

This table summarises the Innovation Panel experiments for each Wave of the Study, including:

- Procedural experiments
- Questionnaire design experiments (both **General issues** and **Specific topics**)
- Non-experimental studies

| Procedural experiments | Summary | Wave |
|---|--|-------------|
| 7.1 Respondent incentives to increase participation and web take-up | Different values of unconditional respondent incentives, including <ul style="list-style-type: none"> • £5, £10 or £5 increasing to £10 if all household members participate (original sample); • £10, £20, £30 (IP4, IP7 refreshment samples); • £10 +£5 bonus if all household members complete by web (web mixed modes group) • £10 +£20 bonus if all household members complete by web (web mixed modes group) | All |
| 7.2 Conditional and unconditional incentives | ½ households issued to standard unconditional incentives, ½ issued to treatment: previous wave respondents received unconditional incentive, previous wave non-respondents received conditional incentive. Amount of incentive determined by allocation to experiment 1. | 7 |
| 7.3 Mixed modes: telephone and face-to-face | 1/3 households issued to face-to-face, 2/3 issued to telephone with respondents followed up face-to-face. Two different strategies for issuing telephone sample to face-to-face: as soon as one person requires face-to-face visit, or only once all household members attempted by telephone. | 3 |
| 7.4 Mixed modes: web and face-to-face | 1/3 households issued to face-to-face interviewing, 2/3 invited to complete survey online. Non-respondents followed up by face-to-face interviewers. | 5-11, 15-16 |
| 7.5 Paper vs. computer aided self-completion | ½ respondents completed adult self-completion on paper, ½ on CASI | 4, 5, 6 |
| 7.6 Advance materials: letters versus cards | ½ respondents received advance letter, ½ in greeting card format; same content | 2 |

| Procedural experiments | Summary | Wave |
|---|---|------|
| 7.7 Advance materials: content of advance letters | 4 versions of advance letter text, varying the content to test theories about how people can be persuaded to take part in surveys. Plus self-completion questions about self-rated helpfulness, conformity, and preference for consistency | 5 |
| 7.8 Targeted advance letters | <p>½ sample received standard advance letter; ½ received targeted version – targeted groups:</p> <ul style="list-style-type: none"> • 16-29 year-olds • employment-busy • have dependent children under age 15 • living in London • of pensionable age | 6 |
| 7.9 Number of mailings between interviews | <ul style="list-style-type: none"> • ½ households received 1 mailing between interviews • ½ received 3 mailings | 7 |
| 7.10 Different ways of asking respondents to register on participant website | <p>2x2 crossed design:</p> <ul style="list-style-type: none"> • Invitation to register with participant website sent in letter versus email • £5 incentive for registering versus no incentive | 4 |
| 7.11 Improving Interviewer observations about characteristics of address | Wording of questions about likelihood that household has a car or children was improved for ½ of interviewers; standard version for other 1/2 | 4 |
| 7.12 Effects of content of re-issue letter on refusal conversion | ½ reissued households received standard letter, for ½ letter included additional information leaflet | 4 |
| 7.13 Early bird scheduling: encouraging respondents to call interviewer to schedule appointment | 2/3 households were encouraged to call their interviewer in advance of fieldwork to schedule an appointment; ½ of these were offered £5 incentive if they did. | 4 |

