Conversational Interviewing, the Comprehension of Opinion Questions and Nonverbal Sensitivity

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May 17, 2012
Acknowledgments

• Jim Lepkowski, Philip Brenner and the 2011 Michigan Program in Survey Methodology practicum

• Survey Research Center

• Bonnie Andree, Alison Bowers, Richard Curtin, Jennifer Kelly, Joe Matuzak, Rebecca McBee, Ann Munster, SCA interviewers, Dylan Vollans, Brady West
Standardized vs. Conversational Interviewing

- **Standardized interviewing (Fowler and Mangione, 1990):** Interviewer (I) required to read question exactly as worded and give only neutral probes
  - Reduce variability in survey data due to I’s by limiting possible I behaviors to a small group requiring relatively little individual judgment.

- **Conversational interviewing (Suchman & Jordan, 1990; Schober & Conrad, 1997):** Read question as worded and then use whatever words necessary to convey the meaning of the question
  - Improve response accuracy by ensuring all respondents (R’s) interpret the question in the same way.
Conversational Interviewing Literature
(Schober and Conrad, 1997; Conrad and Schober, 2000; Schober et al., 2004)

• Experimental Design
  ▪ Questions asked twice: 1st Standardized => 2nd Standardized
    1st Standardized => 2nd Conversational
  ▪ If R’s change answers more often when able to obtain clarification (conversational techniques), suggests their interpretation of the question has changed, presumably to intended interpretation. Consider that to reflect improved response accuracy.

• Key Findings
  1) Conv interviewing increased response accuracy when readministering factual questions with mapping ambiguity and known right and wrong answers
  2) Conv interviewing took more time due to extra clarification provided
Nonverbal Sensitivity and Conversational Interviewing

• To best implement conversational interviewing, I’s must recognize that the R is confused.

• R’s don’t often explicitly ask for clarification, thus I’s need to “pick up” on nonverbal cues.

• In conversational interviews, I’s better at picking up these cues may improve R’s understanding of the question and thus accuracy of their answers more than I’s who are less sensitive nonverbally.

• Measure with Profile of Nonverbal Sensitivity (PONS)
  ▪ Rosenthal, et al. (1979)
Hypotheses

Question asked twice:  
1st Standardized => 2nd Standardized  
1st Standardized => 2nd Conversational

H1: Conversational interviewing will produce significantly more response change on factual and *opinion* questions than standardized interviewing.

H2: Within only conversational technique, I’s who are more nonverbally sensitive (tested via the PONS) will produce significantly more response change than those less nonverbally sensitive. Within the standardized technique, there will be no significant difference.
Experimental Testbed

• Survey of Consumers (SCA)
  ▪ Monthly, centralized, split-panel CATI study helps measure consumer confidence
  ▪ 500 interviews conducted each month using standardized interviewing techniques (300 new R’s, 200 panel R’s 1st interviewed six months prior)
    ▪ 372 interviews conducted by I’s who took the nonverbal sensitivity test
  ▪ June 2011 SCA: 2 additional sections
    ▪ Drowsy Driving
    ▪ Current experiment
Experimental Design – Implementation

• Cases randomly pre-assigned to conversational or standardized readministration
  ▪ I’s conduct both kinds of interviews

• In last section of survey, 10 questions readministered
  ▪ 6 SCA questions: 3 about economy, 1 each about R education level, # of landlines, # of cell phones
  ▪ 4 drowsy driving questions

• Authors created definitions for potentially ambiguous terms in the questions and response options
  ▪ I’s trained and tested on all question concepts and definitions
Question with Short Definition

In your opinion, how risky is drowsy driving? Would you say that it is extremely risky, very risky, somewhat risky, not too risky, or not at all risky?

**DEFINITION:**
By “extremely risky” we mean it causes an accident every time you do it. By “not at all risky” we mean it never causes an accident.
Question with Long Definition

We are interested in how people are getting along financially these days. Would you say that you (and your family living there) are better off or worse off financially than you were a year ago?

DEFINITIONS:
By “better off financially” we mean that you and your family have more left over at the end of each month than you did a year ago. Or if you’re spending more than you’re earning, that you’re adding less debt each month than you did a year ago.

By “worse off financially” we mean that you and your family have less left over at the end of each month than you did a year ago. Or if you’re spending more than you’re earning, that you’re adding more debt each month than you did a year ago.

By “these days” we mean the last three months.
More response change in conversational interviewing (18.1%) than standardized interviewing (12.7%), $p < 0.0001$
Experimental Section Duration (in minutes) by Interviewing Technique and Nonverbal Sensitivity Group

Main Effects:
- Iw Tech (p < 0.001)
- Nonverbal Sensitive Group (p<0.0001)

Interaction: n.s.

