Setting up the Cognitive Interview Task for non-English Speaking Participants: Exploratory Research in the U.S. context

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3MC International Conference
Chicago, IL
July 25 - 29, 2016
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5. Study 1: Spanish-language cognitive interviews
6. Study 2: Chinese and Korean cognitive interviews
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Research Goals

1) Review of literature on 3M issues related to communication and survey pretesting

2) Discussion of exploratory research into the cognitive interview introduction for non-English speakers in the U.S using two projects including 3 languages:
   - Spanish
   - Chinese
   - Korean
The Cognitive Interview: A Definition

- Cognitive interviews: One-on-one interviews to evaluate whether respondents interpret, comprehend and respond to survey questions as intended.

- Typical interview segments
  - Introduction
    - Informed consent
    - Instructions: e.g. think aloud
  - Administer survey instrument
  - Debriefing/probes
  - Payment/receipt form
Literature Review: Differences in communication style

- Views of self and effect on communication
  - Western cultures independent
  - Eastern cultures interdependent
    - (Markus & Kitayama, 1991)

- Hall (1976) low vs. high context framework for explaining sociolinguistic differences
  - Low context: Relying on facts of the message (English)
  - High context: Relying on context and interpersonal cues (Chinese and Korean) (Hall & Hall, 1987)
Literature review: Cognitive Interviews in the 3M context

- Difficulty applying standard cognitive interview methods to different populations
  - (Goerman 2007; Miller, 2003; Pan 2004; Park, Sha, and Olmsted 2015)
- Difficulty with providing adequate answers to probes
  - (Coronado & Earle, 2002; Kissam et al. 1993; Pan, 2004; Pasick, et al. 2001)
- Communication norms of English and Western cultures
  - (Pan et al. 2010)
- Rs’ tendency not to provide adequate answers to probing questions in Nepal and China
  - (Kelley et al, 2015a)
Study 1: Spanish Cognitive Interviews

Goerman (2006)

- 48 exploratory interviews with monolingual Spanish speakers
  - Mexican origin
- U.S. Census Bureau American Community Survey (ACS) Computer Assisted Personal Interview (CAPI) instrument
- Education level
  - 35 less than a High School
  - 13 High School or greater
- Gender 42 women, 6 men
- Age range: 24 - 74 (Average = 46)
- 2 bilingual interviewers
Study examined the effects of two interviewing techniques:
- 1) standard interviews (28)
- 2) experimental interviews (20)

Common to both interview types:
- Interviewer first discussed interview process.
  - Reason for doing the interview
  - Confidentiality
  - Reasons for tape recording
Prior to interview
• Interviewers greeted R briefly, introduce self, shake hands.
• minimal small talk.

Common segment

Practice (think aloud)
• Rs asked to practice talking out loud while deciding how to answer “How many windows are there in your home?”
• Discussed interview procedure and explained it is not a test.

Main interview
• Interviewer reads probes as worded on the protocol
  • reword them only if R had difficulty understanding
Experimental interviews: Spanish

Prior to interview: Rapport building
• Interviewer waited outside or greeted R in the hallway, offered to shake hands (Some Rs initiated kiss on the cheek)
• Engaged in small talk, providing information about self/family background/job

Common Segment

Practice
• Interviewer demonstrated think-aloud and gave other probe examples
• Discussed interview procedure/purpose

Main interview
• Freedom for interviewers to reword the probes and more explanations
Results: Overall Discomfort

<table>
<thead>
<tr>
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<th>Experimental</th>
<th>Standard</th>
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<tbody>
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<td>S=315</td>
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<tr>
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<td>S=7</td>
</tr>
<tr>
<td>Other</td>
<td>E=4</td>
<td>S=11</td>
</tr>
</tbody>
</table>

%:
- Total: 15% E, 17% S
- Pause: 53% E, 21% S
- Embarrass: 16% E, 31% S
- Annoying: 6% E, 12% S
- Emotional: 0% E, 2% S
- Laughing: 18% E, 13% S
- Other: 21% E, 8% S
Study 2: Chinese/Korean cognitive interviews

- 258 cognitive interviews with monolingual respondents
  - 129 Chinese speakers
  - 129 Korean speakers
- U.S. Census Bureau American Community Survey (ACS) Language Assistance Guide (LAG)
- Materials tested in 6 rounds
- Interview sites: Illinois, North Carolina, Washington D.C.
- Rs varied by education level, gender, immigration year, and age
Introductory Practice Type 1

Initial practice for Round 1 of testing:

- Think aloud practice with how many windows question
- Optional probes that interviewer could read
  - How did you come up with that answer?
  - What do you think they mean by the term window?
  - What is this question asking in your own words?
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  - How did you come up with that answer?
  - What do you think they mean by the term window?
  - What is this question asking in your own words?

Interview issues/results

- Rs’ comments were often very brief
- Rs often confused between survey Qs and cognitive interview probes
- Think-aloud practice quite unnatural
Revised practice Rounds 2 and 3:

• Number of windows think aloud replaced with
  • “What is your favorite season?” think aloud practice

• New statement: “What we want to do here is not to collect information about you. Instead, we want to get a better idea of how our questions are working, and if they are easily understood.”

• Required probes, not optional
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- Required probes, not optional

Interview issues/results

- Eliminated confusion between survey questions and cognitive interview probes
- Realized that practice session did not match types of probes actually asked in interview
Revised practice Rounds 4-6

- Practice question on paper
- Sample question with embedded translation error
- Practice probes matched interview probes
  - Goal for Rs to understand that the survey questions maybe flawed and that they were being asked to explain their interpretation
- Reiterated no right or wrong answer
- Encouragement “you’re doing great!”
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Results:
Interviewers felt that changes improved experience and interview quality.
Discussion

• High v. low context cultures revisited
• Applying same procedures in low context cultures: English interviews, an anecdote.
• Need to develop introductions that consider usual communication strategies of different language speakers: “adaptation” as opposed to “translation” of protocols
• Prior understanding and familiarity with task, helps Rs understand probing questions and feel more comfortable with describing their thoughts and opinions
Limitations

Study 1: Lack variation gender, education level

Study 2: Not set up as methodological experiment

• Many variations in procedure. Difficult to quantify which factors had effects on interview outcomes

• Expanded introductory approach increases interview time and may cause R to think and talk in advance about topics to be covered in the interview
Future Research:

• Comparison of different introductory approaches across cultures and languages
• Control for demographic characteristics such as education level
• More research across national boundaries
Disclaimer:
This presentation is intended to inform people about research and to encourage discussion. The views expressed are those of the authors and not necessarily those of the U.S. Census Bureau or RTI International.