| Procedural experiments | Summary | Wave |
|--|--|------|
| 7.14 Targeted weekday invitation emails | ½ households sent email invitation on a day determined by data from previous waves about weekdays on they completed the web survey, ½ households sent email invitation on a Monday (control) | 9 |
| 7.15 Using prospect theory in advance letters | Wording of advance letters: ½ households emphasis on positive outcome of participation, ½ emphasis on negative outcome of not participating | 10 |
| 7.16 Invitation letters for mixed-mode survey | Text of advance letters for IP11 refreshment sample allocated to Web-first, split into four groups: <ul style="list-style-type: none"> • Mention interviews with all HH members, mention interviewer follow up • Mention interviews with all HH members, but not interviewer follow up • Mention interviewer follow up, but not interviews with all HH members • Mention neither | 11 |
| 7.17 Spending Study 2 | <ul style="list-style-type: none"> • ½ households invited to Spending Study 2 in IP11 interview • ½ invited later by postal letter | 11 |
| 7.18 Invitation to complete pre-interview blood pressure measure | <ul style="list-style-type: none"> • 1/3 households given information on their nearest pharmacy to enable blood pressure measurement • 1/3 received an altruistic/pro-social appeal to encourage participants to get their blood pressure measured. • 1/3 none of the above (control) | 12 |
| 7.19 Fieldwork compression | <ul style="list-style-type: none"> • 1/5 households continuous longer interview, full set of rotating modules • 1/5 potential break-off request, full set of rotating modules • 1/5 continuous longer interview, reduced set of rotating modules • 1/5 potential break-off request, reduced set of rotating modules • 1/5 control group, standard IP13 questionnaire and incentives | 13 |
| 7.20 Event Triggered Data Collection | <ul style="list-style-type: none"> • 70% households: invited to event-triggered data collection • 30% households: not invited | 13 |

| Procedural experiments | Summary | Wave |
|---|---|-------|
| 7.21 Consent to survey questions by SMS | <p>IP13:</p> <ul style="list-style-type: none"> • ½ households: consent asked in Demographics module (early in questionnaire) • ½ households: consent asked in Contact Details module (at end of questionnaire) <p>IP15: question re-asked non-experimentally of those who did not consent in IP13</p> | 13,15 |
| 7.22 Wellbeing app study | <ul style="list-style-type: none"> • ½ households each: invited to app early vs late in IP13 interview • ½ households each: 2 vs 10 min daily app survey • 1/3 households each: no bonus vs £10 for completing all 14 days vs £2.50 on 4 randomly selected days | 13 |
| 7.23 Asking for Living Apart Together partner details | <ul style="list-style-type: none"> • ½ households: asked partner details in survey • ½ households: asked partner details in interwave mailing | 14 |
| 7.24 Contact protocols for IP14 refreshment sample | Multiple experiments: prenotification letters and number of reminders, logos/branding on envelopes, gift incentive, explaining longitudinal nature of the survey, early bird incentive, explaining nature of household survey, collecting email addresses of all adults in the household grid, encouraging messages during the survey | 14 |
| 7.25 PERKs for unconditional incentives | <p>Households allocated incentive groups:</p> <ul style="list-style-type: none"> • ½ households sent unconditional Love2Shop vouchers with the advance letter • ½ households told to download their electronic voucher online <p>Crossed with four motivational messages:</p> <ul style="list-style-type: none"> • No additional message • E-incentives are more eco-friendly • E-incentives are easier to use <p>Both messages.</p> | 16 |
| 7.26 Youth online survey | Households with children aged 10-1: | 16 |

| Procedural experiments | Summary | Wave |
|-----------------------------------|--|------|
| | <ul style="list-style-type: none"> • ½ households: Cover letter mentioned that if the child completed the survey online or returned the questionnaire, they would be sent an additional £5 gift card. • ½ households: no additional incentive <p>Information leaflet:</p> <ul style="list-style-type: none"> • ½ households: information leaflet was targeted to the young person <p>½ households: leaflet targeted to the parent</p> | |
| 7.27 Government logo on envelopes | <ul style="list-style-type: none"> • ½ households: envelopes with government logo <p>½ households: no government logo</p> | 16 |

