurses and interviewers who took up to three measures.
- **Height and weight**. In the interview, both nurses and interviewers asked respondents to consent to take actual height and weight measures using a stadiometer and scale.

Nurse

In addition to those reported above, nurses also asked respondents to give:

- **Peripheral blood sample**. Drawn intravenously using several vials, and sent directly to the lab.
- **Dried blood spot**. While the nurse helped lance the finger and place the blood spots, respondents were asked to send back the dried blood spot sheet after the interview to allow it to dry fully before posting to ISER.
- **Hair sample**. The nurse cut and sent back a hair sample to test for hormones to ISER.

Interviewer

In addition to blood pressure, height and weight assessments, interviewers left a kit for respondents to take and return to ISER themselves:

- **Dried Blood Spot**
- **Hair Sample**

Web

In addition to blood pressure, respondents were asked if they were willing to receive kits to collect and return to ISER themselves:

- **Dried Blood Spot**
- **Hair Sample**

Further details are listed below under the heading Hair and Blood sample analytes.

Visual guide to each collection mode

Take a look at the modes in more detail in the Main IP User Guide and health IP flowchart.

Data Files and questionnaire modules

Find the variables you need for your research by searching for the variable name or data file within the Variable Search. Use the Questionnaire Module to see the areas covered by each section of the Study within any wave.

Tips for analysts:

Take a look at these data files to analyse biomarker data collected: **INDRESP** and **HAIR**.

Additional data files for IP12 include: **HAIR** and **EXPERIENCE**.

HAIR contains variables on the collection of hair during the nurse interview visit.

Participant experience

In order to maximise learning for the future, during the main interview and in a subsequent follow-up survey, we asked participants about their reasons for refusing particular measures, and whether they would be willing to provide samples in a similar way again.

Tips for analysts:

Questions asked in the main interview are in the **INDRESP** file. For each measure there are a set of variables about why measures weren't taken. These can be found in the main IP User Guide in section 18.28.

Questions on follow-up participant assessments are listed in the **EXPERIENCE** data file.

EXPERIENCE includes one off questions about the respondents' experience of the interview, 1163 respondents answered questions about the kit supplied, such as whether the respondent would provide blood samples, the experience of being in IP12 and so on.

Procedural experiments

Invitation to complete pre-interview blood pressure measure: information treatment vs pro-social appeal

This experiment included sending a different advance letter to three random groups: one-third of the sample were provided information on their nearest pharmacy to enable blood pressure measurement, one-third an altruistic/pro-social appeal text to encourage participants to get their blood pressure measured; the remaining sample – the control group, did not receive any encouragement.

All sample members received a conditional £5 if blood pressure was reported at the time of their interview/when they completed the web survey. Allocations to treatment were at household level so everyone in the household was treated the same.

Blood pressure was also measured on the interviewer and nurses' arm so that the accuracy of the self-reported blood pressure could be assessed.

Tips for analysts:

Variables used for this experiment are in the data file **INDRESP**. Variables for **self-blood pressure**; include: l_slfbpchk, l_slfbpday, l_slfbpmnt, l_slfbptim, l_slfbploc, l_slfbplocoth_code, l_slfbpdatasys, l_slfbpdatadia, l_slfbpdatapul, l_noslfbp1, l_noslfbp2, l_noslfbp3, l_noslfbp4, l_noslfbp5, l_noslfbp6, l_noslfbp97, l_noslfbpoth_code, l_slfbpprob, l_slfbpprres_code, l_debslfbp.
Note: new entrants to the study do not receive an interview letter therefore should not be included in the Blood Pressure experiment analysis.

Measured blood pressure variables are: l_systolic1, l_diastolic1, l_pulse1, l_systolic2, l_diastolic2, l_pulse2, l_systolic3, l_diastolic3, l_pulse3.

Questionnaire design experiments

Collecting of mobile phone numbers

Mobile phone numbers are collected at the end of the interview at each wave. Given the potential importance of contacting respondents on their mobile phone in upcoming waves, this experiment explored alternative designs to better ensure mobile numbers are collected.

In the control group, participants were asked the questions as per previous waves. The alternative condition asked respondents specifically about mobile phone numbers after which, they were asked for all of the remaining contact details normally asked, similar to the normal design.

Allocations to treatment were at household level so everyone in the household was treated the same. Households were allocated randomly and equally to conditions (50% each).

Tips for analysts:

The controlling variable used **ff_mobexp_w12** is in the data file **HHSAMP**.

The variables affected by this experiment are in the file **INDRESP**: l_rphmob_code, l_rhland_code.