<table>
<thead>
<tr>
<th>Interviewing Technique</th>
<th>Experimental Section Duration (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversational</td>
<td>3.0 (HIGH Nonverbal Sensitivity)</td>
</tr>
<tr>
<td>Standardized</td>
<td>2.0 (LOW Nonverbal Sensitivity)</td>
</tr>
</tbody>
</table>
Pre-emptive Strikes in Conversational Interviewing

• Pre-emptive strikes
  ▪ *I* provides a definition immediately after reading the question, before the *R* has a chance to make a sound.

I: Would you say that you and your family living there are better off or worse off financially than you were a year ago? *And by better off financially, we mean that you and your family have more left over at the end of each month than you did a year ago.*

R: I'd say we're worse off.
Pre-emptive Strikes: Low vs. High Nonverbally Sensitive Interviewers

• In conversational interviewing, the Low Nonverbally Sensitive group of I’s used pre-emptive strikes on 38% of questions asked compared to 0.9% for High group, \( p < 0.0001 \)

• Less nonverbally sensitive I’s may struggle to pick up nonverbal cues if and how the \( R \) is confused, so do this to try to be helpful.
Summary

• For both factual and opinion questions, conversational interviewing increased response accuracy and took more time than standardized interviewing.

• Less nonverbally sensitive I’s:
  ▪ took longer to complete the readministration section
  ▪ used pre-emptive strikes more often


Contact Information

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During the last few months, have you heard of any favorable or unfavorable changes in business conditions?

DEFINITIONS:
When deciding if you have heard about any changes in business conditions, please consider the following sources of information: television, radio, the internet, newspapers, magazines, and conversations with other people.

By "business conditions" we mean the profitability and prosperity of business for the country as a whole, not locally or regionally. Indicators can include earnings, sales, taxes, inflation, unemployment rates, interest rates, and government policies, laws, and regulations about business.

By "favorable" we mean anything that would increase the profitability or prosperity of business for the country as a whole. By "unfavorable" we mean anything that would decrease the profitability or prosperity of business for the country as a whole.

By "last few months", we mean the last 4 months.

1. Yes
5. No, haven't heard
We are interested in how people are getting along financially these days. Would you say that you are better off or worse off financially than you were a year ago?

DEFINITIONS:

By "better off financially" we mean that you and your family have more left over at the end of each month than you did a year ago. Or if you're spending more than you're earning, that you're adding less debt each month than you did a year ago.

By "worse off financially" we mean that you and your family have less left over at the end of each month than you did a year ago. Or if you're spending more than you're earning, that you're adding more debt each month than you did a year ago.

By "these days" we mean the last three months.
Profile of Nonverbal Sensitivity (PONS) 
(Rosenthal et al., 1979)

“The PONS measures accuracy at identifying interpersonal scenarios from nonverbal cues.” 
(Hall, 2001)

• Two seconds of audio clip of a female actor portraying a specific situation.
• Words of actor disguised either by (a) random splicing of audio or (b) suppressing highest and lowest frequencies
• Respondent asked to choose which of two offered scenarios just occurred (e.g. asking forgiveness or leaving on a trip). Only given ~5 seconds before next clip played.
% Total Response Change

• Outcome variable:
  ▪ % total response change
  ▪ # of response changes
    # of questions readministered

• Predictor variables
  ▪ Interviewing technique: Conv vs. Stand
  ▪ PONS Score Group: Low vs. High
    • Median split of interviewer PONS scores
Results: Response Change

- More response change in conversational interviewing

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<thead>
<tr>
<th></th>
<th>n</th>
<th>Mean</th>
<th>SE</th>
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</thead>
<tbody>
<tr>
<td>Conversational</td>
<td>195</td>
<td>18.1%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Standardized</td>
<td>177</td>
<td>12.7%</td>
<td>0.9%</td>
</tr>
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\[ \chi^2 = 21.13, \ p < 0.0001 \]

- Nonverbal sensitivity (PONS) did not affect response change or interact with interviewing technique
Neutral Feedback in Standardized Interviewing

• Neutral feedback purpose: To let R know their effort is appreciated and encourage continued effort
  
  I: Over your lifetime, have you ever had an accident because of drowsy driving?
  R: No.
  I: Thank you. This is helpful for our research.

• In standardized interviewing, low PONS I’s gave significantly more neutral feedback per question than high PONS I’s, $p <0.0001$
  
  ▪ Low PONS I’s follow heuristic of feedback every 3-4 questions answered. High PONS I’s sense R’s want to finish interview and use neutral feedback less
Sample Size

- 494 completed in English, 372 completed by I’s who also took the audio PONS
- 16 of 20 I’s completed nonverbal sensitivity test (median split into two groups)

<table>
<thead>
<tr>
<th>Completed Interviews by PONS group and Interviewing Technique</th>
<th>Conversational</th>
<th>Standardized</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low PONS</td>
<td>109</td>
<td>75</td>
<td>184</td>
</tr>
<tr>
<td>High PONS</td>
<td>86</td>
<td>102</td>
<td>188</td>
</tr>
<tr>
<td>Total</td>
<td>195</td>
<td>177</td>
<td>372</td>
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