| Questionnaire design General issues | Summary | Wave |
|---|---|------------|
| 8.1 Subsetting the questionnaire content | <ul style="list-style-type: none"> • ½ respondents asked questions about environmental behaviours/height and weight every year; long partnership and fertility history in wave 1 • ½ asked every second year; short history in wave 1 | 1-5 |
| 8.2 Showcards versus no showcards | ½ respondents answered questions with long lists of response options using showcards, ½ without showcards | 1-3 |
| 8.3 Impact of question wording and context on measuring change | <p>Four related experiments:</p> <ul style="list-style-type: none"> • ½ respondents had standard question wording, ½ had wording where definitions were less ambiguous • ½ respondents were given explicit instructions for a “select one” type question where response categories were not mutually exclusive • ½ respondents were asked about the dates of events implicitly (“when...”), ½ were asked explicitly (“in which month and year...”); all asked about strategies used to recall dates <p>Effects on high/low frequency context on questions with vague quantifiers: ½ respondents had a high frequency context, ½ a low frequency context for a question about the frequency of behaviours using vague quantifiers</p> | 2, 3, 4 |
| 8.4 Dependent interviewing wording | <ul style="list-style-type: none"> • Waves 3, 4: ½ respondents asked yes/no question whether response from previous waves “still the case?”, ½ asked “has this changed?” <p>Waves 5, 7: two additional forced choice versions asking “is this still the case or has it changed?” or “has this changed or is it still the case?”</p> | 3, 4, 5, 7 |
| 8.5 Branched vs. unbranched rating scales for measuring attitudes | ½ respondents asked standard agree/disagree questions, ½ first asked whether they agree or disagree and then about the strength of their attitude | 3, 4, 5 |

| Questionnaire design General issues | Summary | Wave |
|---|--|---------|
| 8.6 Smiley faces versus text based scales in child self-completion | ½ of youth rated satisfaction with different domains using smiley faces, ½ using text based scales | 5, 6 |
| 8.7 Quality of recall data with web versus face-to-face | Respondents asked to recall facts gathered contemporaneously at earlier waves. Half of respondents completing the survey on the web received a commitment pledge as an experimental treatment to encourage more accurate reporting of historical information. | 6 |
| 8.8 Methods of reducing item non-response in web surveys | 3 treatments: <ul style="list-style-type: none"> • Standard procedure: dk/refused not offered initially; if respondent presses “next” without answering, the options appear • As above but with additional prompt asking respondent to complete the question • Follow-up questions at end of questionnaire for items not answered | 6 |
| 8.9 Separating systematic measurement error components using MTMM | Respondents asked 6 questions about immigration at start and again at end of questionnaire, varying: <ul style="list-style-type: none"> • Whether question emphasizes positive or negative aspects • Number of scale points | 7, 8, 9 |
| 8.10 Replicating classic question wording experiments across countries | <ul style="list-style-type: none"> • Series of cross-sectional question wording experiments | 7 |
| 8.11 Impact of response scale direction on responses | For ½ respondents the direction of the answer scale was reversed | 7, 8 |
| 8.12 Enhancing respondent engagement with the survey through tailored interesting questions | Two treatments: <ul style="list-style-type: none"> • 3 additional questions, tailored to respondents’ interests as reported in IP2, or 3 additional questions that are not tailored, e.g. questions on TV watching and favourite programs. No additional questions | 7 |

| Questionnaire design General issues | Summary | Wave |
|---|---|--------|
| 8.13 Grid design in mobile surveys | ½ of respondents assigned to a standard static grid, ½ assigned to a dynamic grid | 10 |
| 8.14 Don't know/prefer not to answer response formats | <p>Respondents randomly allocated to different ways of presenting DK/REF answer options:</p> <ul style="list-style-type: none"> • Standard procedure • Instructions on DK procedure given first <p>DK/REF response options offered in the initial presentation of question</p> | 11 |
| 8.15 Collecting mobile phone numbers | <p>IP13 treatments:</p> <ul style="list-style-type: none"> • ½ households asked about mobile phone numbers before other contact details • ½ asked standard UKHLS contact details module <p>IP15 treatments:</p> <ul style="list-style-type: none"> • ½ households asked about mobile phone numbers before other contact details <p>½ asked question worded to increase compliance with providing mobile phone number</p> | 12, 15 |

| Questionnaire design Specific issues | Summary | Wave |
|--|---|-------------|
| 9.1 Measures of consumption and expenditure | <p>IP1 three treatments:</p> <ul style="list-style-type: none"> • Question about overall expenditure without cues • Question about overall expenditure with detailed categorical cues • Separate questions about amounts of expenditure broken out into reporting on each category rather than an overall figure. <p>IP6 two treatments:</p> <ul style="list-style-type: none"> • Asked for total benefit unit expenditure by adding up a set of expenditure categories using a showcard to trigger recall of expenditure on each category. • Asked for an amount of expenditure for each expenditure category, then reconciled the total amount spent for accuracy. | 1, 6 |
| 9.2 Measuring satisfaction | <p>Waves 2, 3, 6, several aspects of question wording varied:</p> <ul style="list-style-type: none"> • Number of scale points • Showcards versus no showcards • Labelling of end points only or all scale points • Position early or late in questionnaire • CASI versus interviewer administered | 1-3, 5, 6 |
| 9.3 Reference groups in measuring satisfaction | <p>Four treatments:</p> <ul style="list-style-type: none"> • Standard questions • Satisfaction rating relative to others of same gender • Others of same education • Others of same education and gender | |

