

# Design and Analysis of Cognitive Interviews for Cross-National testing

Rory Fitzgerald (City Uni) and  
Kristen Miller (NCHS)  
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## Work group

Kristen Miller (NCHS)

José-Luis Padilla (U of Granada)

Martin Dimov (CSD)

Cátia Nunes (ICS)

Nicole Schoebi (SIDOS)

Sally Widdop (City U)

Rory Fitzgerald (City U)

Rachel Caspar (RTI)

Michelle Gray (NatCen)

Peter Pruefer (GESIS)

Alisú Schoua-Glusberg

Stephanie Willson (NCHS)

## Others involved

Debbie Collins, Janet Harkness, Amanda Willmot

# Cross-national Questionnaire development

- 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

# 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

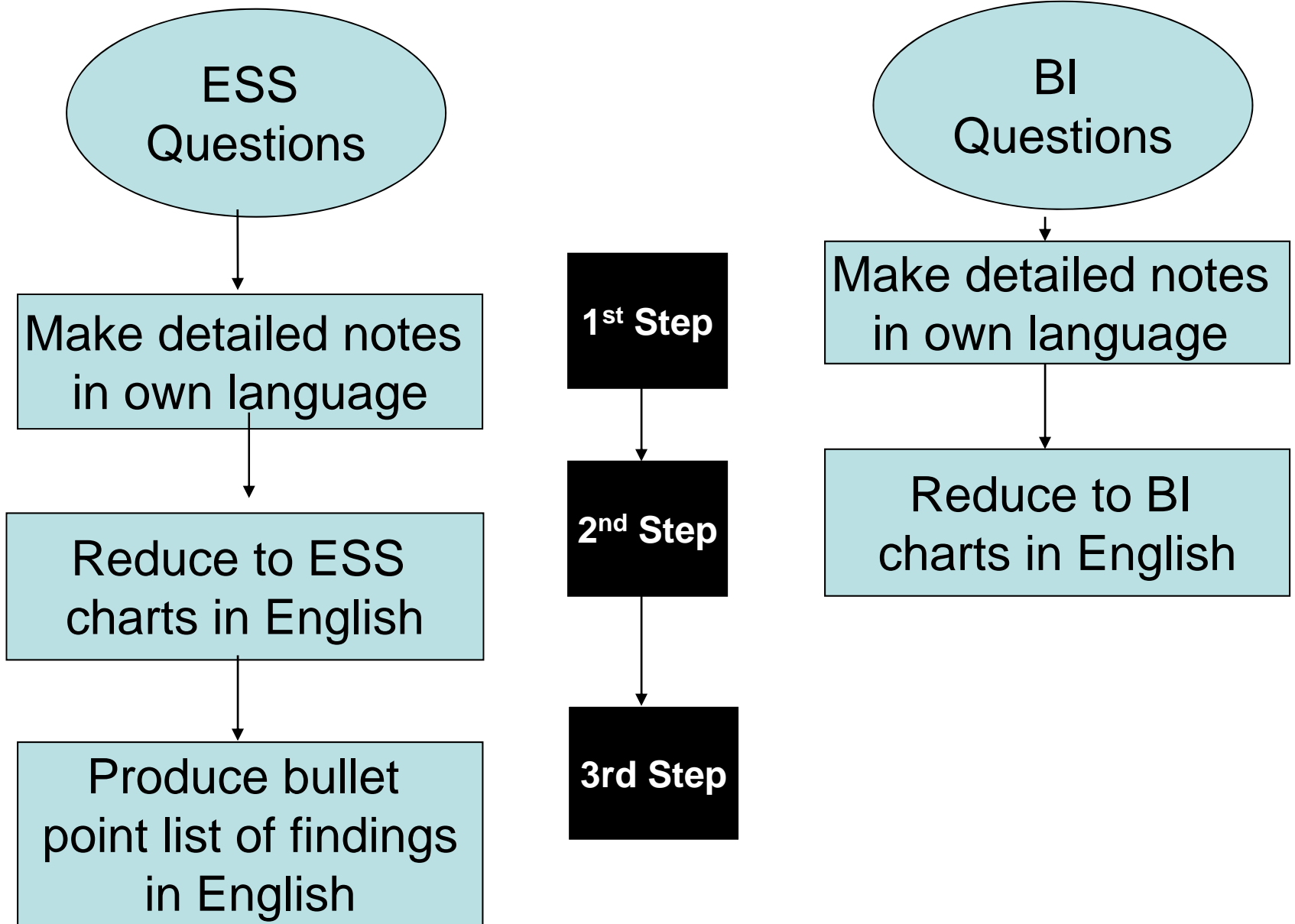
- Initial meeting, London, September 2007
  - Facilitated methodological equivalence
  - Protocol development
  - Establish process eg sampling
  - Cognitive interview training
  
