

HINTS Mod. #5 Interviews: Round 3
Summary of Findings and Recommendations
October 20, 2003

From October 7th through October 9th, 2003, Westat conducted nine cognitive interviews with volunteers to test new questions under consideration for the HINTS instrument. The new questions covered topics on: knowledge of health recommendations, reactions to recommendations, and level of physical activity. The interviews adhered to a structured protocol prepared by Westat and NCI staff prior to the interviews. Questions from the 2003 HINTS instrument were included in the interview to provide context for the new questions. The cognitive interviews focused on the detection of any potential sources of measurement error in the new questions.

Two cognitive interviewers who had previous experience with the project conducted the interviews. All interviews were tape recorded and interviewers took detailed notes on all comprehension and interpretation issues that emerged. Interviews generally lasted about one hour, and participants were paid 45 dollars. The table below provides a simple demographic description of each participant.

AGE	GENDER	RACE	EDUCATION
43	Female	Black	Advanced Degree
28	Male	Black	High School Graduate
49	Male	Hispanic	Some College/Voc. Ed.
23	Female	White	High School
22	Female	White	College Graduate
30	Female	Asian	Some College/Voc. Ed.
46	Female	White	High School Graduate
41	Male	White	Some College/Voc. Ed.
20	Female	Black	Some College/Voc. Ed.

In this document we summarize the interview findings with respect to the new questions under consideration, and offer recommendations for revision.

HC-26. Here are some ways people use the Internet. Some people have done these things, but other people have not. In the past 12 months, have you done the following things while using the Internet?

	<u>YES</u>	<u>NO</u>
a. Bought medicine or vitamins on-line?.....	1	2
b. Participated in an on-line support group for people with a similar health or medical issue?.....	1	2
c. Used e-mail or the Internet to communicate with a doctor or a doctor's office?.....	1	2
d. Looked for information about physical activity or exercise? [NEW]	1	2
e. Looked for advice or programs for diet or nutrition? [NEW]	1	2
f. Looked for information about sunscreens? [NEW]	1	2
g. Looked for other health or medical information?	1	2
h. Done anything else health-related on the Internet? (SPECIFY) _____	1	2

The new items here (d.-f.) seemed to work fine. Several participants noted they had looked for information related to either exercise or nutrition, and the details they provided in response to probing appeared reasonable and consistent with the intent of the items. It's worth noting though that no one in the last two rounds of interviews has reported having looked for sunscreen information on the internet. Thus, we wonder if you'll get enough people answering "yes" for this item to have any analytic value.

Recommendation. Leave items as they are. Examine the "no variability" problem for item f. in future HINTS pretesting before fielding.

Knowledge of Recommendations (KN) [NEW]

Now we'd like to know what recommendations you may have heard regarding physical activity, nutrition, and protecting oneself from the sun.

KR1. What is the recommended minimum number of days per week an average adult should be physically active to achieve a health benefit?

_____ (number of days)

KR2. What is the recommended minimum number of minutes an average adult needs to be physically active during most days of the week in order to achieve a health benefit?

_____ (number of minutes)

A couple of respondents commented that “physically active” is vague. For example, one wanted to know if we specifically meant exercise. Another took issue with the phrase “average adult” (as being too vague) and ultimately said she couldn’t answer KR2 as “the question doesn’t work for me.” A couple of others needed at least one of the items to be read a second time before they could answer. Finally, it seemed rather awkward to refer to “most days of the week” in KR2 in situations where the respondents had given an answer such as “3” in KR1.

Recommendation. I don’t know that providing a definition of “physically active” to everyone would be a good idea, since that might conflict with the recommendations that some have heard. But perhaps it would be worthwhile to provide interviewers with a definition to be used only if respondents specifically ask for it. It should be something simple that clarifies the item is not strictly about time set aside for exercise, such as: “*By physical activity, we mean any activity performed at work or at home that increases your heart rate.*” In addition, consider revising the phrase “during most days of the week” in KR2 to “*on those days,*” so as to allow the question to be consistent with any answer given in KR1. Also, KR2 does not need the phrase “in order...”. So KR2 could be revised as:

What is the recommended minimum number of minutes an average adult needs to be physically active on those days to achieve a health benefit?

