Q-notes: Analysis software for cognitive interviews

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QUEST
Bergen, Norway
History

- **Budapest Initiative, Geneva, 2007**
  - Australia, US, Canada, Italy
  - Separate studies, separate reports, inconclusive findings
  - Lesson: work must be comparable with consistent method of analysis
Comparative Cognitive Testing Workgroup

Budapest Initiative
European Social Survey

COUNTRIES
Bulgaria/Bulgarian
Germany/German
Portugal/Portuguese
Spain/Spanish
Switzerland/French
The UK/English
The US/English and Spanish
Workgroup: Objectives

Purpose: to develop systematic comparable method with joint analysis

- Joint and coordinated interviewing
  - Similar protocol
  - Similar sample
  - (at minimum) Understanding of differences

- Joint and coordinated analysis
  - With interview data
  - Evidence based (as opposed to opinion)
### Example BI chart

**Because of a physical, mental or emotional problem, do you have difficulty concentrating, remembering or making decisions?**

<table>
<thead>
<tr>
<th>ID</th>
<th>Immediate words after question</th>
<th>Response Category</th>
<th>Description of any response</th>
<th>Activity, experience or Situation Discussed</th>
<th>took meds? If so, was this considered?</th>
<th>Way in which answer was formed; pattern of Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>&quot;None&quot;</td>
<td>No difficulty</td>
<td>None</td>
<td>Forgetting an umbrella when the forecast is for rain.</td>
<td>no</td>
<td>She was thinking about her ability to remember &amp; concentrate in general. Even though she occasionally forgets things it's not a problem. clause ignored</td>
</tr>
<tr>
<td>S2</td>
<td>&quot;Sometimes I have trouble remembering things&quot;</td>
<td>a little difficulty</td>
<td>Easy to answer, but this difficulty she sees as normal stuff &amp; isn't concerned about it; i.e., this isn't a disability</td>
<td>walking in to the kitchen and forgetting why she's there</td>
<td>no</td>
<td>a little difficulty means that sometimes she forgets things - it's frequency of forgetting, not significance of things forgotten; 1st clause ignored</td>
</tr>
</tbody>
</table>

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"Sometimes I have trouble remembering things"
Lessons Learned

– Semi-structured cognitive interviews offers critical and unique insight into cross-national question performance

– Transparency is critical
  - Of data from interviews
  - Of the process for drawing conclusions

– Data collection oversight

– Better data management
Q-Notes

- On-line data entry and analysis tool
  - Allows for continuous oversight
  - Facilitates quick but thorough analysis

- Designed around analysis principles
Required Levels of Analysis

1. **Cognitive processing errors**  
   (For individuals)

2. **Patterns of interpretation and process**  
   (What the question captures)

3. **Patterned differences in sub-groups**  
   (Potential For Bias)

- In-interview Analysis
- Across Interview Analysis
- Across Sub-Group Analysis
Analysis Technique: Constant Comparative Method


- Identify an aspect of question response in one interview
  - E.g., type of error, type of interpretation
  - Compare that finding to the next interview
  - Is it the same? If not, how is it different?

- Incorporate revelations from that comparison into the “theory” (i.e. the cognitive interview “findings”)

- Report incorporates description of themes with the examples
Overall during the past four weeks, how much difficulty did you have with walking short distances, for example 100 yards/meters?

**Example: Constant Comparative Method**

- **Theme:** 100 Yards
  - R knows
    - R figures out
  - R doesn’t know
    - R estimates
  - R answers without any idea
Goal:

- Map out all relevant constructs in the entire question-response process
  
  Eg. 100 yards, 4 weeks, activities considered

- As well as, the relationships between the constructs
  
  Eg. Does ‘4 weeks’ inform the types of activities considered?

- Fully depicting the phenomena captured by the question
What is a credible finding?

1. Transparent
2. Coherent Themes
3. Consistent Individuals
4. Communicable
Q-Notes

User Name:  
Password:  
Login

Forgot your Password?
Enter your User Name and Click HERE
Welcome to Q-Notes, Kristen

To begin, select the project you would like to work on.

<table>
<thead>
<tr>
<th>Date</th>
<th>Project Name</th>
<th>Investigator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/5/09</td>
<td>Washington Group International Disability Testing</td>
<td>Kristen Miller</td>
</tr>
<tr>
<td>10/08-12/08</td>
<td>NHANES A-CASI Sensitive Questions</td>
<td>Heather</td>
</tr>
<tr>
<td>2/2/09</td>
<td>Washington Group International Disability Testing Round 2</td>
<td>Kristen Miller</td>
</tr>
</tbody>
</table>
**Project Information**

- **Project Name**: Washington Group International Disability Testing Round 2
- **Investigator**: Kristen Miller
- **Date Range**: 2/2/09
- **Topic**: Disability
- **Scope**: International

**Country** | **Interviews**
--- | ---
Australia | 2
CAMBODIA | 19
Canada | 17
KAZAKHSTAN | 20
MALDIVES | 20
MONGOLIA | 20
PHILIPPINES | 20
South Africa | 6
SRI LANKA | 14
United States | 19

View All Interviews
The interview was conducted at the respondent's house that was a little bit warm. An electric fan was used to ease the perspiring respondent. She was obese & feel hot most of the time. From time to time, we pause because she seems to have difficulty breathing. According to her, she had an asthma attack two (2) days ago.
### Information

- **RespondentID**: PHILIPPINES 10
- **Interviewer**: MBaluyot
- **Interview Date**: 3/6/2009

