Empirical Evaluation of Non-English Cognitive Interview Techniques: Creation of a Coding Scheme to Evaluate Probe Wording Effectiveness

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Outline of Talk

- Cognitive interviewing (CI)
- Review of the literature
 - mono-cultural CI v. cross-cultural CI
- Research Questions
- Study methods and respondent characteristics
- Development of coding scheme
- Inter-coder reliability
- Sample findings and conclusions



Cognitive interview probes

Meaning oriented

"What does the term 'foster child' mean to you in this question?"

Process oriented

- "How did you arrive at/choose that answer?"
- Paraphrasing
- "Can you tell me in your own words what that question is asking?"
- Recall
- "How do you remember that you (saw a dentist 3 times) in the last year?"



Empirical Research: Monolingual cognitive interview (CI) methods

Increasing amounts of empirical research

Presser et. al. 2004; Willis 2005; Beatty and Willis 2007; Blair et al. 2006



Adaptation of CI Method for use across languages/cultures

Difficulties with pretesting techniques, English

- Willis, 2005; Miller, 2003; Bickert & Felcher, 1996; Wellens, 1994
- Difficulties with pretesting: non-English
- Pan, 2004; Carrasco, 2003; Coronado and Earle, 2002; Blumberg & Goerman, 2000; Kissam, et al., 1993

More recent literature

 Dean et al. 2007; Willis and Zahnd 2007; Fitzgerald and Miller 2009; Pan et al., 2010; Harkness et al 2010



Research Questions

- Why have previous studies found that CI techniques cause discomfort among non-English respondents?
- What specific interview techniques and probes work best with Spanish-speaking CI respondents?



Methods

- 48 cognitive interviews with Spanish speakers using a segment of CATI/CAPI version of ACS
 - Demographic characteristics of respondents
 - Type of interviews conducted
 - Development of coding scheme
 - Inter-coder reliability
 - Sample findings



Demographic characteristics of Spanish speakers

- Mexican origin immigrants to U.S.
 - 44 of Mexican origin
 - 4 of some other origin
- Education level
 - 33 Less than High School
 - 12 More than High School
- Gender
 - 42 Female
 - 6 Male
- Age
 - 14 Age 39 or less
 - 15 Age 40 to 48
 - 14 Age 49 or greater



Structured v. experimental interviews

- Variation of introduction and probe wording
- Structured interviews
 - Direct translation of typical U.S. English protocol (procedure and wording)
- Experimental interviews
 - Variation of introductory statements/conversation
 - Different sample probes to begin
 - Flexibility in probe wording



Development of coding scheme

- Interviews transcribed mostly in Spanish with some description in English
- 2 bilingual coders (also the interviewers)
- Coding scheme designed in advance but new categories and codes added during the coding process



Coding scheme

Yes/no codes:

- 1. Was probe administered?
- 2. Was probe administered as worded in protocol?
- 3. Did respondent understand when read as worded?
- 4. Was probe reworded?
- 5. Was probe understood when reworded?
- 6. Did probe cause discomfort?
- 7. Did respondent provide "useful" answer to probe? Descriptive codes:
- 1. Type probe rewording done? (description)
- 2. What type of discomfort did it cause? (description)



Inter-coder reliability

- Application of Kappa statistic
- Kappa Scores
 - Total of 7 cases coded by both interviewer/coders
 - Overall: 0.68 (n=892)
 - Yes/No: 0.71 (n=784) (good)
 - Type probe rewording: 0.50 (n=69) (fair-good)
 - Discomfort: 0.38 (n=39) (poor)



Sample Findings: Rewording of Probes by type





Overall Usefulness of Probes





Usefulness of Probes when Read As Worded





Usefulness of Probes when Reworded





Limitations

- Use of mostly Mexican-origin respondents in 1 geographic region
- Gender distribution of respondents
- Same 2 interviewers and coders



Next steps

- AAPOR presentation
- Examination of probe rewording
 - Major v. conversational rewording
- What seemed most "useful?" for a given probe type
- Examination of results by education level



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