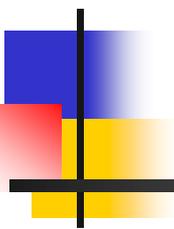


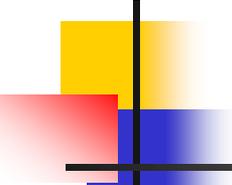
Assessing Mode Differences for Kessler's K-6 Scale for Psychological Distress.



David Cantor
Brett McBride

Westat

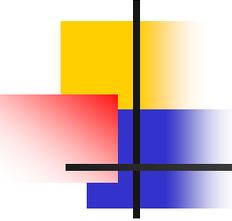
Presented at the 2009, HINTS Data User
Conference, Silver Spring, MD,
September 24, 2009



Self-Administered K-6

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



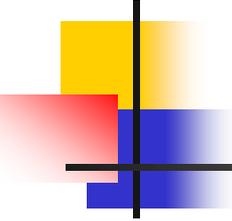
HINTS 2007 Results

Mail Component

- Frame: USPS addresses
- Response rate: 31%
- n of completes = 3582
- Coverage – civilian non-institutional

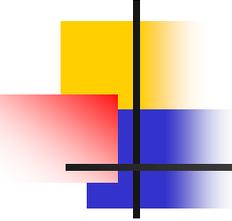
Telephone

- Frame: Random Digit Dial
- Response Rate: 24%
- n of completes = 4081
- Coverage – civilian non-institutional with a landline telephone



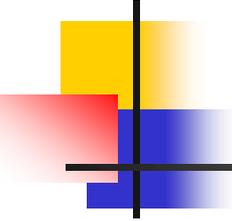
Comparison of Mail and Telephone Modes for K-6

- Cantor and McBride (2009) found significant differences –
 - Telephone < Mail
 - Largest differences are for “worthless”, “hopeless”
- Result is consistent with social desirability hypothesis



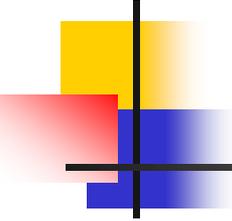
Research Questions

- What are the characteristics of the interviewer-responder interaction for the K-6 items?
 - Can we detect evidence of sensitivity?
 - What other problems are expressed by interviewers and/or respondents?
 - Can these problems be linked to mode differences?
- Is there a response set on the mail survey?



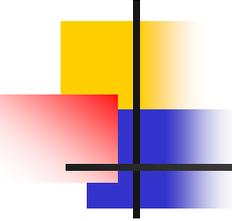
Mode effects for K-6: Auditory Communication

- Auditory (telephone) presentation
 - Relies on short term memory
 - Need to understand concept and the response categories from oral presentation
- Hypothesis: Larger primacy and recency effects for telephone because of difficulty remembering response scale and/or confusion of concepts