### Question List

<table>
<thead>
<tr>
<th>QuestionID</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDR2SS1a</td>
<td>Do you have difficulty seeing, even when wearing glasses?</td>
</tr>
<tr>
<td>IDR2V1.1a</td>
<td>Do you wear glasses to see far away?</td>
</tr>
<tr>
<td>IDR2V1.1b</td>
<td>Do you wear glasses to see up close?</td>
</tr>
<tr>
<td>IDR2V1.1c</td>
<td>Do you wear glasses for another reason?</td>
</tr>
<tr>
<td>IDR2V1.3</td>
<td>Do you have difficulty clearly seeing someone's face across a room [even when wearing your glasses]?</td>
</tr>
<tr>
<td>IDR2V11.1a</td>
<td>How old were you when the difficulty seeing far away began?</td>
</tr>
<tr>
<td>IDR2V12.1i</td>
<td>Is your difficulty seeing far away due to a health problem or something else?</td>
</tr>
<tr>
<td>IDR2V13.1i</td>
<td>Does your difficulty seeing far away limit your ability to carry out daily activities?</td>
</tr>
<tr>
<td>IDR2V13.2bi</td>
<td>Does your difficulty seeing far away limit your ability to carry out daily activities that are not part of your day-to-day life?</td>
</tr>
<tr>
<td>IDR2V14</td>
<td>Do you have difficulty clearly seeing the picture on a coin [even when wearing your glasses]?</td>
</tr>
<tr>
<td>IDR2V21.1ai</td>
<td>How old were you when the difficulty seeing close up began?</td>
</tr>
<tr>
<td>IDR2V22.1i</td>
<td>Is your difficulty seeing up close due to a health problem or something else?</td>
</tr>
</tbody>
</table>
Response Information
IDR2M3.4: Do you have difficulty walking 100 (meters/yards) on level ground, that would be about (insert country-specific example) [without the use of your [insert aid]]?

Respondent MALDIVES 7
ID:
Interviewer: L.Hakeem  Send Email
Interview Date: 3/31/2009
Answer: Yes - some difficulty
know may be very far, but when gave the example to top the football ground then she immediately said no difficulty.

**Analysis**
- Themes
  - Response Consistency
  - Distance Considered
  - Aid Instruction
  - Administrator Code Only

**Category:**
- Add New Category
  - No, not intended distance
  - Yes, intended distance
  - Missing - Cannot assess

**Save Memo**
Others' Summarizing Memos:
Stephanie: Potential error when the respondent takes the question too literally. Interpretation of categories (i.e., difficulty) may vary — one example = frequency of difficulty vs. level of difficulty.
Heather: Difficulty = pain
MSchneider: rural dwellers tend to walk long distances and therefore rarely have difficulties in mobility. Soccer is a very popular sport in rural...
<table>
<thead>
<tr>
<th>Link</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Question</td>
<td>Allows you to view answers and themes for a selected question. You can filter results by themes and answers. Also you can group results by various categories (Race, Answer, Gender, etc..)</td>
</tr>
<tr>
<td>Question VS</td>
<td>Allows you to view answers for two different questions. You can filter results by answers. Also you can group results by various categories (Race, Answer, Gender, etc..)</td>
</tr>
<tr>
<td>Question Search</td>
<td>Allows you to do a simple cross-tab of Respondents answers to two different questions.</td>
</tr>
<tr>
<td>Question VS Crosstab</td>
<td>Allows you to do a simple cross-tab of Respondents answers to a question, with a theme from a different question. (Potentially)</td>
</tr>
</tbody>
</table>
**Select Question:** IDR2S3

Do you have any difficulty walking or climbing steps?

**Answers:**

- Cannot do at all

**Theme:** Response Consistency

**Category:**

**Output:**

- Notes [ ]
- All Categories [ ]

**Theme:** Administrator Code Only

**Category:**

**Output:**

- Notes [ ]
- All Categories [ ]

**Field** | **Output** | **Sort Order**
--- | --- | ---
Race | ☐ | ☑
Hispanic | ☐ | ☑
Age | ☐ | ☑
Country | ☐ | ☑
Language | ☐ | ☑
Gender | ☐ | ☑
Education | ☐ | ☑
Income | ☐ | ☑
Question Answer | ☐ | ☑
Narrative | ☑ | ☑
<table>
<thead>
<tr>
<th>Respondent ID</th>
<th>Narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada 13</td>
<td>Probed: Cannot walk at all - am in a wheelchair</td>
</tr>
<tr>
<td>MONGOLIA 2</td>
<td>Spinal cord injury owing to the car accident.</td>
</tr>
<tr>
<td>MONGOLIA 8</td>
<td></td>
</tr>
<tr>
<td>South Africa 2</td>
<td>she considers both walking and climbing; for her the issue is entirely with or without her wheelchair and then depends on whether the battery is properly charged or not. She said she refers to 'walking to the shops' when referring to going there in her wheelchair.</td>
</tr>
<tr>
<td>SRI LANKA 12</td>
<td></td>
</tr>
<tr>
<td>SRI LANKA 4</td>
<td></td>
</tr>
<tr>
<td>United States 18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>She said she can't walk due to knee problem.</td>
</tr>
</tbody>
</table>
Do you have difficulty walking 100 (meters/yards) on level ground, that would be about (insert country-specific example) [without the use of your [insert aid]]?

<table>
<thead>
<tr>
<th>Do you have difficulty .... even when using your [insert aid]?</th>
<th>No - no difficulty</th>
<th>Yes - some difficulty</th>
<th>Yes - a lot of difficulty</th>
<th>Cannot do at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>No - no difficulty</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Yes - some difficulty</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Yes - a lot of difficulty</td>
<td>South Africa 3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Cannot do at all</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>