Design and Analysis of Cognitive Interviews for Cross-National testing

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Work group

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Others involved
Debbie Collins, Janet Harkness, Amanda Willmot
Recent years have seen improved standards of equivalence in cross-national surveys.

Equivalence of constructs has lagged behind / translation challenges.

Data from the ESS has shown big differences in the reliability and validity of the same questions cross-nationally (using MTMM).

Data corrections are becoming available for some variables.

Challenge is to design good questions that can also be translated in advance of fieldwork.

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CI project

- Budapest Initiative project already conducted earlier cross-national testing with mixed results: problems mostly from lack of equivalence in methodology

- Key aim achieve methodological equivalence between countries (in 7 countries)

- Overcame previous difficulties and produced comparable data

- EG...How to conduct joint cognitive interviewing across multiple sites with different interviewers in different languages / how to facilitate joint analysis
Project: Timeline

Initial meeting, London, September 2007
- Facilitated methodological equivalence
- Protocol development
- Establish process eg sampling
- Cognitive interview training

Translation and Data Collection, October-January

Joint analysis meeting, February 2008

Post meeting analysis

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Workgroup Protocol

- Translation, “committee approach” (some exceptions)
- Semi-structured interviews, common probing techniques, “areas to cover”
- Ongoing communication
- Training for new researchers
- Purposive sample, guidelines provided
- Interview notes, template provided
- Data reduction, chart template

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## Sample

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<thead>
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<th>Country</th>
<th>Total</th>
<th>Gender</th>
<th>Age (in years)</th>
<th>Education</th>
</tr>
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<td></td>
<td>Men</td>
<td>Women</td>
<td>18 – 29</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>10</td>
<td>5</td>
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<td>2</td>
</tr>
<tr>
<td>Germany</td>
<td>10</td>
<td>5</td>
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<td>2</td>
</tr>
<tr>
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<td>15</td>
<td>14</td>
<td>8</td>
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</tr>
<tr>
<td>US-English</td>
<td>30</td>
<td>11</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>US-Spanish</td>
<td>13</td>
<td>3</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>61</td>
<td>74</td>
<td>32</td>
</tr>
</tbody>
</table>
Make detailed notes in own language

Reduce to ESS charts in English

Produce bullet point list of findings in English

1st Step

2nd Step

3rd Step

Make detailed notes in own language

Reduce to BI charts in English
**Brief description of test Q**

Columns could be Qs or specific issues, such as comprehension, recall etc. Depends on Q complexity.

**Summary of data obtained from interview notes. May also include attributed interviewer and analyst observations and ref. back to notes (page no.)**

Case details reflect sampling criteria.
8 Analysis steps

• Overt respondent problems
• Other respondent behaviour suggesting problems
• Contextual information at country level
• How respondents went about answering question
• Identification of key findings / error source
• Overall conclusions
• Recommended changes
• Country verification

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Error source typology

- **Source question issues** – poor question

- **Translation problems** – failed to achieve equivalence but would be possible to in the target language (avoidable error / non-realisation of functional equivalence)

- **Source question design and interaction with translation** – source questionnaire designed in a way that makes translation difficult / impossible but OK in source

- **Cultural issues** – concept does not exist in all countries or proposed measurement method cannot be used due to cultural differences
Strengths

- Systematic approach
- Ensured consistency across countries
- Provided a consistent framework for analysis
- Provided transparent link between raw data and higher levels of abstraction
- Allowed charts to be reviewed by lead research team as all in English – produced a data set
Strengths

- Meeting allowed for interrogation of data
- Problems with translation & in the preparation of charts could be identified and rectified
- Allowed deeper exploration of the data to determine cause of problems
- Allows for a detailed and complex picture of the captured phenomena
Weaknesses

- Time consuming and therefore (relatively) expensive

- Potential loss of important data, stemming from variation in level of detail countries recorded and in part from insufficient training.

- Not always clear whether respondent’s response was from general opening probe or more specific probing
Weaknesses

- No agreed protocol for dealing with requests to add columns to the chart, so potentially useful additions were not added (e.g. column indicating R confusion when survey Q initially read)

- Limitations of using Excel meant could not (easily) sort data by Respondent’s answer to the survey question

- As full analysis done in English with charted data possibility of misinterpretation (but for ESS questions checking process built in)
Improvements

- Closer management of charting procedures
  - More training
  - One interview at a time

- Joint analysis meeting after analysis of entire dataset

- Use another software to help sort and speed analysis (e.g., NCHS / NatCen)

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Best Practice Recommendations

- Agreed protocols / set up meeting
- Agreed interviewing style
- Agreed sampling plans
- Agreed charting procedures
- Full data set analysis by core RT
- Analysis at all levels
- Charting in single language
- Regular communication during fieldwork
- Joint analysis meeting with preparation (timing)
- Country verification essential
- More detailed CSDI protocols?