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NCHS Questionnaire Design Research Laboratory

THE Q-SUITE: Q-BANK AND Q-NOTES

FedCASIC 2014: Survey Evaluation Methods

March 19, 2014

Outline

- Introduction
- Analytical Framework
- Q-Notes: Qualitative Analysis software
- Q-Bank: Question Evaluation library and resource
- Next Steps

Introduction

- ① What is cognitive interviewing/question evaluation?
- ① Benefits of Cognitive Interviewing
- ① Validity studies showing all phenomena the question is capturing

Analytical Framework



Background Challenges

- ⦿ Time consuming to conduct a thorough analysis
- ⦿ Larger sample sizes ($N > 20$)
 - Multiple projects with over 100-150 interviews
- ⦿ Collaboration
 - Multiple Interview Locations
 - Researchers with varying levels of experience
 - Testing in Multiple Languages

Q-NOTES: ANALYSIS SOFTWARE

Level One: Conducting Interviews

- Interview guide
- Consistency
- Pre-selected Themes
- Multiple Languages
- Raw data storage



Interview Guide

1. Compared with children of the same age, does [he/she] have difficulty with self-care such as feeding or dressing him/herself?

Response Options	Skip Pattern
No Difficulty	Go to Question 6
Some Difficulty	
A lot of difficulty	
Cannot do at all	

Themes

Construct: Activities considered by Respondent:

- General Conceptualization
- Only Dressing
 - Physically Able
 - Willingness
- Only Feeding
 - Physically Able
 - Willingness
- Both Feeding and Dressing
 - Physically Able
 - Willingness

Question Translation

Question Translations

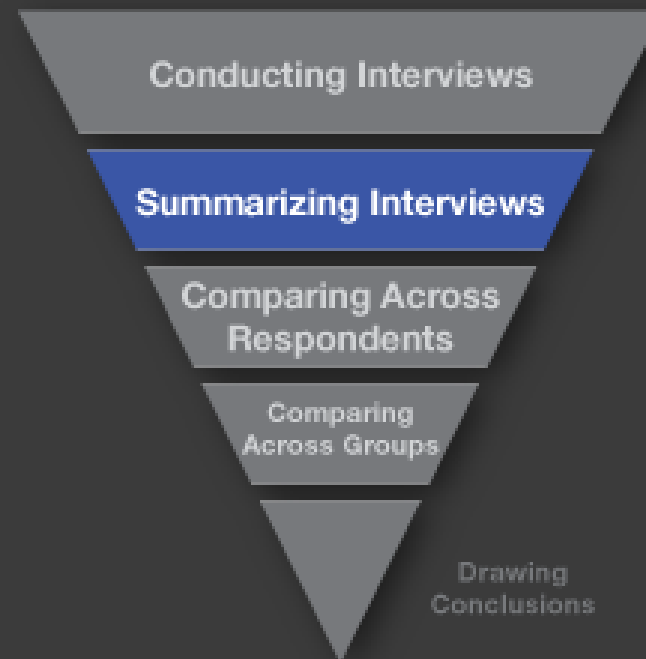
Question Text

▼ Would you say that in general your health is excellent, very good, good, fair or poor?

#	Language	Country	Translation Text	Translation File
Edit New Delete	Spanish	United States	¿Diría usted que en general su salud es excelente, muy buena, buena, regular o mala?	
Edit New Delete	Arabic	Oman	هل تقول أن في العام صحتك ممتازة، جيد جداً، جيد، عايلة أو القراء؟	
Edit New Delete	Spanish	Belize	¿Diría usted que en general su salud es excelente, muy buena, buena, regular o mala?	
Edit New Delete	Hindi	India	Āpa sāmān'ya rūpa mēm apanē svāsthya, utkr̥ṣṭa bahuta acchā, acchā, ucita hai yā garība hai ki kahēngē?	
Edit New Delete	Montenegrin	Montenegro	Ar norite pasakyti, kad apskritai Jūsų sveikata yra puiki, labai gerai, gerai, patenkinamai ir prastai?	

Level Two: Summarizing Interview Notes

- Synthesizing raw data
- Tagged videos
- Researcher collaboration
- Viewing data for a single respondent



Summarizing Interview Notes

Respondent ID: CD14 12/1/2013

Interviewer: MMassey - [Send Email](#)

Self-care_1 : Compared with children of the same age, does [he/she] have difficulty with self-care such as feeding or dressing him/herself?

Answer:

Interview Notes

r was focused on dressing when answering the question. Child's eyes are blurry so he gets frustrated or he puts clothes on backwards or inside out. When r tests him by asking him to dress himself, he gets frustrated because he can't put the clothes on correctly.

