Using Recordings of Telephone Interactions to Understand Mode Differences

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Research Goals

- Compare mail and telephone responses for questions on health seeking behavior

- Explain differences between modes using recordings to:

  - Evaluate questions
  - Understand role of interviewers as they contribute to differences between modes

Selected Differences Between Telephone and Mail Surveys

Mode Feature	Impact (Telephone)	Impact (Mail)
Channel of presentation	Aural – challenges short-term memory	Visual – requires literacy
Design	Prevents moving forward, backtracking	Permits moving forward, backtracking
Interviewer presence/absence		
- social distance	Decreased honesty	Increased honesty
- item presentation	Interviewer reads and clarifies items, controls pace	Respondents read items, control pace of responses

- From Tourangeau, Rips, and Rasinski (2000)

- Telephone survey (4,081 completed surveys - 24% response rate), and mail survey (3,582 completed surveys - 31% response rate).

- Research focused on initial set of questions on seeking information about health

- 200 cases recorded for behavior coding (186 codeable)

1) Interviewer behavior

  - Read question as written
  - Probing behavior
  - Response to questions from respondent

2) Respondent behavior

  - Expressed difficulty
  - Final response

- Data on respondents in the mail mode:
  - Whether instructions followed correctly (skips, "mark only one" instructions)
  - Response distributions

- Combined with data from behavior coding, we can make some comparisons between modes, though most information on respondent behavior came from the telephone mode

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Telephone Survey Layout

HC-01. Have you ever looked for information about health or medical topics from any source?

YES 1
NO 2 (HC-06)

HC-02. The most recent time you looked for information about health or medical topics, where did you go first?

[IF SP HAS MADE MORE THAN ONE SEARCH, PROBE FOR THE MOST RECENT SEARCH.]

BOOKS 1
BROCHURES, PAMPHLETS, ETC. 2
CANCER ORGANIZATION 3
FAMILY 4
FRIEND/CO-WORKER 5
HEALTH CARE PROVIDER 6
INTERNET 7
LIBRARY 8
MAGAZINES 9
NEWSPAPERS 10
TELEPHONE INFORMATION NUMBER
    (1-800 NUMBER) 11
COMPLEMENTARY OR ALTERNATIVE
    PRACTITIONER 12
OTHER (SPECIFY) 91

Mail Questionnaire Layout

Section A

Seeking Information about Health

A1. Have you ever looked for information about health or medical topics from any source?

☐ Yes

☐ No→ **Go to Question A6**

A2. The most recent time you looked for information about health or medical topics, where did you go first?

Mark only one.

☐ Books
☐ Brochures, pamphlets, etc.
☐ Cancer organization
☐ Family
☐ Friend/co-worker
☐ Doctor or health care provider
☐ Internet
☐ Library

