

Discussion: HINTS DUC 2009 – Session on Survey Methodology

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First: What's the big deal?

"Just show me the data..."

❑ On the one hand:

- A (true) cliché: Developing a survey is like making sausage
- Self-report surveys are pretty blunt instruments – there's bound to be some error
- Why hang your dirty laundry, anyway...?



❑ On the other hand:

- Method is important – Lincoln: *"If I had eight hours to chop down a tree, I'd spend six hours sharpening my ax"*
- Howard Schuman: *"Artifacts are in the mind of the beholder"* – i.e., mode effects, etc., are not (just) annoyances, but something we can learn from

Error Effects Come in Different Flavors

(Groves: Total Survey Error)

❑ **Errors of Non-observation:**

- Coverage error (missing cell phones in RDD)
- Sampling error (sample isn't representative)
- Non-response error (can't find them, convince them)

❑ **Errors of Observation:**

- Interviewer error (Curbstoning)
- Response error ('Bad Answers')



❑ **Post-Observation Errors:**

- Processing error (coding, recoding, analysis)
- Interpretation error (Are we reading the tea leaves correctly?)

Session authors are looking at multiple parts of the elephant...

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Peytchev &
Ridenhour

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Cantor

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McBride

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Kerwin

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Response Error Effects in HINTS

- ❑ I will focus on an area I know something about: Error effects of Administration Mode (Cantor; McBride)
- ❑ “Simple question”: Are responses different for phone (RDD) than for paper-based self-administration (mail)
- ❑ Answer: YES
- ❑ Why?
 - There are differences in **Respondent** cognitive processing demands between modes
 - Telephone mode includes **Interviewer** effects – which are non-trivial
 - Mail has NO interviewer – *Is this a good thing or a bad thing?*

Generalizing Error Effects due to Mode

- ❑ Would be nice to extend interpretation to the field generally: “Sharpening the axe” for others
- ❑ But there are lots of variations of ‘mode effects’ due to subtle differences in design
- ❑ I noticed that even papers done by the *same authors, on the same project*, have ‘apples and oranges’ variation
 - ❑ Cantor – Phone version: Read, ordinal response categories
 - ❑ McBride – Phone version: Unread, nominal response categories

Cantor (Self-Administered version) The *Phone* version must have said “All of the time...None of the time” for each item

So – these are *Ordinal* responses, *read aloud*

The following questions ask about how you have been feeling during the **past 30 days**. For each question, please circle the number that best describes how often you had this feeling.

Q1. During the past 30 days, about how often did you feel ...	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. ...nervous?	1	2	3	4	5
b. ...hopeless?	1	2	3	4	5
c. ...restless or fidgety?	1	2	3	4	5
d. ...so depressed that nothing could cheer you up?	1	2	3	4	5
e. ...that everything was an effort?	1	2	3	4	5
f. ...worthless?	1	2	3	4	5

McBride: Telephone Survey Layout

These are *Nominal* response categories, *unread*
(‘precoded’)

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

MODE	NO response categories	Response categories Unordered (Nominal)		Response categories Ordered (Ordinal, Interval, or Ratio)	
Telephone	A) Open-ended	B) If unread: <u>Precodes</u>	C) If read: Closed-ended	E) If unread: Endpoint-specified	F) If read: Closed-ended
Self-Administered (paper)	A) Open-ended	(D = B/C) Closed-ended		(G, H, I, J) Closed-ended	

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

Format was not tested in HINTS studies

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B) The most recent time you looked for information about health or medical topics, where did you go first? [MARK ONE - DO NOT READ]

- [] BOOKS
- [] BROCHURES/PAMPHLETS
- [] CANCER ORGANIZATION
- [] FAMILY
- (etc...)

Format was
used by
McBride

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C) The most recent time you looked for information about health or medical topics, where did you go first – [MARK ONE]

- [] Books,
- [] Brochures or pamphlets,
- [] A cancer organization,
- [] Family,
- (etc.)

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D) The most recent time you looked for information about health or medical topics, where did you go first? **Mark only one.**

- ☐ Books
- ☐ Brochures or pamphlets
- ☐ Cancer organization
- ☐ Family
- (etc.)

Format was used by McBride

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compared one type of Telephone format (precode) to its parallel S/A format: B vs. D

D) The most recent time you looked for information about health or medical topics, where did you go first? **Mark only one.**

- ☐ Books
- ☐ Brochures or pamphlets
- ☐ Cancer organization
- ☐ Family
- (etc.)

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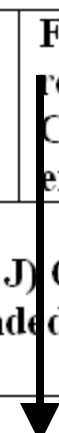
E) On a scale from 1 to 4, where 1 is not at all useful, and 4 is extremely useful, how useful was that source of information?

[] 1-4

[] DK

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F) How useful was that source of information: Would you say not at all, a little, somewhat, or very?

- ☐ NOT AT ALL
- ☐ A LITTLE
- ☐ SOMEWHAT
- ☐ VERY

Like Cantor study that asked K-6 'All of the time' to 'none'

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Self-Administered (paper)	A) Open-ended	(D = B/C) Closed-ended		(G, H, I, J) Closed-ended	



G) How useful was that source of information?

Not
at all Very
1 2 3 4

Format was not
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H) How useful was that source of information?

- ☐ Not at all
- ☐ A little
- ☐ Somewhat
- ☐ Very

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I) How useful was that source of information?

Not at all

☐

A little

☐

Somewhat

☐

Very

☐

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J) To what extent was each of the following true of that source:

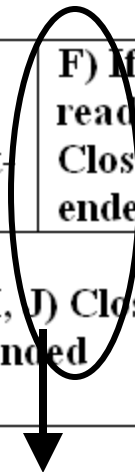
Not at all A little Somewhat Very

- | | | | | |
|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. It was useful... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. It was X..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. It was Y..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Like format used by
Cantor for K-6 (table)

MODE	NO response categories	Response categories Unordered (Nominal)	Response categories Ordered (Ordinal, Interval, or Ratio)
Telephone			E) If unread: Endpoint-specified F) If read: Closed-ended
Self-Administered (paper)	ended	(D = B/C) Closed-ended	(G, H, I, J) Closed-ended

So, Cantor study compared one type of Telephone format (F: Ordered) to one S/A variant (J: Table)



J) To what extent was each of the following true of that source:

Not at all A little Somewhat Very

- | | | | | |
|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. It was useful... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. It was X..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. It was Y..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

So what's the point?

- ❑ **It's difficult to make blanket statements about the difference between modes**
 - There are lots of variations of item and format types
 - Under ***Self-Administration***, there are a number of variations in visual layout that could influence responses
 - This is likely to keep methodologists employed for the foreseeable future...