

# Transitioning CAPI Questionnaires to work well on a mobile

A 5-step process using the Skills and Employment Survey (SES) as a case-study

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# The issue

- Increasing demand for survey practitioners to transition CAPI surveys to other modes
- The challenge is how can we transition questionnaires effectively and efficiently?
- Trade-offs:

**Data-users want as much consistency as possible with existing CAPI measures**



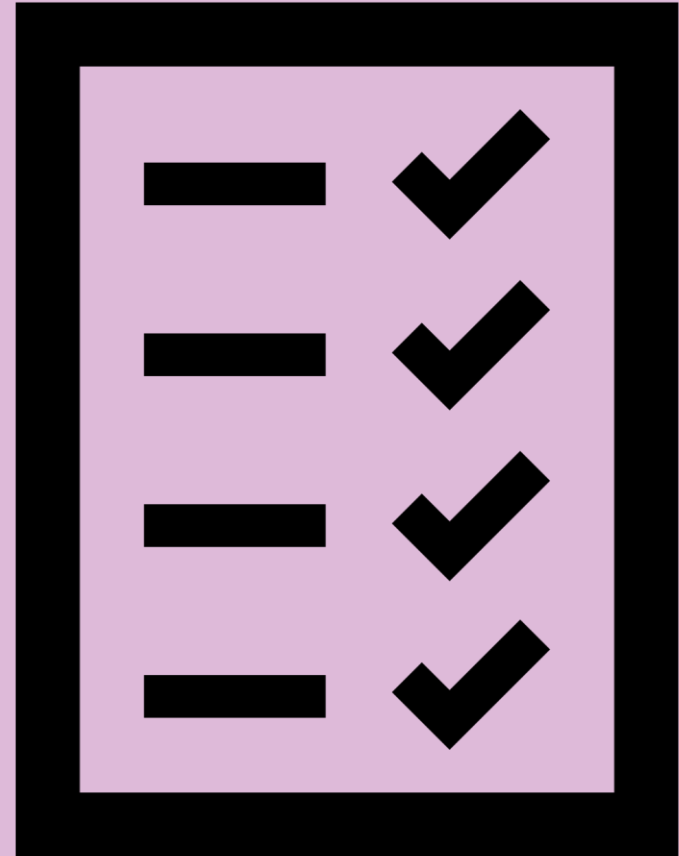
**Participants want quick and easy questions that render well on their mobile devices**

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# Aims and background

- To illustrate a five-step process to help researchers transition questionnaires
  - The National Centre for Social Research is currently using this process to transition the Skills and Employment Survey (SES)
  - The SES started in 1986, and is a representative survey of people working in Great Britain
    - Conducted every 5 years
    - SES 2023 will be the 8<sup>th</sup> wave of data collection
      - 2,800 CAPI interviews
      - **NEW for 2023: 1,500 web interviews via NatCen's online random probability panel**
      - **Parallel run is to establish whether online methods could be used in the future**
  - More information about the SES can be found on the **Wales Institute of Social and Economic Research and Data (WISERD)** website: <https://wiserd.ac.uk/project/ses/ses2023/>
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# Step 1: Systematic review of CAPI questions



# Review every question using a check-list of risk criteria

A1. Fear of disclosure risk

A2. Positivity bias risk

B1. Complex question

B2. Extra information

B3. Computation required

B4. Open questions

C1. High number of response options

C2. Batteries of repeated scales or questions

C3. Hidden codes

C4. Ranking tasks

C5. Non-standard template or visual aid required

D. Other issue

## 1.1.2 Risk Type: Satisficing

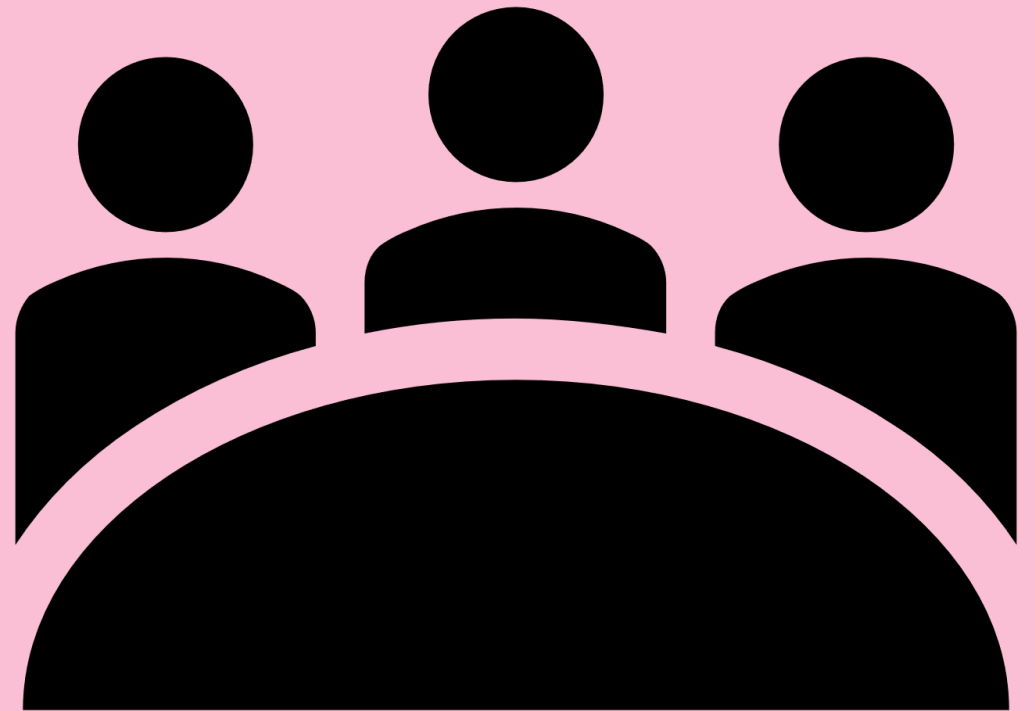
It is generally assumed that the risk of respondent satisficing is greater for difficult questions than easy questions (Krosnick, 1991). In interviewer administered questionnaires, interviewers can:

- Read out text;
- Explain tasks and provide additional information if required; and
- Motivate participants to perform more complex tasks in a way that maximises data quality.

Interviewer presence could decrease question difficulty, increase respondent motivation and increase optimal answering strategies. Theoretically this means that inherently difficult questions could be answered in optimal ways in interviewer administered modes and non-optimal ways in self-completion modes. Our code-frame includes some items adapted from Willis' Questionnaire Appraisal System (QAS) where we think interviewer presence could have a positive impact participant answering strategies.

Type of risk	Description	Is risk factor present?	Action
<b>B1. Complex question stem or clarifications</b>	Interviewers are trained to read out the entire question, including all instructions. In self-completion modes participants may not read the entire question, especially if it is long-winded or complex. Over the telephone it is more difficult for people to retain multiple instructions and clauses if they cannot see the written text.	Does the question stem include lengthy instructions, introductions, or explanations?  If changing to a CATI mode, try reading the question out loud. Does it feel verbose? Could it be simplified?	The aim is to cut all superfluous text from a question stem whilst still retaining its original meaning. Ideally the question should be under 250 characters to fit on a single mobile screen.  Is the question long because it contains multiple sub-clauses or conditions? If so, consider breaking the question down into a series of more single clause questions that get to the same information. The aim is to get to 'functional equivalence' of the end data collected.
<b>B2. Extra information</b>	In self-completion modes participants may be less likely to seek out information displayed on help screens or read text that appears after the question.	Does the questionnaire include explanatory notes other than those in the question's stem e.g. definitions of key words or other forms of help? Include optional interviewer read-outs, and checks. Include instructions that appear after the question mark.	Remove superfluous instructions such as 'click one only' or 'choose the answer most applicable to your situation.'  Help screens can be included but should be kept to a minimum. It should be assumed that participants will only read information on screen. When embedding a help screen use a hyperlink that explicitly says what information is being linked to e.g. 'Types of X to include' rather than 'Help' or 'More information.' Unfolding help is better than help that opens in a new window for mobile screen design.

