Minimizing Order Effects when Integrating Early Stage Scoping and Cognitive Interviewing Techniques

Kenneth Herrell Kristin Stettler

U.S. Census Bureau

Disclaimer: Any views expressed are those of the authors and not necessarily those of the U.S. Census Bureau.

Overview

- Missing Link and Early Stage Scoping (ESS)
- Previous Research on Integrating ESS with Cognitive Interviews
- The Question: How to Integrate?
- Our Methods
- Recommendations for Integrating ESS into Cognitive Interviews

Background

- The Missing Link (Willimack and Snijkers, 2012)
 - Gap between the survey questions on a survey and the concept they are designed to measure
 - Caused when questions are written without full exploration of the concept
- Early Stage Scoping (ESS) (Stettler and Featherston, 2012):
 - Pretesting method designed to address the Missing Link
 - Interviews with respondents that discuss survey concepts in broad terms
 - Draft questions are not used, or are used sparingly
 - Main topics:
 - What data respondents have (and can provide)
 - How data is stored
 - Native terminology



The Question

If there is no time for ESS as a separate phase in the development of an establishment survey, what is the best way to integrate ESS into cognitive interviews?

Current Research

- New questions being added tested for the Annual Survey of Manufactures (an establishment survey) regarding the use of robots in manufacturing
- Test questions were prepared without a separate phase dedicated to early stage scoping interviews

Round 1 of Testing

- Round 1
 - 17 Interviews
 - Experimental design
 - Condition 1: Interviews were conducted with early stage scoping questions coming first
 - Condition 2: Cognitive interviews coming first
 - Same questions were asked in the protocol for each section

Round 1 Findings

- In Cognitive Interview-first condition:
 - Interviews were more frequently disrupted
 - Often ended up covering same material twice, first in the context of the question, then again from a broader perspective
 - Two approaches when faced with a repeat scenario:
 - Skipping broad topics that were already covered specifically (disrupted flow and confused interviewer)
 - Ask questions anyway respondent confusion about being asked something twice

Round 1 Findings

- In ESS-first condition:
 - No major disruption in interviews; more natural flow
 - Cognitive responses may have been biased because of the earlier ESS discussion
 - Example: ESS phase discussed preferences for terms like "industrial robotic equipment;" may have made those terms easier to digest during cognitive interview portion

Round 2

- 15 Interviews
- Same protocol for all (no experimental comparison)
- Less distinct phases for ESS vs. Cognitive Interviews
 - Choice made for project reasons: no need for wide-ranging ESS interview after round 1
- More similar to traditional cognitive interviews, but with ESS-style questions included when reviewing each question, and broader ESS-style questions at the end, that covered topics not addressed in cognitive questions

Round 2 Findings

- Interviews tended to go more smoothly
 - No priming for cognitive interviews
 - Fewer disruptions of early stage scoping questions
 - Potentially went more smoothly because content was more refined and there was less subject matter to cover

Overall Recommendations

- Ultimately, still ideal to do an entire separate stage of ESS
- If combining into the same interview:
 - Blending the two styles for each topic worked well
 - If phases are kept distinct, ESS should come first in the interview

Contact Information:

Kenneth Herrell kenneth.herrell@census.gov (301) 763-2197

Kristin Stettler
kristin.stettler@census.gov
(301) 763-7596