KR3. I'm going to read you three statements concerning physical activity. For each, just tell me if you think it's true, false, or you don't know. The first statement is: The average adult must exercise *vigorously* to achieve a health benefit. (Would you say that is true, false, or you don't know.)

True	1
False	2
Don't know	3

KR4a. The health benefits you gain by exercising vigorously can also be achieved by doing moderate activities like walking. (Would you say that is true, false, or you don't know.)

True	1
False	2
Don't know	3

KR4b. You can lose a significant amount of weight by doing 30 minutes of moderate activities such as brisk walking on most days of the week. (Would you say that is true, false, or you don't know.)

True	1
False	2
Don't know	3

For the most part, these items appeared to work okay. KR4a. and KR4b. yielded little variability though, with 7 and 8 persons, respectively, answering "true." One person misinterpreted the phrase "to achieve a health benefit" in KR3 as "just to be healthy" which made it a very different statement. Another person answered "false" to KR4b., but qualified it by saying that this was "for me personally," and that for an overweight person the answer would be "true." And for what it's worth, some people clearly view "exercise vigorously" as having a rather negative connotation. For example, one person said she thinks vigorous exercise is extreme, and talked about how it could make you have a heart attack. A couple of others described it as "overdoing it," and "straining yourself...it's unhealthy."

Recommendation. In KR4b., you might consider changing the reference to "You" to "*People who are overweight,*" if that would remain consistent with your intent. Another possibility would be to focus it on "*the average adult.*" The potential problem of too little variability should be examined in future HINTS pretesting (namely, a larger field test). Otherwise, I'd suggest leaving these questions as they are. I'm assuming the negative connotation that 'vigorous exercise' has for some people does not represent a problem for you.

KR5. What is the recommended number of fruits and vegetables that an average adult should eat per day?

_____ (insert number of fruits and vegetables per day)

As observed in previous rounds, some people report what they do in response to questions like this, rather than what they've seen or heard recommended. For example, one reported "2 or 3" and said that it's "common sense," not a recommendations that she's heard. Another answered "3" but acknowledged she's heard a recommendation of "5." She said she wanted to give an answer closer to what she does.

Recommendation. I think people reporting what they do here is, to some extent, unavoidable. You might consider beginning the question with "Based on what you've seen or heard...." to help emphasize that it's recommendations that you're interested in, not opinions or behavior. Otherwise, leave as is.

KR6. What is the recommended minimum Sun Protection Factor, or SPF, that should be used in a sunscreen to protect your skin?

_____ (insert number of SPF)

Apparently a news story was reported in the week or so before the interviews began saying that sunscreens have been found to be ineffective for providing protection against skin cancer. One person had heard this story, and thus could not give an answer for this item.

Recommendation. Consider allowing people to report "*sunscreens do not provide protection.*"

[HINTS Question EX-3 (modified)]

KR7. As far as you know, does exercise increase or decrease the chances of getting some types of cancer, or does it not make much difference?

- | | |
|---|---|
| Increases chances of getting some types of cancer | 1 |
| Decreases chances of getting some types of cancer | 2 |
| Doesn't make much difference | 3 |

KR8. Does eating a diet high in fruits and vegetables and low in fat increase or decrease the chances of getting some types of cancer, or does it not make much difference?

- | | |
|---|---|
| Increases chances of getting some types of cancer | 1 |
| Decreases chances of getting some types of cancer | 2 |
| Doesn't make much difference | 3 |

We observed no problems with these items.

Reactions to Messages (RM) [NEW]

Now we have some questions about how you view and respond to health-related recommendations.

RM1. To what extent would you agree or disagree with the following statements:

a. There are so many different recommendations on physical activity and exercise, it's hard to know which ones to follow. Would you say you:

Strongly agree	1
Somewhat agree	2
Somewhat disagree	3
Strongly disagree, or	4
You have no opinion?	5

b. There are so many different recommendations on diet and nutrition, it's hard to know which ones to follow. (Would you say you....)