Mode effects for K-6: Visual Presentation

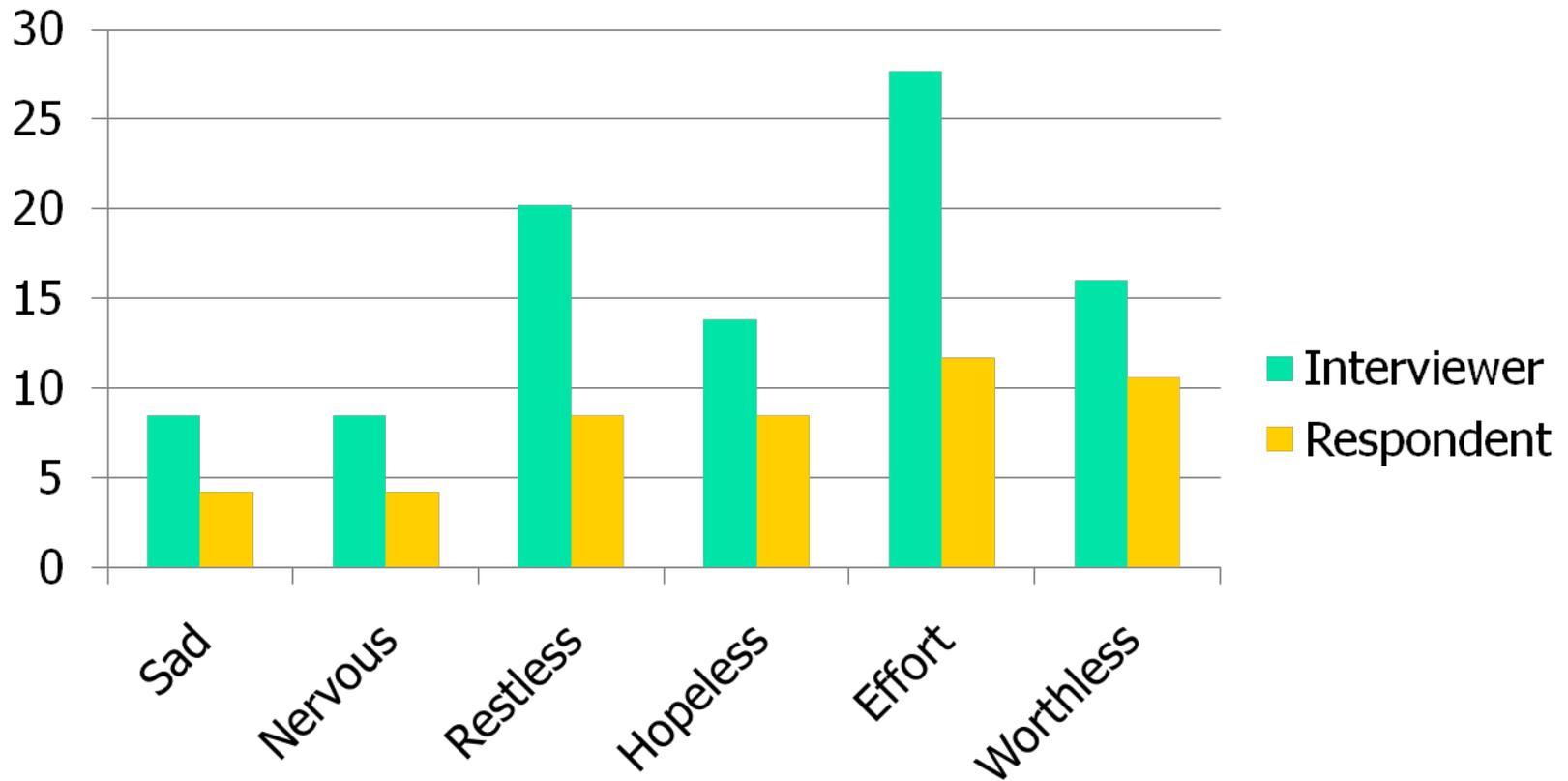
- Visual (mail) relies on respondent reading question
 - Ability to review concepts and response options
 - Able to see all questions to get an overall picture of content domain
- Motivation to consider each item separately
- Hypothesis: Greater likelihood for a response set (e.g., straightlining) on the mail survey