☐ Magazines
☐ Newspapers
☐ Telephone information number
☐ Complementary, alternative, or unconventional practitioner
☐ Other→ *Please specify below:*
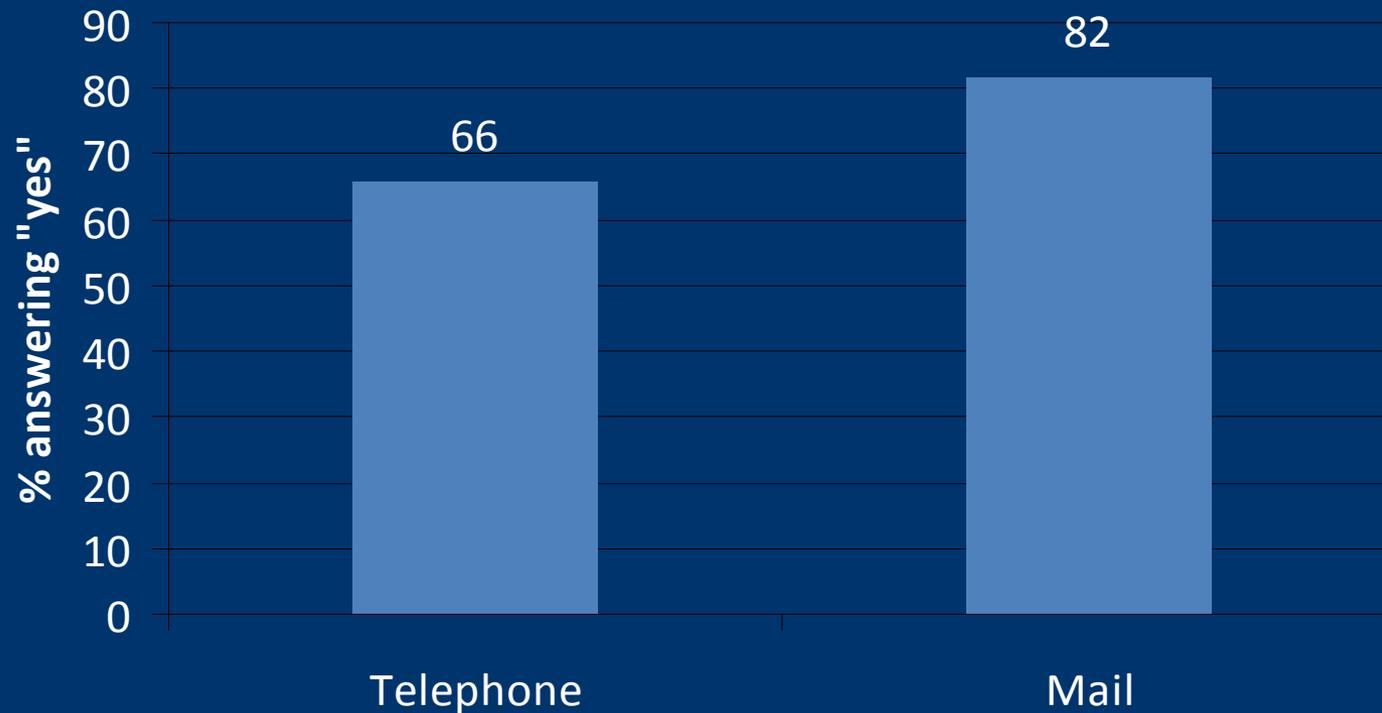
- Question is open ended

- Are differences related to respondent confusion about the scope or meaning of the question?

- Are differences related to interviewer behavior (e.g., read the question as worded; type of probing or response to questions)

- Interviewers paraphrasing the question (not found)

- Interviewers responding to difficulty by using response categories (occurred in only 2% of cases)

- Respondent expressing difficulty (22% of cases)
  - Respondent difficulty seen in requests for question to be re-read, demonstrated uncertainty about scope of the responses
  - Coded respondents who expressed confusion were slightly less likely to answer "yes" than those who did not (66% versus 72% respectively)

HC02: Sources of Health Information

"The most recent time you looked for information about health or medical topics, where did you go first?"

Telephone		Order	Mail	
Category	Percent		Category	Percent
Internet	62%	7th	Internet	56%
Doctor	11%	6th	Doctor	17%
Books	10%	1st	Books	11%
Magazines	5%	2nd	Brochures	5%
Other	3%	9th	Magazines	3%

- Did list on mail survey lead to primacy effect?
  - Some evidence of a limited effect

- Were respondents confused by the question?
  - Mail survey respondents saw a list, which provided definition and cues
  - Telephone respondents had very little information to assist in understanding meaning of question

- Did the interviewer probe and did this lead to differences?

- 22% of coded respondents had difficulties:
  - reference period (9%)
  - response uncertainty (5%)
  - other difficulties (8%)

Examples: "Uh, well, I haven't looked, I just usually gone to the doctor"

"What do you mean, 'Where did I go?' I didn't understand…"

HC01/HC02: Interviewer Response Category Probes

Response category	Number of times category used in probing	Number of times respondent's answer matched
Internet	17	12
Books	9	4
Library	6	1
Doctors	6	3
Brochures	5	1
Magazines	5	1
Friends/coworkers	3	1
Newspapers	1	1
Other	1	1
Total	53	25
Total Respondents	32	25

HC01/HC02 Verification Probes

When interviewers used a response category in a probe, sometimes it was in order to verify a response already given by the respondent

Example: [interviewer read HC01]

Respondent [HC01]: "well, only what I can get from my practicing physicians."