Strongly agree	1
Somewhat agree	2
Somewhat disagree	3
Strongly disagree, or	4
You have no opinion?	5

c. I am skeptical about most physical activity recommendations. (Would you say you.....)

Strongly agree	1
Somewhat agree	2
Somewhat disagree	3
Strongly disagree, or	4
You have no opinion?	5

d. I am skeptical about most nutrition recommendations. (Would you say you.....)

Strongly agree	1
Somewhat agree	2
Somewhat disagree	3
Strongly disagree, or	4
You have no opinion?	5

In general, these items appeared to work fine. At item b. one respondent interpreted “diet” as “dieting” and said her answer would vary depending on whether it’s dieting or nutrition. Another person indicated the term “skeptical” could mean different things to her, but decided it meant “not sure about”. Another interpreted “skeptical” as “do not agree with,” which for her made application of the response scale difficult (“do I somewhat agree that I don’t agree...”).

Recommendation. Leave items as they are. In my judgment the few problems observed were more the result of certain participants “thinking too much” (facilitated by the context of the cognitive interview) than any aspect of these questions.

RM2. Which of the following statements best describes how you usually respond to new recommendations you may hear about physical activity?

- | | |
|--|---|
| I don't pay attention at all to recommendations on physical activity | 1 |
| I may pay attention but I do not change my behavior | 2 |
| I wait to hear the recommendation from other sources before I change my behavior, or | 3 |
| I think about changing my behavior to follow the new recommendation | 4 |

RM3. Which of the following statements best describes how you usually respond to new recommendations you may hear about nutrition?

- | | |
|--|---|
| I don't pay attention at all to recommendations on physical activity | 1 |
| I may pay attention but I do not change my behavior | 2 |
| I wait to hear the recommendation from other sources before I change my behavior, or | 3 |
| I think about changing my behavior to follow the new recommendation | 4 |

These items were by far the most problematic items in this round – we observed problems in 7 of the 9 participants. A fundamental problem is that the question stem combined with the response options result in something that is too long and difficult to follow. We frequently had to reread these questions. As one person put it: *“The answers are so long I have to ask you to read [them] again. By the time I heard the last one, I forgot the first one.”* In addition, three people answering RM2 thought of recommendations about nutrition (or both physical activity and nutrition), rather than strictly physical activity. A few persons resisted choosing one of the answer choices in RM2. Some noted that more than one answer applied. Two persons offered different answers altogether – one saying: *“I wait to see the results on somebody else.....”*. Another said he would try it and if it worked he'd keep it in his routine.

Recommendation. I'm reluctant to suggest that you add more answer choices for these items. Instead, it should be stressed in interviewer training that they may have to remind respondents that the questions are seeking the response that *best* applies. But you might give interviewers the option to record cases where the respondent truly cannot pick one (note – this option would not be explicitly presented to respondents). Although not seen in these interviews, an obvious possibility that could make it very difficult to choose an answer here is when a respondent indicates that it depends on who is making the recommendation (someone they trust versus someone they don't). Also, to make these items easier to follow, my recommendation below breaks the question stems into two statements and shortens the answer choices. I admit I'm not completely confident about these suggestions, so I would strongly recommend including these items in the future HINTS cognitive pretesting that is planned.

Think of times you may have heard a new recommendation about physical activity. Which of the following best describes how you usually respond?

- I do not pay any attention*
- I pay attention but I don't change what I do*
- I wait to hear from other sources before changing what I do*
- I consider changing what I do based on the new recommendation*
- CANNOT CHOOSE/NONE OF THE ABOVE**

Think of times you may have heard a new recommendation about nutrition. Which of the following best describes how you usually respond?

- I do not pay any attention*
- I pay attention but I don't change what I do*
- I wait to hear from other sources before changing what I do*
- I consider changing what I do based on the new recommendation*
- CANNOT CHOOSE/NONE OF THE ABOVE**

RM4. Which of the following statements best applies to you?

