The Role of Interviewers in Collecting High Quality Survey Data

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Role of Interviewers

- Create frame of HHs
- Select cases

- Approach households
  - Roster members
  - Select member

- Ask questions
  - Record answers
Role of Interviewers

- Create frame of HHs
  - Coverage Error
- Select cases
  - Sampling Error

- Approach households
  - Nonresponse Error
- Roster members
  - Coverage Error
- Select member
  - Sampling Error

- Ask questions
- Record answers
  - Measurement Error
Interviewer Incentives

- Do we incentivize interviewers to collect good data at each stage?

- Principal–Agent problem
  - Principal: survey researchers, central office
  - Agent: interviewer
    - Private information about cases and neighborhoods
    - Not closely monitored
    - Paradata movement: capture private information
Interviewer Incentives

- Interviewer convenience
  - Stay cool, warm, dry
  - Safe in dangerous neighborhoods

- Response rates
  - Pay–by–case (Germany)
  - Pay–by–hour (US)

- How do these affect 3 error sources
  - Nonresponse, Sampling and Coverage
Interviewers & Nonresponse

- Interviewers in face-to-face surveys
  - Not closely monitored
  - When to approach cases
  - Which cases to attempt

- Effect of incentives
  - Earlier attempts in African–American areas
    - (Hawkins 1977)
  - Pursue cases that look like previous respondents
    - (Kennickell 2005)
Interviewers & Sampling

- Random walk: select every $k$th HH
- HH member: select $R$ from HH roster

- Interviewers select likely respondents
  - (Alt 1991, Eyerman et al 2001)

- Bias due to interviewer selection
  - Higher income, more home ownership, more adults
  - (Manheimer & Hyman 1949)
Interviewers & Coverage

- Interviewers create frames
  - Housing units, household members
  - Under- and overcoverage can lead to bias

- My research is about housing unit listing
  - Interviewer (lister) goes to selected blocks
  - Records address of every housing unit
    - Description where address unclear or does not exist
  - Frames returned to office for selection
Listing Example
Two Listing Methods

- Traditional
  - Lister has only map of selected area
  - Travel around each selected block
  - List all housing units

- Dependent
  - Lister has map and initial frame
    - From previous listing
    - Or commercial database (postal list)
  - Update frame in the field
  - Used in IAB survey PASS
Census Bureau Listing

- US Census Bureau
  - Survey research as well as Decennial Census
    - Lots of listing
  - Highest response rates in US

- Two listings of 215 blocks
  - Identical methods
Block Agreement Rates
Hypotheses on Mechanisms

- Purposeful undercoverage to avoid nonresponse
  - If later interviewing in the same area
    - *If I see a house with a big fence and a sign that says “Dangerous Dog,” should I even list it?*
    - CPS: Hainer (1987)

- Difficult to test
Hypotheses on Mechanisms

- What makes listing easier or more comfortable for the lister?
  - Race, language match
  - Crime rates
  - Driving

- Confirmation bias in dependent listing
  - *Failure to add* HUs missing from list
  - *Failure to delete* inappropriate units on list
Michigan Listing Study

- 2 listings of 14 segments

- Failure-to-add confirmation bias
  - Deleted 53 housing units
  - 13% point decrease in inclusion

- Failure-to-delete confirmation bias
  - Added 24 housing units
  - 11% point increase in inclusion

Eckman & Kreuter (submitted)
Dissertation Data Collection

- National Survey of Family Growth (NSFG)

- Three listings of 49 selected segments
  - Vary listing method
  - Manipulation: add and delete units

- Interviewer characteristics
  - Experience, attitudes, languages

- Interview data
Next Steps

- Match 3 listings
  - What kinds of HUs are listed by only 1 or 2?

- Test hypotheses
  - High crime areas
  - Interaction of area, interviewer characteristics
    - Race
    - Language

- Do lister errors lead to bias?
Dissertation research is part of research project into interviewer incentives
  ◦ Mechanisms of interviewer error
  ◦ How sensitive are interviewers to incentives?
  ◦ 2 sessions at ESRA 2009 on interviewers as agents

Interviewers impact data quality
  ◦ Need better understanding of their role
Thank You

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