Video 6 of 6: Levels, Informants, Summary

Questionnaire Design

November 2020

Module 3 – Questionnaire Design
Levels of Questions

- Usually only one person answers a phone survey
- When picking respondents (within household selection) it is important to know what informant is needed and
- what process was used for selection
Screening questions

• General population surveys
  – Probability selection of household either through address or through telephone number
  – Selection of an adult from sampled household (within-household selection)

• Targeted population surveys
  Examples:
  – Households having at least one child with special needs
  – Households with at least one child between the age of 19-36 months old (NIS)
  – Adults aged 35 to 55 years old
Within-household selection

- Probability methods: requiring household roster (household listing)
  - Kish’s method (Kish, 1946)
    - “Can you tell me first the names and ages of the male adults currently living in this household? What about women living in this household?”
    - Men listed in descending order of age, women listed in descending order of age
    - Using Kish’s table to randomly choose 1 adult
  - Weaknesses:
    - Time-consuming, burdensome for both respondent and interviewer
    - Perceived as intrusive by respondent
  - Strength:
    - True random selection with known selection probability
Within-household selection (2)

- Quasi-random probability methods: no household roster is needed
  - Next/last birthday method (Salmon & Nichols, 1983)
    - “In order to determine whom to interview, could you tell me, of the people who currently live in your household who are 18 years of age or older and had the last birthday?”
  - Strength:
    - Less burdensome to respondent and to interviewer
    - Less intrusive to respondent
  - Weakness:
    - Assuming birth is random (which is not true)
      - Sacrificing randomness
Within-household selection (3)

- Non-probability methods: no household listing necessary
  - Troldahl-Carter method (1964) and variations
    - “How many persons 18 years or older are living in your household counting yourself?”
    - “How many of them are men?”
    - Based on answers and using one of four matrices to do the selection
      - approximating population age and gender distribution
      - Sacrifices randomness
  - Rizzo’s method: a mix of methods based on household size
    - “Including yourself, how many people aged 18 or older currently live in this household?”
      - If HH size=1, continue with respondent
      - If HH size=2, randomly select one.
      - If HH>=3, any method can be used
Screening for households/people

• We always found fewer people than what we expect
  – Underreporting to the screening questions
    • =>undercoverage
  – National Longitudinal Survey of Youth, 1997 cohort
    • Screening household to find people who were 12-23 years of age

<table>
<thead>
<tr>
<th>Age group</th>
<th>Found/Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;23 years of age</td>
<td>1</td>
</tr>
<tr>
<td>&lt;12 years of age</td>
<td>.90</td>
</tr>
<tr>
<td>12-23</td>
<td>.70</td>
</tr>
</tbody>
</table>

(Horrigan et al. 1999)
Motivated underreporting  
(Tourangeau, Kreuter, and Eckman, 2012)

- Experimental study comparing different questions to screen for people aged 35 to 55
  - (Direct) “Is anyone who lives there between the age of 35 to 55?”
  - (Compliment) “Is everyone who lives there younger 35?” “Is everyone who lives there older than 55?”
  - (Roster) “Before we begin, we would like to ask you a few questions about the people who usually live there. Let us start with you.”

<table>
<thead>
<tr>
<th>Experimental condition</th>
<th>Known eligible (n = 854)</th>
<th>No known eligible (n = 1,739)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screener format</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>81.9 (271)</td>
<td>10.1 (626)</td>
</tr>
<tr>
<td>Complement</td>
<td>84.1 (302)</td>
<td>9.8 (594)</td>
</tr>
<tr>
<td>Roster</td>
<td>92.2 (281)</td>
<td>19.5 (519)</td>
</tr>
</tbody>
</table>
Proxy Reports

• Data from informants
  – Tradeoff between loss of quality vs. social desirability issues
  – Proxy knowledge
  – Dependent upon relationship between reporter and individual for whom proxy information is obtained
Module Summary Questions

Questionnaire Design
Module Summary Review Questions

- Are questions clearly worded and well understood by interviewers and respondents?
- Do pre-coded response categories cover the most common responses?
- Are scripted or more detailed introductions needed to introduce individual questions or entire sections?
- Does the survey consent/introduction script provide respondents an adequate understanding of the survey?
- Can you conduct cognitive interviews to test the questions?
References

References

END OF VIDEO 6