Conducting cognitive interviews over the phone: Benefits and challenges

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AAPOR 2013

May 2013
Research Motivation

- Typically, they are done face-to-face; however,
  - Some target populations such as clinicians or farmers are very difficult to reach face-to-face
  - Many researchers are facing budget and staff time constraints
  - Demand for larger samples, more geographic variation

- To date, little research has examined the effectiveness of conducting cognitive interviews over the telephone
  - Self-administered Web surveys with promising success (Edgar 2012)

- Alternative approaches for conducting cognitive interviews may be the way of the future
Methods

- 8 interviews
  - Cognitive interviewers in Health Policy and Research at AIR
- 1 hour, no incentive, IRB approved
- Protocol topics
  - Type of cognitive interview projects
  - Logistics
  - Benefits/Challenges/Trade-offs
  - Quality of the data
  - Preferences for face-to-face or phone
<table>
<thead>
<tr>
<th>Project Topic</th>
<th>Type of Material</th>
<th>Population</th>
<th>Shared Screen</th>
<th>Remote Location</th>
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</thead>
<tbody>
<tr>
<td>Medicare Part D</td>
<td>Phone survey</td>
<td>Medicare</td>
<td>N</td>
<td>N</td>
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<tr>
<td>EHR Adoption</td>
<td>Phone survey</td>
<td>Clinician</td>
<td>N</td>
<td>Y</td>
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<td>Nutrition and Exercise in School Program Implementation</td>
<td>Web survey</td>
<td>Community Site Directors</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Use of Clinical Guidelines</td>
<td>Web survey</td>
<td>Clinician</td>
<td>Y</td>
<td>Y</td>
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<td>Traumatic Brain Injury, Burns, Spinal Cord Injuries</td>
<td>Guides</td>
<td>Consumer</td>
<td>N</td>
<td>Y</td>
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<td>Cardiovascular Disease etc.</td>
<td>Comparative Effectiveness Reviews</td>
<td>Clinician</td>
<td>N</td>
<td>Y</td>
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<tr>
<td>Care Coordination</td>
<td>Definition</td>
<td>Consumer</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>
Results

Benefits of Phone Cognitive Interview
Benefits of Phone Cognitive Interview

- Access to populations nearly impossible to get face-to-face
  - Clinicians
  - Physically disabled

- Variation
  - Geographic (urban/rural, region of country, multiple sites)
  - Dr. practice setting (e.g. solo practice, group practice, hospital)
  - Dr. specialty
  - Education/SES
  - Race
Benefits of Phone Cognitive Interview

- Scheduling easier
  - Quicker timeline
    - More interviews if less travel time
    - More interviews per day because of time zones
  - Rescheduling easier so don’t lose people
  - After hours scheduling easier
  - Respondent not as late to appointment
Benefits of Phone Cognitive Interview

- Cost less
  - No travel
    - No facility rental
  - Lower incentive
- Interviewer can take more notes
- Less judgment of interviewer (i.e. age)
Results

Challenges of Phone Cognitive Interview
Challenges of Phone Cognitive Interview

- Lose non-verbal cues
  - Can’t see emotions like confusion, annoyance, boredom
    - Strategy: Can use tone of voice, audible expressions
  - Can’t watch someone read
    - Strategy: Ask to read outloud
  - Silence is even more awkward; harder to know what silence means
    - Strategy: Ask more probes
  - Harder to interrupt to re-direct
  - Harder to hear strong accents
Challenges of Phone Cognitive Interview

- **Less feedback to probes**
  - Strategy: More probing needed to get think aloud
    - Especially for people not comfortable/familiar verbalizing their thought process
    - Annoying for respondent

- **Rapport building harder**
  - Especially important for people not comfortable/familiar verbalizing their thought process

- **Pre-sending materials**
  - Respondent doesn’t have materials
  - Not getting first reaction
    - Strategy: send materials right before interview
Challenges of Phone Cognitive Interview

- Harder to know where respondent is navigating
  - Even with a shared screen because can’t see eye tracking
    - Strategy: More probing to ask where they were
    - Strategy: Instrument needs clear navigation cues (i.e. headings, color coding)

- Lose control of pace if respondent had control of mouse with shared screen
  - Strategy: Interviewer controls mouse

- Graphics/visuals not easy to probe
Results

Quality of Data

Interviewer Preference
Quality of data the same?

- Most people felt the quality of the data was similar to face-to-face
  - Got what they needed for analysis
  - But hard to tell without direct comparison
- Potential change in type of information received
  - More verbal probing means raw reactions replaced with conscious reactions
Prefer phone or face-to-face?

- Most people still preferred to do them face-to-face
  - “If the choice is to do it by the phone or not do it, we’re going to do it by the phone and I’ll compensate, but if I have the choice it’s always best to do it face-to-face, in my opinion.”

- Some people felt more ethical to do by phone
  - Accessing disadvantaged groups

- A couple people felt phone is easier
  - Interviewing clinicians easier than consumers
  - Logistics
Discussion

Tradeoffs between phone and face-to-face
When to use phone or face-to-face? Depends on…

- **Phone better**
  - Populations:
    - Clinician or others with time constraints
    - Better verbal skills/strong opinions/can say don’t know
    - Motivated by topic/personal experience
    - Physically disabled
  - Geographic variation
  - Cost
  - Quick timeline
  - Text only

- **face-to-face better**
  - Populations:
    - Older people
    - Blind or deaf
    - Computer illiterate
    - Low cognitive/verbal ability
    - Caregiver needs to be present
  - Visual/graphics
Future Research

- Compare data collected by phone and face-to-face within the same project to assess data quality
- Interviewer skills different for phone/face-to-face?
  - More experienced interviewers over the phone?
- Sensitive topic
  - Trade-off privacy on the phone vs rapport building face-to-face
- Eye tracking software/Skype?
  - Video capabilities to see non-verbals
Questions?

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