Interviewer: [read HC02] "… and you said, 'to your physician'?"

Respondent [HC02]: "uh, I just asked somebody. I worked in the hospital, so that's mostly where I would ask somebody…"

Interviewer: "Was that a health care provider or coworker?"

HC01/HC02: Interviewer Verification Probes

Response category	Number of times category used for verification	Number of times respondent's answer matched
Internet	8	7
Books	2	2
Library	1	1
Doctors	5	3
Brochures	3	1
Magazines	2	1
Friends/coworkers	1	1
Newspapers	1	1
Other	1	1
Total	24	18
Total Respondents	22	18

Another type of response category probe involved using a category as an example

Example:

Interviewer: [interviewer read HC02] "… did you go online, or did you look in books, or go to the library, or - where did you look?"

Respondent: "ah, it was online, yeah."

Respondent: [after interviewer read HC02] "What do you mean, 'Where did I go?' I didn't understand…"

Interviewer: "… where did you look, if you looked – magazines, books, brochures…?"

Respondent: "No, computer."

HC01/HC02: Interviewer Example Probes

Response category	Number of times category used as example	Number of times respondent's answer matched
Internet	9	5
Books	7	2
Library	5	--
Doctors	1	--
Brochures	2	--
Magazines	3	--
Friends/coworkers	2	--
Newspapers	--	--
Other	--	--
Total	29	7
Total Respondents	10	7

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- Interviewers probed to reorient respondents to the correct reference period:

Interviewer [HC02]: "The most recent time you looked for information about health or medical topics, where did you go first?"

Respondent: "uh, I would normally ask my doctor, first."

Interviewer: "The most recent time, is that what you did, or?"

Respondent: "I think the most recent time, since I haven't been to the doctor 3 or 4 months now, I looked up a couple things on the computer."

- Interviewers needed to address respondent difficulties with a reference period that was not salient – but did so in 7 out of 21 coded cases

- Evidence showed comprehension difficulties occurred for respondents in the mail mode as well

  - 9% of respondents in mail provided multiple answers to HC02, despite it asking where they looked for information "first."

"Did you look or go anywhere else [for information about health or medical topics]?"

Telephone – 46% yes, Mail – 76% yes

- 11% of coded respondents had difficulties

- Many demonstrated reference period confusion

  - unlike prior questions, reference period ("most recent time") is only implied (by "anywhere else")

- Little evidence on this question that features of the telephone mode led to reduced reporting of multiple sources

"Where else did you look or go?"

Telephone		Mail	
Category	Percent	Category	Percent
Doctor	35%	Doctor	41%
Books	22%	Brochures	27%
Internet	20%	Books	25%

- 9% of coded respondents had difficulties, all involving reference period confusion

- Across questions, "Internet" an easy-to-remember source to report, even if not consulted the most recent time

HC03: Elaboration Probes

- Interviewers were trained to probe "anywhere else" after each response to HC03

- In the coded cases where respondents answered HC03, the interviewer probed this way in less than half (23 of 53)

- May have reduced the number of additional sources of information reported in telephone mode

- Among all HINTS respondents who searched for information, respondents averaged 1.6 sources in the telephone mode and 2.7 sources in the mail

- How practical are open-ended questions?

