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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**

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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?)**

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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?***

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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**

taken from website for National Co-Morbidity Study, April 26, 2009, at http://www.hcp.med.harvard.edu/ncs/ftpdir/k6/K6+self%20admin-3-05-%20FINAL.pdf

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: Precodes	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

MODE	NO response categories	Response categories Unordered (Nominal)		Response categories Ordered (Ordinal, Interval, or Ratio)	
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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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MODE	NO response categories	Response categories Unordered (Nominal)		Response categories Ordered (Ordinal, Interval, or Ratio)	
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Self-Administered (paper)	A) Open-ended	(D = B/C) Closed-ended		(G, H, I, J) Closed-ended	

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

MODE	NO response categories	Response cate… Unordered (N…	…es
Telephone	A) Open-ended	B) If unread: Precodes	…d-ended
Self-Administered (paper)	A) Open-ended	(D = B/C) Closed-ended	(G, H, I, J) Closed-ended

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

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’

MODE	NO response categories	Response categories Unordered (Nominal)		Response categories Ordered (Ordinal, Interval, or Ratio)	
Telephone	A) Open-ended	B) If unread: Precodes	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	

G) How useful was that source of information?

Not at all 1 2 3 4 Very

Format was not tested in HINTS studies

MODE	NO response categories	Response categories Unordered (Nominal)		Response categories Ordered (Ordinal, Interval, or Ratio)	
Telephone	A) Open-ended	B) If unread: Precodes	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	

H) How useful was that source of information?

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

Format was not tested in HINTS studies

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Telephone	A) Open-ended	B) If unread: Precodes	C) If read: Closed-ended	E) If unread: Endpoint-specified	F) If read: Closed-ended
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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…	☐	☐	☐	☐
2. It was X……..	☐	☐	☐	☐
3. It was Y…….	☐	☐	☐	☐

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…	☐	☐	☐	☐
2. It was X……..	☐	☐	☐	☐
3. It was Y……..	☐	☐	☐	☐

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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…