Child has no trouble with feeding: "As long as you put the bowl there, he fine."

Mom helps with all activities.

In answering, r makes a comparison to his younger daughter (3 years old) who is very advanced and can do everythign herself.

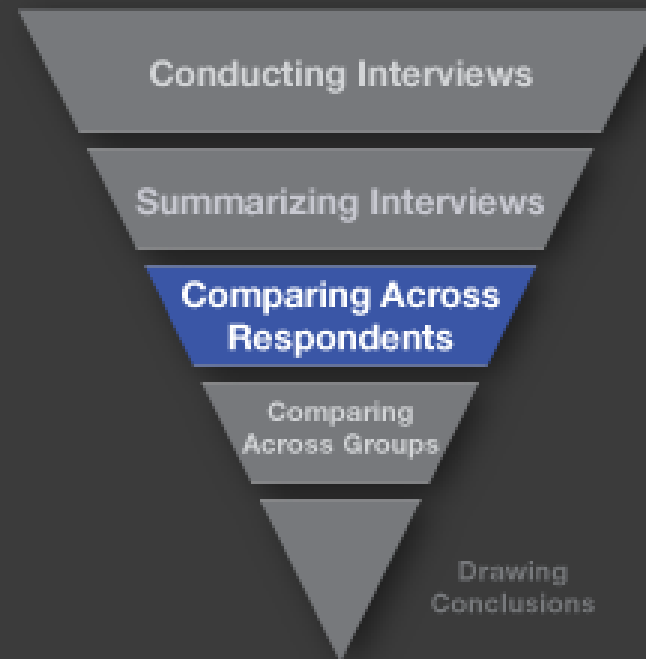
Also compares child to his classmates who have difficulties. One classmate has hearing difficulties. This calssmate is more advanced

Video



Level Three: Comparing Across Respondents

- Developing thematic schema
- Project level themes
- Question level themes
- Flexibility
- Consistency across coders
- Cross interview comparison



Viewing one question across all respondents

Across Interview Analysis

Select a question to view all respondent's answers and interviewer's notes for the question.

Select Question:

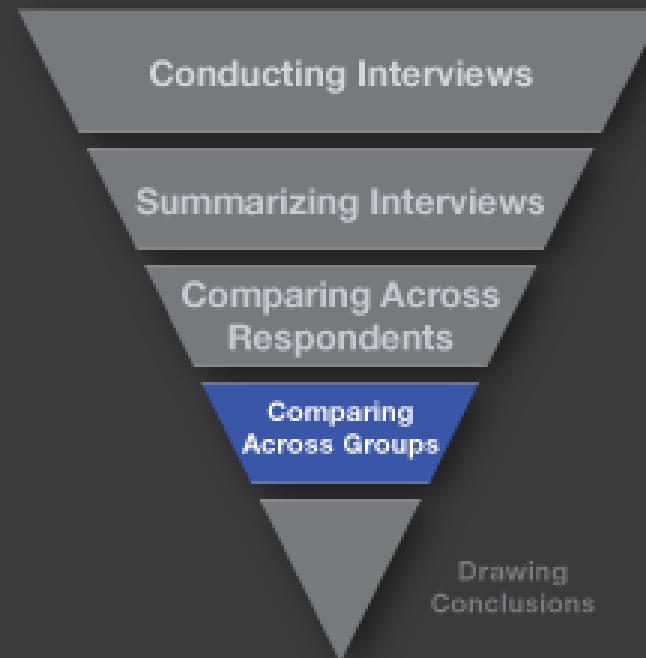
Self-care_1

Compared with children of the same age, does [he/she] have difficulty with self-care such as feeding or dressing him/herself?

Respondent ID	Question Summary	Answer	
CD1	r's daughter has problems dressing herself. When r asked her to get ready this morning for school, the buttons on her shirt were mismatched and her daughter didn't even realize it. The other day daughter went to school with shoes on the wrong feet. No problems feeding herself.	Some Difficulty	Edit
CD10	Child can prepare his own breakfast and eat it in the correct way. He keeps his clothes clean when eating. He can dress up well and has no trouble buttoning and unbuttoning his shirt without assistance.	No Difficulty	Edit
CD11	Child is dependent for all his daily living activities and physically unable to attend to these things. No comparison made to other children. r: "There's no comparison. He is completely dependent. I don't need to make a comparison to know this."	Cannot do at all	Edit
CD12	Child's problem is that he will not sit in one place to eat. he will only eat one item of food at a time. Then he runs away. Then he is hungry and wants more food. This difficulty is because he is hyperactive. Dressing: he has no problem. He does everything on his own. He dresses himself for school each day. Probed about comparison to children his age. r did not make a comparison when formulating answer. r said in comparison he does have difficulty dressing himself. Makes a comparison to his brother. He is more difficult to feed than his brother ever was (older brother).	Some Difficulty	Edit

Level Four: Comparing Across Groups

- Development of Advanced Schema
- Sub-group analysis
- Comparative analysis



Subgroup Analysis

Subgroup Analysis

Select Question:

Self-care_1

Compared with children of the same age, does [he/she] have difficulty with self-care such as feeding or dressing him/herself?