  - Difficult to define scope on the telephone
  - Need for multiple probes

- Open-ended items may be subject to mode effects associated with mail and telephone interviews

- HINTS had a number of open-ended questions
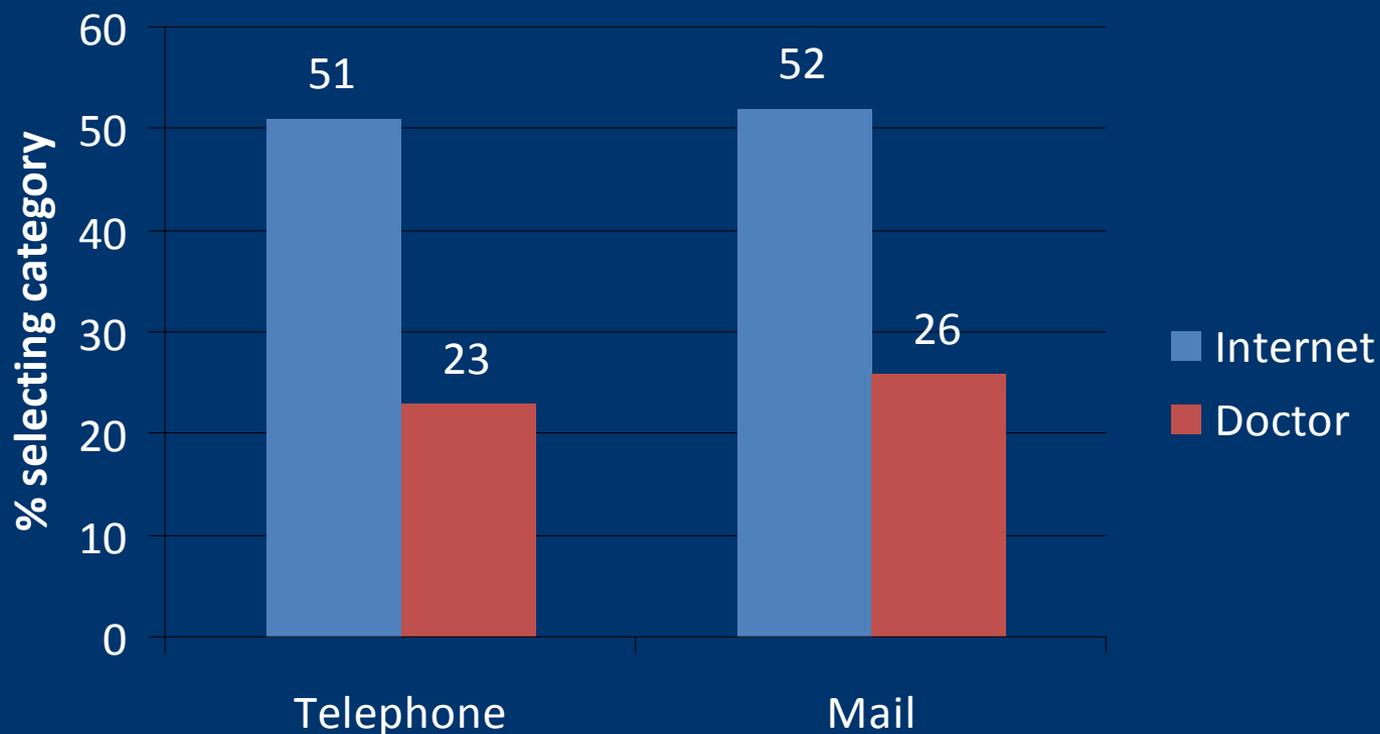
Findings

- Significant differences between mail and telephone

- Respondent uncertainty on question scope

- Interviewer response category probes augmenting reports of the most frequent response category

- Omission of elaboration probes, reducing the number of additional sources of information reported

- Mail survey, some evidence respondents not reading the whole list

Mode Implications:

- Administering these questions in the mail mode can limit observed respondent difficulties:

  - visual list of response categories allows for clarification of question scope
  - seeing all categories may 'cue' less-common categories
  - the same set of response categories considered

- Be aware of possible primacy effects

- Questions should be revised to make the reference periods evident

- Design only allows for limited exploration of issues for the mail survey (e.g., possible over-reporting, not reading carefully)

- Behavior coding was based on relatively small samples

- No absolute measure of "truth" to judge extent of error in either survey

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