| Questionnaire design Specific issues | Summary | Wave |
|--|--|---------|
| 9.4 Measuring identity | For questions about identity ½ respondents were asked about their “profession”, ½ about their “occupation” | 2 |
| 9.5 Measures of wealth | Four ways of collecting information about money held in savings and investments, 2x2 crossed design varying: <ul style="list-style-type: none"> • Aggregate amounts versus itemized • Reports from all adults versus one financial reporter | 3 |
| 9.6 Context of questions about consent to data linkage with administrative records | 2x2 crossed design varying whether <ul style="list-style-type: none"> • consent asked in context or at end of interview • independent question or dependent reminding respondent of whether or not they gave consent previously | 4 |
| 9.7 Respondent preferences about mode of data collection | ½ respondents asked to rate specific modes then generalized preference; ½ asked first about generalized preference, then ratings of specific modes | 4, 5, 6 |
| 9.8 Feasibility of directly measuring household energy use | 2x2 crossed design varying: <ul style="list-style-type: none"> • which meter readings household was asked for (odometer only / gas, electricity and odometer) • whether advance letter mentioned that respondent would be asked for meter readings | 5, 6 |
| 9.9 Context effects in fertility decisions | <ul style="list-style-type: none"> • ½ respondents asked about expected fertility before questions about friendship networks, ½ asked afterwards | 4, 5 |
| 9.10 Vignettes: measuring partner satisfaction with division of household labour | Vignettes describing hypothetical scenarios of partners sharing domestic and paid work; 3 vignettes per respondent; dimensions varied: (1) paid work; (2) earnings; (3) presence of children; (4) housework allocations; and (5) use of paid help. | 5, 6 |

| Questionnaire design Specific issues | Summary | Wave |
|---|---|---------|
| 9.11 Subjective expectations about the returns to higher education and decisions to attend university | ½ respondents and their parents shown information about average earnings by gender and subject, ½ no information | 5, 8, 9 |
| 9.12 Measuring change in self-assessed disability | <ul style="list-style-type: none"> • ¼ asked standard questions: filter question whether long term illness or disability, if “yes” asked about difficulty with everyday activities • ½ respondents asked follow-up questions if they reported a long term illness or disability, and had not reported this at previous interview, or vice versa about reasons for change. All asked about areas of everyday life where they have difficulty due to health • ¼ only asked about difficulties with everyday life activities, not asked about long-term health problems | 6, 7 |
| 9.13 Associated Study: Measuring Time and Risk Preferences | A total of 91 lottery questions about respondents risk and time preferences, including actual payouts | 6, 7 |
| 9.14 Assessing how people think about environmental taxes | 10 treatments varying questions about respondents’ willingness to pay increased environmental taxes. For each of 5 question pairs, one variant makes no mention of tax reductions elsewhere, while the other variant does | 7 |
| 9.15 Validity of interviewer ratings of respondent health | ½ interviewers asked to assess respondents health at start of interview, ½ at end | 8 |
| 9.16 Social desirability bias in attitudes towards immigration | Item count list | 8, 9 |
| 9.17 Measuring sexual identity using direct and indirect questioning | Item count list and direct question | 8, 9 |