# Step 2: Workshop with data-users

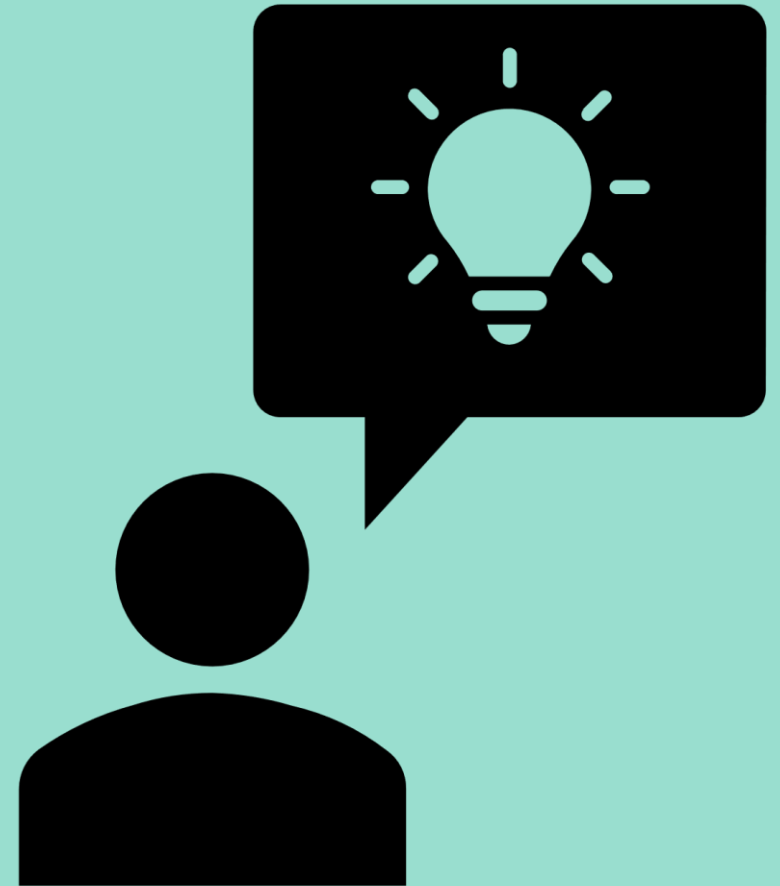


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## Workshop aims

- To agree general mobile/ web conversion rules
- To highlight questionnaire ‘pain-points’ as high-lighted in the systematic review
  - To understand data-collection needs for those items
  - To agree highest priority areas for development
- To agree understand what changes can be made to repeated CAPI questions
  - unimodal design for wave 8 versus time series preservation for CAPI items

# Step 3: Develop alternative Qs for high priority items





# Priorities for Qn development

SES Feature	Issue	Solutions
<b>Eligibility checks</b>	<ul style="list-style-type: none"> <li>• Multiple inclusion/ exclusion criteria as an interviewer help-screen</li> <li>• No formalised screening questions</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and test new multi-item screener</li> </ul>
<b>Industry and Occupational questions (SIC/SOC)</b>	<ul style="list-style-type: none"> <li>• Item of key importance</li> <li>• Open question</li> <li>• Known issue with mobile respondents not entering enough information</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and test different ways of increasing word count to open SIC/SOC questions- including multiple open questions, and soft-checks for low character counts.</li> <li>• Trial closed questions to supplement data available for in-office coders</li> </ul>
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• Item of key importance</li> <li>• Very long interviewer coded lists</li> </ul>	<ul style="list-style-type: none"> <li>• Trial formats with sub-headings, help-links and branches</li> </ul>
<b>Interviewer checks</b>	<ul style="list-style-type: none"> <li>• High volume of interviewer facing checks</li> <li>• Between section navigation needed if internal consistency checks not met</li> </ul>	<ul style="list-style-type: none"> <li>• Review and re-write check messages</li> <li>• Create new formats for internal consistency checks/ between module navigation</li> </ul>

# Step 4: Cog-ability testing

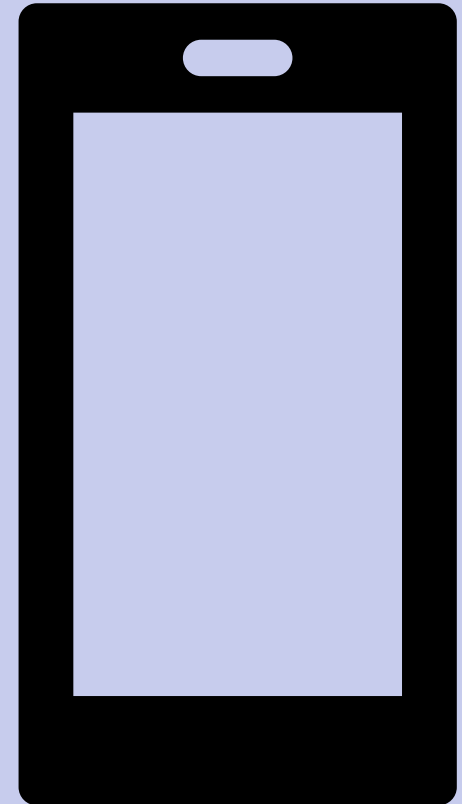
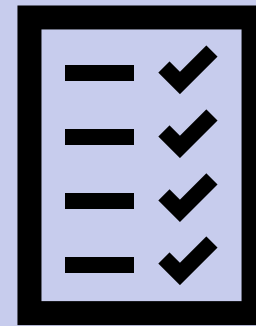


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## **Cog-ability testing**

- Qualitative testing, combining user-testing and cognitive interviewing techniques
  - Complete prototype mobile questionnaires with alternative versions;
  - Screen sharing and capture;
  - Think-aloud;
  - Probing;
  - Vignette/ task-setting;
- Include those with lower levels of self-reported digital confidence
- Recordings of interviews reviewed by questionnaire developers and programmers

# Step 5: Agree Quality Indicators for Parallel run



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## Agreement of questionnaire quality indicators to assess parallel run

Level of break-off

Break-off points

Item non-response

SIC/ SOC data that is not codifiable

Granularity of SIC/SOC coding possible

Evidence of non-differentiation

Evidence of primacy effects for long lists

Differential reporting for sensitive questions

**Triangulate quality indicators against questions flagged in step 1 and step 2**

Respondent feedback

**Thank you!**

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