The Effect of Interviewer Experience on Item Non-Response: A Verbal Behavior Study

İpek Bilgen
Robert F. Belli

Survey Research and Methodology (SRAM)
University of Nebraska-Lincoln
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Research Focus

• Interviewer experience association with
  – Interview Pace
  – Interviewer and respondent verbal behaviors during the interview

• How does this association affect data quality?

• The role of interviewer experience in two interviewing techniques
  – Namely, standardized and flexible interviews
Focus of the talk

- Interviewer experience association with
  - Interviewer deviation from standard protocols

- How does this association affect item NR?
  - In behavioral questions

- In different interviewing techniques
  - Standardized interviews
  - Flexible calendar interviews
Interviewer Experience

• **General interviewer experience***
  – Gained over lifetime

• **Survey-organization specific experience**
  – Gained in one particular survey organization

• **Within-study interviewer exposure***
  – Gained during administration of one survey fielding/administration period.
Interviewing Techniques

• **Standardized Interviews**
  – All questions are scripted in a pre-defined order
  – **Aim:** Limit the effects of interviewers

• **Calendar Interviews**
  – Uses structure of autobiographical memory
  – Allows conversational flexibility
Item Nonresponse (Item NR)

• Failure to obtain responses from one or more items during the administration of the survey.

• Effect on data quality
  – Systematic differences between respondents who answer and who do not answer a particular item.
  – Incorrect survey inferences
Interviewer Experience & Item NR Relationship

- Findings on the relationship between general interviewer experience and item non-response are mixed.
Interviewer Exposure & Item NR Relationship

• A few studies examined the relationship between i’wer exposure and i’wer performance
  – Implications for item non-response.
Behaviors that occur during the interview

1. GENERAL I’WER EXPERIENCE

2. I’WER EXPOSURE

3. INTERVIEW TECHNIQUE

DATA QUALITY
This talk focuses on…

1. I’wer Verbal Deviation Behaviors (from Conventional Ideals/Protocols)

2. ITEM NR

- GENERAL I’WER EXPERIENCE
- I’WER EXPOSURE
- INTERVIEW TECHNIQUE
Stage 1: Computer-Assisted Telephone Interviewing (CATI)

626 PSID respondents are randomly selected.

Respondents randomly assigned to int. technique

26 i’wers randomly assigned to int. technique

Interviews are - Tape-recorded - Transcribed

Respondents are interviewed with CATI in both conditions.
Stage 2: Verbal Behavior Coding

- Coding Scheme
  - Includes both interviewer & respondent behaviors
- Random sample
  - 165 Calendar + 162 Standardized
- Inter-coder reliability analyses
  - Random 10% double coded
  - w/ Kappa>0.40 selected
Outcome

• Item Non-response
  – Unresolved don’t know (DK) Behavior
    R: Uh… see I don’t even remember the year when I broke all my ankle bones. Because then I got a metal plate and 2 screws in my hip.
    I:  Wow, hmm, that sounds painful.
    R: I don’t remember the year though.
    I:  Let’s just go ahead skip to the next one then.
  – Binary Measure (0- Occurred, 1-Not occurred)
  – Turn-level outcome
Predictors

• Interviewer-Level Predictors
  – General Interviewer Experience with standardized interviews
    (0-Less than one year, 1- One year or more)
  – Interviewing Technique
    (0- Calendar, 1- Standardized)

• Respondent-Level Predictor
  – Interviewer Exposure (continuous)
Moderator Verbal Behavior

• **Turn - Level Moderator**

Interviewer VB Deviation Scale
– Created using the sum of following behaviors:
  • Failure to probe
  • Failure to probe to DK responses
  • Improper Positive Feedback
I’wer VB Deviation Scale

- **Interviewer failure to probe after a DK response:**
  Interviewer accepts the “don’t know” response and this results in an unresolved DK response.

  I: What was the address of the place you moved to?
  R: Honest to Gosh, I can’t remember the address.
  I: Laugh-R. You are doing good. Did you ever live in a different place after that?

  <I’wer provides *improper positive feedback* rather than probing whether it was an apartment or a house>
Methods

• STEP 1: Experience by Behavior Models
  – Interviewer Experience and Exposure effect on Interviewer Deviation Behaviors
  – Negative Binomial Multi-Level Models
    • Respondent-level
    • Count data (over-dispersion)

• STEP 2: Item NR Models
  – Unresolved DK measure
    • Turn-Level and Binary
    • Logistic Three-Level Linear Models
Hypotheses

• Increase in *interviewer deviation behaviors*
  – Experienced > Inexperienced (both conditions)
  – Calendar > Standardized (both experience levels)

• Increase in *interviewer deviation behaviors* due to within-study interviewer exposure
  – Inexperienced > Experienced (both conditions)
  – Calendar > Standardized (both experience levels)
Hypotheses (cont’d)

IF the previous hypotheses hold, THEN:

• **Item non-response** increase/decrease
  – Experienced > Inexperienced (both conditions)
  – Calendar > Standardized (both experience levels)

• **Item non-response** increase/decrease due to within-study interviewer exposure
  – Inexperienced > Experienced (both conditions)
  – Calendar > Standardized (both experience levels)
Interviewer Deviation Behaviors

![Graph showing interviewer deviation behaviors](image)

- Calendar No Experience (<1 year)
- Calendar Experienced (>=1 years)
- Standardized No Experience (<1 year)
- Standardized Experienced (>=1 years)
Item Non-Response

Interviewer Experience by Condition

No Experience | Experienced (>=1 years) | No Experience | Experienced (>=1 years)

Calendar

Standardized

Low DEVIATION
Average DEVIATION
High DEVIATION
Conclusions

• I’wer experience and item NR relationship
  – Moderated by i’wer deviation behaviors
  – I’wer exposure do not play a role in this relationship.
  – **Overall item NR**
    • Experienced > Inexperienced
    • Standardized > Calendar
  – **Overall, item NR increase due to deviation**
    • Experienced > Inexperienced
    • Standardized > Calendar (among experienced)
  – **Item NR decreases due to deviation**
    • Among inexperienced i’wers in standardized interviews
Future Direction

- General I’wer Experience
- I’wer Exposure
- Interview Technique

- I’wer Deviation from Conventional Ideals/Protocols
- I’wer and R’dent Interpersonal Dynamics
- I’wer and R’dent Retrieval Strategies

Future Direction
Discussion

• Interviewer experience and item NR relationship may be moderated by several different interview verbal behaviors
  – This may explain the equivocal results in the literature

• Implications for interviewer training and monitoring, depending on…
  – Interviewing technique
Questions?
ipekbilgen@huskers.unl.edu