- Translation and Data Collection, October-January
  
- Joint analysis meeting, February 2008
  
- Post meeting analysis

## 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

# Sample

	Total	Gender		Age (in years)			Education	
		Men	Women	18 – 29	30–69	70+	< HS degree	HS degree +
<b>Bulgaria</b>	10	5	5	2	4	4	4	6
<b>Germany</b>	10	5	5	2	4	4	4	6
<b>G. Britain</b>	29	15	14	8	9	12	9	20
<b>Portugal</b>	8	3	5	3	3	2	3	5
<b>Spain</b>	18	10	8	6	6	6	9	9
<b>Switzerland</b>	17	9	8	7	4	6	2	12
<b>US-English</b>	30	11	19	3	19	8	14	16
<b>US-Spanish</b>	13	3	10	1	9	3	6	7
<b>Total</b>	<b>135</b>	<b>61</b>	<b>74</b>	<b>32</b>	<b>58</b>	<b>45</b>	<b>54</b>	<b>81</b>





Brief description of test Q

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

**P refers to the probes which interviewers should have covered.**

<b>CHART 2:</b> <b>Question 2: CARD 2. Using this card please tell me, on a scale of 0-10, how efficiently you think the income tax authorities in [country] carry out their work? 0 means extremely inefficiently, and 10 means extremely efficiently</b>			
Extremely inefficiently <span style="float: right;">Extremely efficiently</span> 0 1 2 3 4 5 6 7 8 9 10 (Don't know)			
Serial Number, Sex, Age, Health Status (and condition?), Level of education, Question set asked 1st	Q2: RECORD RESPONDENT'S ANSWER: P: How respondent came up with their answer? AND/OR What they were thinking? P: Why the respondent chose the number they did (i.e. what this means in the context of the question)?	Q2: P: What the respondent understood by 'efficient'. P: What the respondent understood by 'carrying out their work'. P: Who the respondent thought 'the income tax authorities' are.	Q2: P: What would the income tax authorities have to be like at carrying out their work for the respondent to have answered 'extremely inefficiently'. P: What the income tax authorities would have to be like at carrying out their work for the respondent to answer 'extremely efficiently'?
UKNatCenGIM01, F, 80years, Limited mobility and deaf, Left school at aged 14. ESS Qs asked first	<b>Answer:</b> 4 R asked for Q to be re-read. R then stated that politicians get far more to spend on themselves than people like teachers, doctors, those sort of people. R choose 4 because she doesn't think "they spend enough time on detail to see the position of the people that are paying the tax". R thought that the people who decide how much taxes could spend more time looking at what people earn and what they have to pay out of their earnings	the income tax authorities: "Those who work out what people have to pay".	
UKNatCenGIM02, Male, Late 70s, Hearing & Memory problems, left school aged 16 or younger. EI Qs first	<b>Answer:</b> 5; R's initial response was "I don't think they do it right, anyway". R chose 5 because he saw this as about 50%: a lot of people get away without paying taxes.	R saw efficiency as fair and thought that the "inland revenue" placed a bigger burden on the lower classes than the higher classes - he said that the income taxes "pick on the lower classes all the time"	
UKNatCenGIM03, M, early 70s, Hearing and Memory problems (due to asthma), left school 16 years or younger. ESS Qs first	<b>Answer:</b> 8. R mentioned that his experience was limited but, "Whenever I talk to them, they always answer my queries, they write to me, they let me know what's going on, they always seem very efficient. In my experience, they are very, very good." -	R saw the tax authorities as the government but said he thought about the people who work in industry too. R said that for the tax authorities to be inefficient, they would not run properly: people wouldn't know what they were being paid and it would be chaos. R said that we don't always agree with the money we have to pay.	

Case details reflect sampling criteria

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

# 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

# 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 (eg NCHS / NatCen)



# 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?