- | | |
|--|----------|
| I like to get a tan and look healthy, or | 1 |
| I wear sunscreen or stay out of the sun to protect yourself against skin cancer | 2 |

This question was also very problematic in the interviews. Three persons chose the “I like to get a tan” response but only with some difficulty and reluctance because they did wear sunscreen. One person insisted she could not pick an answer because she does not agree that a tan looks healthy but she is in the sun everyday, does not wear sunscreen, and has no worries about getting skin cancer. Two others persons (both African-American) would not choose an answer – both noting the question does not really apply to them (interestingly, this was not an issue with the African-American participants in the previous round). Someone also suggested separating “I wear sunscreen” from “I stay out of the sun...” – indeed, some people do hear them as being separate answer choices.

Recommendation. Consider deleting this item. If you do ask it, at least have a “*None of the above*” response. It would not to be explicitly presented to respondents, but interviewers could use it when faced with a respondent who will not pick one of the choices you’re providing (which I suspect this will be common). Also, would simplifying the second response choice as follows be consistent with your intent? (if not, then you might at least separate “wear sunscreen” and “stay out of the sun” into two different response choices).

Which of the following statements best applies to you?

- I like to get a tan and look healthy*
- I prefer to protect myself against skin cancer*
- CANNOT CHOOSE/NONE OF THE ABOVE**

RM5. How much would you trust information about physical activity or nutrition from [FILL SOURCE]? Would you say a lot, some, a little, or not at all? (How about from (FILL SOURCE))

	A LOT	SOME	A LITTLE	NOT AT ALL
a. A doctor or other health care professional				
b. Family or friends				
c. A professional health association				
d. Newspapers				
f. Magazines				
g. Radio				
h. Internet				
i. Television				

Five persons gave answers here that were very close to the answers they had given at HC-18 (level of trust in sources about cancer). Significant redundancy was observed in the previous round of interviews as well. This suggests that many people can only report very general views of their trust in information sources, and don't distinguish their views by topic.

Recommendation. If HC-18 remains in the HINTS questionnaire, you might consider deleting this item. At a minimum, compare responses to the two questions from a larger sample (the field pretest) before deciding to keep both of them in.

Physical Activity Stage (PAS) [NEW]

PAS1. We want to know whether or not you are physically active on a regular basis. By physically active we mean performing an activity that is at least comparable to walking briskly. Walking briskly is walking like you are late for an appointment. For physical activity to be regular, it must be done for at least 30 minutes at a time for at least 5 days a week.

[IF RESPONDENT IS UNCLEAR ABOUT THE DEFINITION OF PHYSICAL ACTIVITY, PROMPT: Physical activity includes things like walking briskly, swimming, and aerobic classes, or any activities that take the same amount of energy to do. For example, you could take a 30-minute brisk walk or ride a bicycle for 30 minutes.]

a. Do you currently do regular physical activity?

YES
NO (SKIP TO C.)

b. Have you been regularly physically active for the past six months?

YES (NEXT SECTION)
NO (NEXT SECTION)

c. Do you intend to do regular physical activity in the next 6 months?

YES
NO (NEXT SECTION)

d. Do you intend to do regular physical activity in the next 30 days?

YES
NO

A couple of persons appeared to “round up” slightly in order to be able to report that they are (or intend to become) physically active on a regular basis. For example, one participant answered “yes” to item a. and when probed as to what she does stated that she runs on a treadmill 6 days a week, but for at least 20 (rather than 30) minutes at a time. Another participant answered “yes” to items c. and d., but she also expected her routine to be only about 20 minutes at a time. A third respondent may have under-reported – he said that is not physically active on a regular basis (“no” to item a.), yet he walks his dog every day for at least 30 minutes at a time. Sometimes it’s very brisk, sometimes not, so we aren’t sure whether he should have replied “yes” instead. The point is the respondent did not consider this to be relevant because he thought the question was about activity performed specifically as exercise, such as going to a gym. Another participant wanted clarification as to whether the question is asking only about activity performed as exercise.

Recommendation. I understand these items to be a scale established in previous research, so if you want to use them then the items should be left as is. But I do think that simply reporting whether or not one is (or plans to be) physically active is subject to social desirability bias (i.e., “rounding up” one’s level of activity). And it’s not just the number of

minutes that may get inflated, but the number of days a week as well - I imagine many people who exercise 3-4 days a week will want to say they are physically active, even though this would not be consistent with your definition. It's not clear what can be done to minimize this with the current format.