| Questionnaire design Specific issues | Summary | Wave |
|---|---|--------|
| 9.18 Vignettes: measuring what people think of as “successful ageing” | Vignettes describing different scenarios about the circumstances of a 75 year old; 3 vignettes per respondent; dimensions varied: (1) gender, (2) chronic disease, (3) disability, (4) physical functioning, (5) cognitive functioning, (6) interpersonal engagement, and (7) productive engagement. | 9 |
| 9.19 Household finances | <p>Experiment 1: ½ respondents shown a summary of all income sources reported and asked to check and correct, ½ respondents no summary screen.</p> <p>Experiment 2: budget reconciliation module with ½ benefit units asked about money taken from savings/new credit and money put into savings/repayment of credit (cross flows), vs. changes in savings and credit accounts (net flows).</p> | 9 |
| 9.20 Presentation of response options in satisfaction questions | <p>1/3 households assigned to each treatment:</p> <ul style="list-style-type: none"> • Grid format • One question per screen, response options vertically aligned • One question per screen, response options horizontally aligned | 9 |
| 9.21 Improving consent to link to the electoral register | <ul style="list-style-type: none"> • Random allocation of households to opt-in vs. opt- out and two versions of wording the consent question | 10, 11 |
| 9.22 Financial management within couples | <ul style="list-style-type: none"> • Households randomly allocated to two different versions of questions asking about financial management and perception of money ownership within couples | 10 |
| 9.23 Non-resident parents and reasons for separation | <ul style="list-style-type: none"> • Households randomly assigned to two different versions asking about non-resident parents and reasons for separation | 10 |
| 9.24 Variations of the EQ-5D questions | <p>Respondents were randomly allocated to three equal sized groups:</p> <ul style="list-style-type: none"> • ask EQ-5D-3L Late and ask EQ-5D-5L Early • ask EQ-5D-3L Early and ask EQ-5D-5L Late • ask EQ-5D-5L Late ONLY | 11 |

| Questionnaire design Specific issues | Summary | Wave |
|--|--|--------|
| 9.25 HMRC data linkage consent experiment | IP11: <ul style="list-style-type: none"> • Respondents randomly allocated to an easy vs. difficult version of the consent question • For CAPI respondents question difficulty was crossed with early vs. late location in the questionnaire IP15: <ul style="list-style-type: none"> • FTF respondents randomly allocated to CAPI, CASI, partial CASI consent question • Web respondents randomly allocated to control or consent question with message from and photo of study director | 11, 15 |
| 9.26 Competition over public services and immigrant rights | <ul style="list-style-type: none"> • Conjoint experiment and vignettes | 11 |
| 9.27 Self-reported height and weight | <ul style="list-style-type: none"> • Respondents interviewed face-to-face: • ½ households were asked to report height and weight by the interviewer • ½ households asked about height and weight in the self-completion module | 12 |
| 9.28. Biomarker and sample collection | <ul style="list-style-type: none"> • Depending on the mode of interview (see Section 16.4), respondents were asked to provide blood samples, dried blood spots, and hair samples. | 12 |
| 9.29 LinkedIn consent | Two randomized allocations: <ul style="list-style-type: none"> • ½ respondents asked early, ½ late in the questionnaire • ½ respondents shown a motivational statement before the consent question, ½ no motivational statement | 14 |
| 9.30 Vignettes: intentions to prepare for automation | Vignettes describing different scenarios about the prospected severity of technological developments (severe threat vs. minor threat) and the prospected timeframe of such developments (short-term vs. long-term) followed by questions about attitudes and behaviours regarding re- and upskilling | 14 |
| 9.31 Comparison of ReQoL-10 to other scales | Randomised order: <ul style="list-style-type: none"> • ½ respondents: ReQoL and EQ5D early and GHQ late • ½ respondents: ReQoL and EQ5D late and GHQ early | 14 |