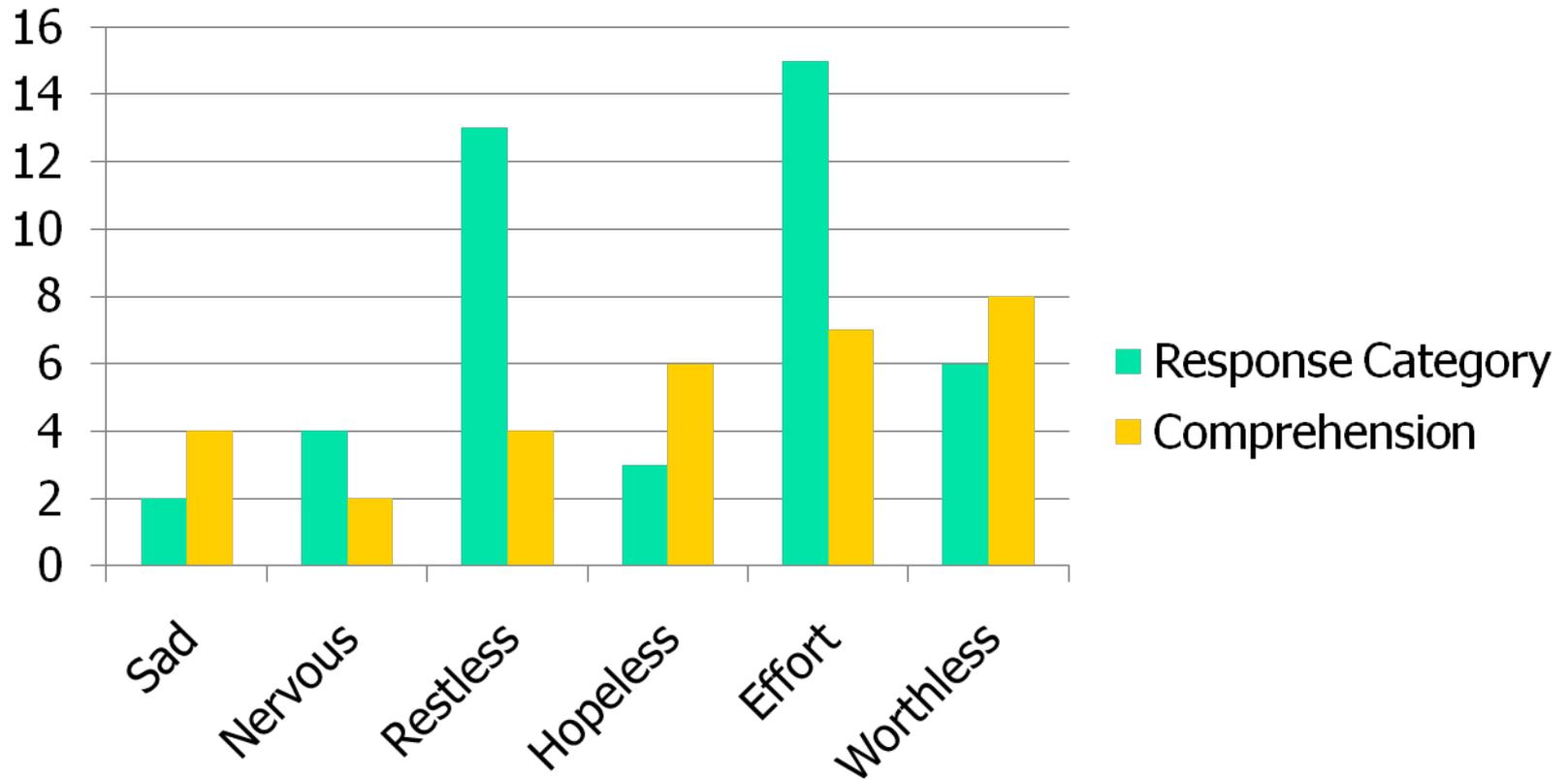
Methods: Auditory Communication

- Reviewed the exchange between the Interviewer and Respondent (n=100)
- Looked for signs of problems with the items
 - Signs discomfort
 - Comprehension of concepts
 - Response categories

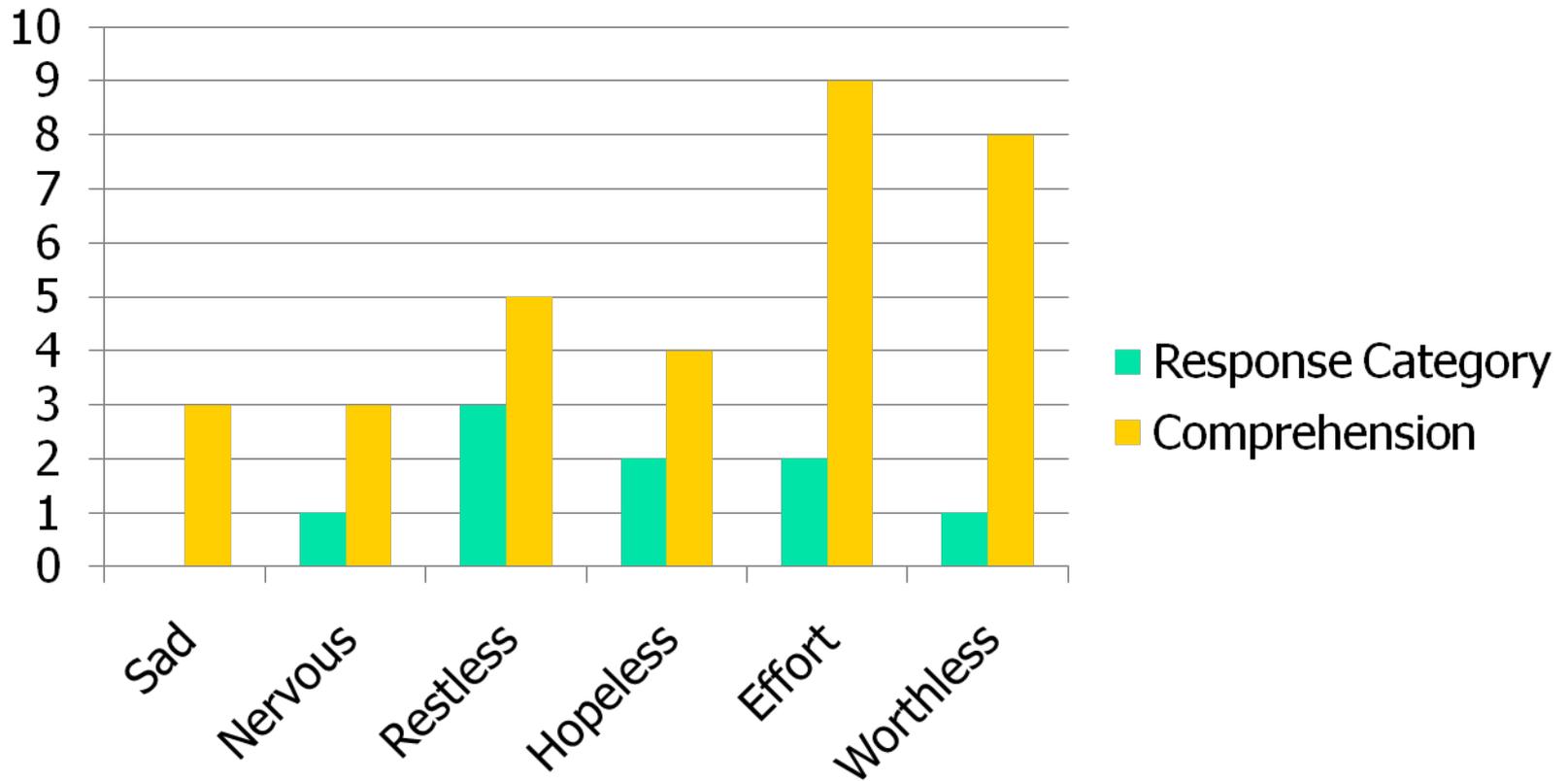
% of Difficulties identified by Interviewer and Respondent

