Using Audit Trails to monitor interviewer behavior under CAPI mode in Chinese Family Panel Studies

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Backgrounds (1)

• On-going Projects in ISSS
  – China Family Panel Study (CFPS)
    • 13,000 ~ HHs, 50,000 ~ Individuals
  – China Health and Retirement Study (CHARLS)
    • 10,000 ~ HHs, 15,000 ~ Individuals
  – China Mental Health Survey (CMHS)
    • 30,000 ~ HHs, 30,000 ~ Individuals
Backgrounds (2)

• Quality control approaches
  – Call back verification
  – Audio recording evaluation
  – Field verification

• Disadvantage
  – Can be slow
  – Time consuming
  – Not the most foolproof way

• Blaise Audit Trails
Why we are interesting in response time

**Assumption:**
The interviewer do have influence on response time
How to measure Response Time (RT)

Latent Timers

• Question reading
• Comprehension
• Recall
• Judgment

Respondent

Interviewer

Active Timers

• Probing
• Clarifying

Respondent

Interviewer

• Coding the answer

Interviewer

Determinants of response time

Interviewers characteristics:
- Age
- Education
- Gender
- Marriage status
- Experience

Respondent characteristics:
- Age
- Education
- Gender
- Marriage status
- Language used during interview

Field characteristics:
- Length
- Position
- Question type
- Complexity
- Sensitivity
- Content
Data Source

• Chinese Family Panel Studies (CFPS)
• Work accomplished so far
  – Pilot survey of 2400 households in Beijing, Shanghai, and Guangdong in 2008 (PAPI)
  – Pilot panel survey in Beijing, Shanghai and Guangdong was done in 2009 (CAPI)
  – Baseline survey in 25 provinces in 2010 (CAPI)
  – First adolescents (less than 18) follow-up survey in 2011 (CAPI)
  – First full scale follow-up survey in 2012 (CAPI)
• 2011 CFPS Family Financial Questionnaire
• Average interview length was 27 mins with 141 variables.
## Structure of Interviewer Team

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>% of field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Mean:28.66</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Dummy variable, 1=Male</td>
<td>54.30</td>
</tr>
<tr>
<td>Marital status</td>
<td>Dummy variable, 1=Married</td>
<td>48.68</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>High school and below</td>
<td>17.88</td>
</tr>
<tr>
<td>2</td>
<td>College for professional training</td>
<td>28.81</td>
</tr>
<tr>
<td>3</td>
<td>College graduated</td>
<td>43.05</td>
</tr>
<tr>
<td>4</td>
<td>Master</td>
<td>10.26</td>
</tr>
<tr>
<td>Prior CFPS Experience</td>
<td>Dummy variable, 1=Yes</td>
<td>56.62</td>
</tr>
</tbody>
</table>

\( n=302 \)
Statistical Method

- Data structure : Cross-classified

<table>
<thead>
<tr>
<th>IWER</th>
<th>Respondent</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
<th>......</th>
<th>Qn</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>:</td>
<td>:</td>
<td>:</td>
<td>:</td>
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</tr>
</tbody>
</table>
Results

• Component of the variation in RT
  – Interviewers contribute about 3.1%,
  – Respondents contribute about 4.7%.

• Our results parallel prior finding on respondent characteristics and item characteristics on response time.

• CFPS interviewers appear to contributed independently to the RT
  – Education has negative effect on RT
  – Prior project experience decrease the RT
  – Sequence number of complete IW shows negative effect on RT
Discussion

• There are significant random effects and systematic covariation of characteristics at all levels with the response time.
• The effect of item characteristics can vary across respondents and interviewers.
• Future application
  – Identify the potential problems existing during the data collection
Thank You for Your attention!!
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