| Questionnaire design Specific issues | Summary | Wave |
|---|---|------|
| 9.32 Proxy nomination | Two randomized allocations: <ul style="list-style-type: none"> • ½ respondents asked early, ½ late in questionnaire • ½ respondents asked wording version 1, ½ asked version 2 | 14 |
| 9.33 Twitter consent | Two randomized allocations <ul style="list-style-type: none"> • ½ respondents shown 'help' links with additional information on the same page • ½ respondents shown help links on a separate page | 15 |
| 9.34 Marginal propensity to consume | Question wording with 3 randomizations, crossed: <ul style="list-style-type: none"> • Two-part vs. direct question on marginal propensity to consume • 3 month vs. 12 month period • £500 vs. £2500 windfall gain | 15 |
| 9.35 Informal care | Two randomized allocations: <ul style="list-style-type: none"> • Control: current UKHLS questions • Amended caring questions • Combining comparable questions | 15 |
| 9.36 Alcohol consumption | Two randomized allocations: <ul style="list-style-type: none"> • Questions used by NHS • Questions used by UKHLS | 15 |
| 9.37 Body measurements and BodyVolume app | Waist and hip measurements collected as self-measurement, interviewer observed self-measurement, and from an app that calculates measurements based on photos of the respondent Randomized allocations for the invitation to the app study: <ul style="list-style-type: none"> • Respondents promised feedback on their total body fat, visceral body fat, or no feedback | 15 |

| Questionnaire design Specific issues | Summary | Wave |
|---|--|------|
| | <ul style="list-style-type: none"> • £5 additional unconditional incentive for completing the survey vs. £5 conditional on using the app | |
| 9.38 National identity | Randomized allocations: <ul style="list-style-type: none"> • Importance of being British first • National identity first | 15 |
| 9.39 Vignettes: Flexibility stigma | Vignettes describing different characteristics of job applicants, followed by questions about whether respondent would recommend the applicant and their perceptions of the applicant | 16 |
| 9.40 Cognitive reflection and politically motivated reasoning | <ul style="list-style-type: none"> • 1/3 households allocated to control version • 1/3 households allocated to Brexit Remain version 1/3 households allocated to Brexit Leave version | 16 |
| 9.41 Robustness of climate change worry measurement | <ul style="list-style-type: none"> • ½ households allocated to 'Worry me' version ½ households allocated to 'Worry about' version | 16 |
| 9.42 Understanding of the long-term future | Households allocated to <ul style="list-style-type: none"> • Financial questions only • Environmental questions only • Both financial and environmental questions And different question order/position: <ul style="list-style-type: none"> • Environmental questions early/financial questions late Financial questions early/environmental questions late | 16 |
| 9.43 Mental health questions comparison | Households allocated to different versions of the UKHLS questions about mental health: <ul style="list-style-type: none"> • Wave 8 version • Wave 10 version Wave 14 version | 16 |

| Questionnaire design Specific issues | Summary | Wave |
|--|--|------|
| 9..44 Asking for child Red Book pictures | Households with children <16: <ul style="list-style-type: none"> • ½ asked for information from red book before interview ½ asked during the interview | 16 |
| 9..45 Spatial cognition mobile app game | <ul style="list-style-type: none"> • ½ households: £10 conditional incentive ½ households: £30 conditional incentive | 16 |

| Non-experimental studies | Summary | Wave |
|--|---|------|
| 10.1 Questions about twins | Non-experimental: whether respondent is a twin, type of twin, whether they would disclose twin's address and likelihood that twin would participate in a follow-up study | 5 |
| 10.2 Measuring finger length ratios as indicator of prenatal testosterone exposure | <ul style="list-style-type: none"> IP6: non-experimental measurement of 2nd and 4th digit length on both hands in adult interview; IP7 measurement in adult interview repeated for new sample members (including refreshment sample), and included in youth self-completion questionnaire | 6, 7 |
| 10.3 Associated Study: time use diary | Each respondent asked to complete two paper time use diaries. Random allocation to a weekday and a weekend day. | 7 |
| 10.4 Spending Study 1 | A mobile app based study where respondents were asked to upload pictures of all their shopping receipts for a month, fielded autumn 2016 (after IP9 interviews) | 9 |
| 10.5 Consent to link Twitter data | All respondents asked whether they use Twitter and whether willing to link their Twitter account to their survey data | 10 |
| 10.6 Children reporting parents' occupation | Youth and young adults asked about mother's and father's occupation | 11 |
| 10.7 Panel conditioning | Questions about how participating in the survey affected the way respondents think, their behaviours, their attitudes, and why they participate. | 13 |
| 10.8 Living Apart Together partner details | Questions about name and contact details. | 13 |
| 10.9 Parents living apart contact details | Questions about name and contact details. | 15 |