But it would be worthwhile to clarify in the introduction to the items that the activity does not have to be time set aside specifically for exercise. Since this would be adding words to an already lengthy introduction, I've also suggested a way to shorten the description of relevant walking.

We want to know whether or not you are physically active on a regular basis. By physically active we mean performing any activity that is at least comparable to walking as if you are in a hurry. The activity could be done for your job, recreation, or any other purpose. For physical activity to be regular, it must be done for at least 30 minutes at a time and at least 5 days a week.

I still think it may be possible to develop questions that get people to report what they do, allowing you to classify people as physically active (or not) as you see fit. This would be a way to get around the "rounding up" problem. It would also allow you to classify people in terms of their degree of physical activity (e.g., not at all, somewhat active, very active). If you'd like to pursue this, we can probably continue exploring this in the upcoming HINTS cognitive pretesting. But I imagine the questions might look something like this (note: the first question is just to screen out people who have very little or no physical activity)

We want to know how physically active you are. By physically active we mean performing any activity that is at least comparable to walking as if you are in a hurry. The activity could be done for your job, recreation, or any other purpose.

In general, how many days a week are you physically active for at least 10 minutes at a time?

_____ [IF ZERO, THEN SKIP OUT]

In general, how many days a week are you physically active for at least 20 minutes at a time?

_____ [IF ZERO, THEN SKIP OUT]

In general, how many days a week are you physically active for at least 30 minutes at a time?

Skin Cancer Behavior (SKB) [NEW]

Finally, we have a few questions about the extent to which people try to protect themselves from the sun.

SKB1. When you go outside for more than 1 hour on a warm sunny day, how often do you do each of the following to protect yourself from the sun:

a. Wear sunscreen?

Always
Usually
Sometimes
Rarely, or
Never

b. Stay in the shade?

Always
Usually
Sometimes
Rarely, or
Never

c. Wear a hat that shades your face, ears, and neck

Always
Usually
Sometimes
Rarely, or
Never

d. Wear a long sleeve shirt or long pants

Always
Usually
Sometimes
Rarely, or
Never

These items seemed to work fine, for the most part. A few participants qualified their answers to item d. by saying they sometimes or usually wear this type of clothing, “*but it’s not to protect myself from the sun.*” For example, one person noted that this is just the way she prefers to dress. Others said that it’s more dependent upon the temperature.

Recommendation. If consistent with your intent for these items, you might want to revise the transitional language and question stem to:

(Finally/Now) we have a few questions about the extent to which people do things that protect themselves from the sun.

When you go outside for more than 1 hour on a warm sunny day, how often do you do each of the following:

SKB2. How often do you (or someone else) carefully examine your skin for cancer? Would you say....

- At least one time per month**
- Every 1-2 months**
- Every 3-6 months**
- Every 7-12 months, or**
- Less than once a year or never**

One participant answered this question based on looking for any kind of cancer – she considered her looking for possible breast cancer as well as pap smears from the gynecologist. Four participants said they never examine their skin for cancer, and one only started doing so a couple months ago. This latter respondent could not pick from one of the answer categories, since they seem to assume a long-time pattern.

Recommendation. My suggested rewording below is an attempt to make it more clear that the item is asking about skin cancer. Also, the previous question implies that this is something virtually everyone does. But actually this is asking about something that probably many people do not do, and plenty of them haven't even considered doing it. I'd suggest first determining whether or not it's something they do at all, and if they do, then asking how often. And rather than having interviewers read the response categories, consider letting respondents report their own frequencies for interviewers to code. Giving respondents a set of frequency categories gives them cues regarding the expected distribution, which in turn affects how they respond.

Do you ever closely examine your skin for signs of possible skin cancer?

- Yes*
- No (SKIP OUT)*

How often do you do this?

- ONCE A MONTH OR MORE 1*
- EVERY 2-3 MONTHS 2*
- EVERY 4-6 MONTHS 3*
- EVERY 7-12 MONTHS 4*
- LESS THAN ONCE A YEAR 5*