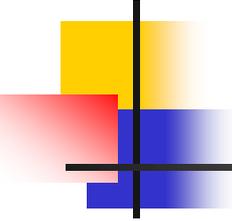


Interviewer Reaction to Perceived Respondent Difficulty



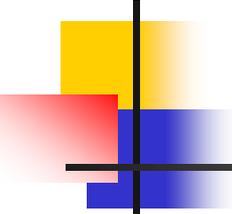
Request for clarification by the respondent





Summary Findings from Behavior Coding

- The exchange between interviewer and respondent is not scripted in a significant percent of the time
 - There are issues with remembering and understanding the response categories
 - There are also significant issues with understanding the concepts
- Interviewers intervene, even when respondents may not explicitly express confusion (e.g., long pauses)



Possible straightlining on Mail Survey

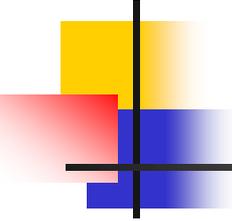
N2. How often did you feel each of the following during the past 30 days?

	<i>All of the time</i>	<i>Most of the time</i>	<i>Some of the time</i>	<i>A little of the time</i>	<i>None of the time</i>
1. So sad that nothing could cheer you up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Nervous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Restless or fidgety.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Hopeless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. That everything was an effort.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Worthless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Possible straightlining on Mail Survey

N2. How often did you feel each of the following during the past 30 days?