Reporting of height and weight

Height and weight were measured to calculate body mass index, a measure of adiposity. The aim of this experiment was to compare self-report with measured data, and more specifically if participants are asked to report their height and weight in the main interview versus self-completion section affect the accuracy of individuals' responses.

Households in face-to-face modes (nurse and interviewer modes only), were randomly assigned to one of two groups: self-completion mode and interviewer-administered group.

Allocation to this experiment is done at the household level; households were allocated randomly and equally to conditions (50% each).

Nurse and interviewers assessed height and weight using the protocols previously established in Understanding Society Wave 2 Nurse-Protocols.

Tips for analysts:

The allocation variable used **ff_height** is in the data file **HHSAMP**.

The variables affected by this experiment are in the data file **INDRESP**. Variables **measured by the interviewer/nurse include**: l_hlht, l_hlhtf, l_hlhti, l_hlhtc, l_hlwt, l_hlwts, l_hlwtp, l_hlwtk, l_hlwte, l_hlwtl

Variables **self-reported** by respondents include: l_schl (l_schlht, l_schlhtf, l_schlhti, l_schlhtc, l_schlwt, l_schlwts, l_schlwtp, l_schlwtk, l_schlwte, l_schlwtl

Hair and Blood sample analytes

Analytes from hair samples:

- Cortisol (pg/mg)
- Cortisone (pg/mg)
- Testosterone (pg/mg)
- Progesterone (pg/mg)
- Dehydroandrosterone (pg/mg)

Tips for analysts:

Hair was collected from both children and adults. Youth data is contained in the **YOUTH** file and adult data in the **INDRESP** file. To analyse the complete set of data in the **HAIR** file, users will need to link both the **INDRESP** and **YOUTH** files using the variable **Pidp**.

Analytes from Blood samples:

These variables are derived from full blood samples

- L_FB_TRIG full blood triglycerides (unfasted) mmol/l
- L_FB_CHOL full blood cholesterol (total) mmol/l
- L_FB_HDL full blood high-density lipoprotein cholesterol mmol/l
- L_FB_HBA1C full blood glycated hemoglobin (ifcc standardised) mmol/mol hb
- L_FB_HBA1C_CORRECTED full blood glycated hemoglobin (ifcc standardised) mmol/mol hb - corrected

These variables are derived from dried blood spot

- L_DBS_TRIG dried blood triglycerides (unfasted) mmol/l

- L_DBS_CHOL dried blood cholesterol (total) mmol/l
- L_DBS_HDL dried blood high-density lipoprotein cholesterol mmol/l
- L_DBS_HBA1C dried blood glycated hemoglobin (ifcc standardised) mmol/mol hb

Tips for analysts:

Users can find blood sample data in the **INDRESP** file.

Dried blood samples and Lab Closures

The closure of labs during the COVID-19 pandemic resulted in the dried blood samples being analysed at different times. The measurements that were made after the lab closure are impacted by that closure. To identify these the indicator variable **LATE_LAB_BATCHES** in **INDRESP** shows whether the samples were processed before or after the lab closures. A value of 1 indicates they were analysed after the lab closures.

Biomarker weights for IP12

For interviewer or nurse measured estimates of blood pressure please use **l_indbpip_xw** weight, and those of height and weight please use **l_indbmip_xw**. If you are interested in combining measured and self-reported blood pressure and/or height and weight measures you could either use a suboptimal weight **l_indinip_xw**, or create your own weight tailored to your analysis (use **l_indinip_xw** as your base weight). The training material for creating your own weight can be obtained by sending a request to usersupport@understandingsociety.ac.uk.

Tips for analysts:

Information on how the weights were constructed can be found in the main IP User Guide.

The weights for measured blood pressure **l_indbpip_xw** and for height and weight **l_indbmip_xw** can be found in **INDRESP**. If you are interested in comparing self-reported measures to those obtained by an interviewer and/or nurse please follow the guidance in the weighting FAQs (question 16) on creating a weight for this purpose.

Acronyms and terminology explained

The following acronyms explain the biomarkers and terminology used for the collection mode:

- **DBS**: Dried blood spot
- **Peripheral blood samples**: intravenous blood sample taken by the Nurse
- **CAPI**: Computer-assisted personal interviewing (used by the interviewer or nurse to complete the survey for participants)
- **CATI**: Computer-assisted telephone interviewing (used during mop-up stage when the participant didn't respond to previous CAPI or face-to-face interviews)
- **Stadiometer**: medical equipment used for measuring human height

- **Adiposity**: a condition of being severely overweight
- **ISER:** Institute for Social and Economic Research