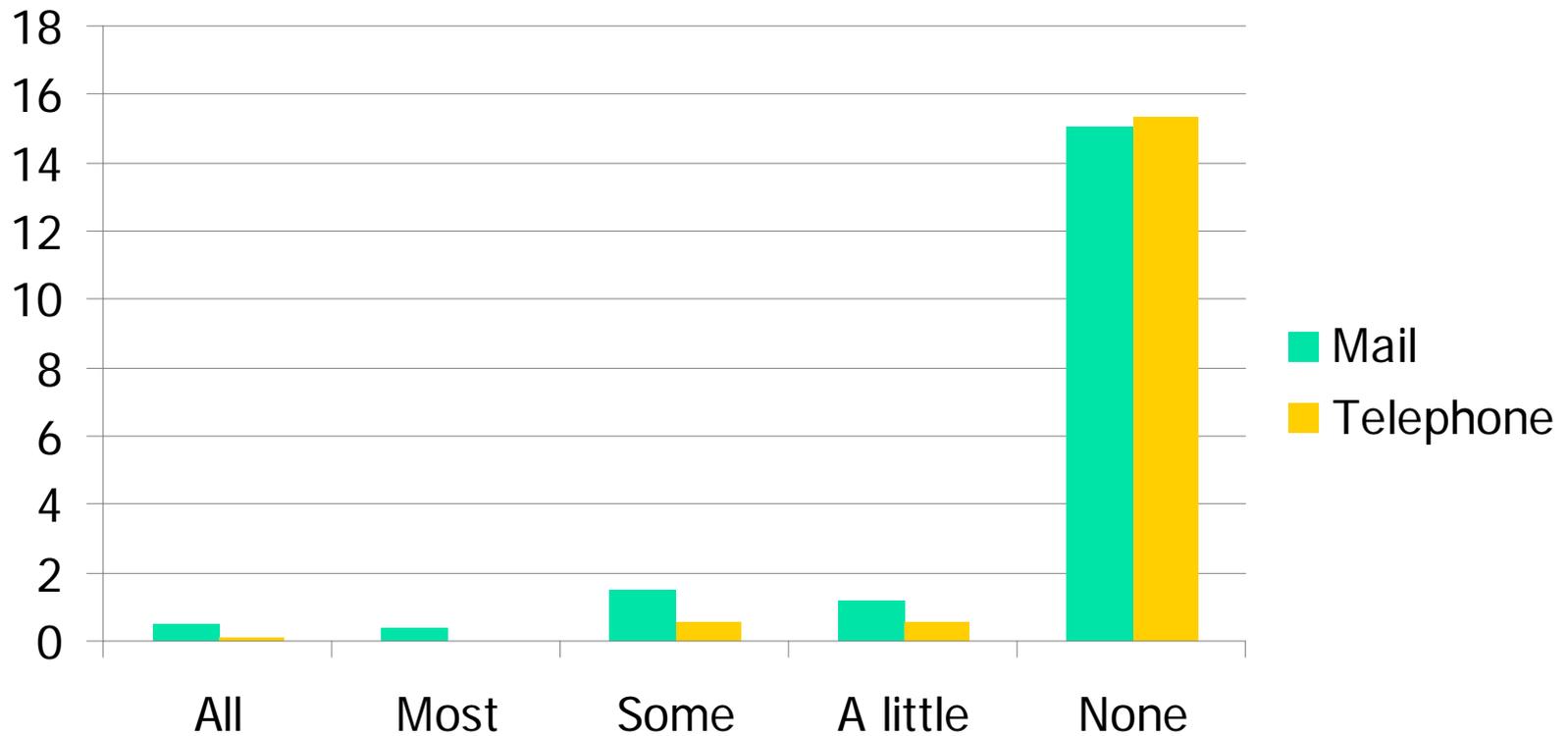
	All of the time	Most of the time	Some of the time	A little of the time	None of the time
1. So sad that nothing could cheer you up	<input type="checkbox"/>				
2. Nervous	<input type="checkbox"/>				
3. Restless or fidgety.....	<input type="checkbox"/>				
4. Hopeless	<input type="checkbox"/>				
5. That everything was an effort.....	<input type="checkbox"/>				
6. Worthless	<input type="checkbox"/>				

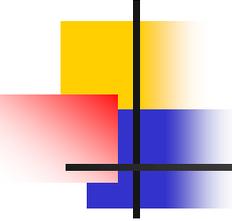


Estimates of Straightlining

- Calculated the proportion of respondents that answered all 6 items with the same response categories
- Examine by response category
- Compare the Mail and Telephone Survey

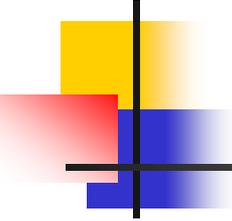
% of Respondents Reporting the Same Response for All Items by Mode





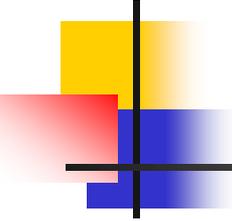
Conclusions

- Estimates for K-6 are significantly higher for self-administered questionnaires
- Most “sensitive” items display the largest differences
- This is consistent with a social desirability hypothesis



Conclusions (continued)

- On the telephone, a significant percentage of items lead to unscripted clarification and probing
 - Response categories are difficult to remember
 - Concepts need clarification
 - Suggests that cognitive complexity is an issue with these items.
 - Unclear if this leads to differences by mode
- Results point to need to administer questions in ways that promote understanding of concepts and response categories
- No evidence of response set on the mail survey



Caveats

- Could not directly measure key concepts (e.g., sensitivity; primacy effects; comprehension)
- Behavior coding is based on small samples

Thank-you

Davidcantor@westat.com