Choose items to display in results:

- Show Question Summaries
- Show Question Answers
- Show Frequency Table

Filters:

- Response Options
- Question Themes
- Interview Information and Demographics

Field	Output	Sort Order
Age	<input checked="" type="checkbox"/>	▼
Country	<input type="checkbox"/>	▼
Language	<input type="checkbox"/>	▼
Gender	<input checked="" type="checkbox"/>	▼
Interview Location	<input type="checkbox"/>	▼
Marital Status	<input type="checkbox"/>	▼

Respondent Descriptors:

Output results

Subgroup Analysis Results

RespondentID	Answer	Narrative	Age	Language
CD6	A lot of difficulty	Food has to be served to the child. All food has to be of the proper consistency so the child does not choke. She only swallows and does not chew so the food can get stuck in her throat. r did not address child's difficulties dressing. r was only thinking of difficulties feeding when answering the question.	6	English
CD8	A lot of difficulty	Child has a lot of difficulty when it comes to eating as well as dressing herself. She is too slow when she's eating because she has weak coordination of herlimbs. She usually receives help from her family in eating. This is also why she has trouble dressing. Sometimes she dresses herself and it takes up to an hour to fully dress. Usually her family provides assistance.	16	English
CD11	Cannot do at all	Child is dependent for all his daily living activities and physically unable to attend to these things. No comparison made to other children. r: "There's no comparison. He is completely dependent. I don't need to make a comparision to know this."	11	English
CD7	No Difficulty	She can take a shower on her own. She can dress herself and has no trouble eating. She has a hard time tying her shoes or using a knife (despite these difficulties r still answered no difficulty). When probed as to why she did not answer "some difficulty," r says that the child can take care of her daily needs so there is no difficulty.	17	English
CD10	No Difficulty	Child can prepare his own breakfast and eat it in the correct way. He keeps his clothes clean when eating. He can dress up well and has no trouble buttoning and unbuttoning his shirt without assistance.	12	English
CD3	No Difficulty	r said child doesn't have any difficulty. When he comes from school, he serves food by himself and eats it. He dresses and bathes and takes care of his hair by himself.	11	English
CD14	Some Difficulty	r was focused on dressing when answering the question. Child's eyes are blurry so he gets frustrated or he puts clothes on backwards or inside out. When r tests him by asking him to dress himself, he gets frustrated because he can't put the clothes on correctly. Child has no trouble with feeding: "As long as you put the bowl there, he fine." Mom helps with all activities. In answering, r makes a comparison to her younger daughter (3 years old) who is very advanced and can do everythign herself. Also compares child to his classmates who have difficulties. One classmate has hearing difficulties. This calssmate is more advanced and does not get as frustrated or give up as often as her son.	5	English
CD1	Some Difficulty	r's daughter has problems dressing herself. When r asked her to get ready this morning for school, the buttons on her shirt were mismatched and her daughter didn't even realize it. The other day daughter went to school with shoes on the wrong feet. No problems feeding herself.	6	English
CD9	Some Difficulty	r says child is able to stay home alone. He can eat by himself, get ready and go out alone. When probed about why r answered "some difficulty" r says child can not tie shoe laces and does not remember to tuck his shirt into his trousers.	10	English
CD5	Some Difficulty	r explains that he has difficulty in dressing himself. He can't button his shirt or tie his tie or tie the laces of his shoes. Child is occupational therapy to help with these issues. OT has improved his abilites in this area. Child has trouble tucking his shirt into his pants and sometimes wears underpants front side back. Feeding: child has no trouble eating. He does not spill and keeps his hands clean.	7	English

Comparative Analysis

Comparative Analysis

Select Item #1: Question Project Themes
 Question Themes Demographics

Select Question: Self-care_1 ▾

Compared with children of the same age, does [he/she] have difficulty with self-care such as feeding or dressing him/herself?

Select Item #2: Question Project Themes
 Question Themes Demographics

Themes disability status ▾

Search

Project Theme
disability status

Compared with children of the same age, does [he/she] have difficulty with self-care such as feeding or dressing him/herself?

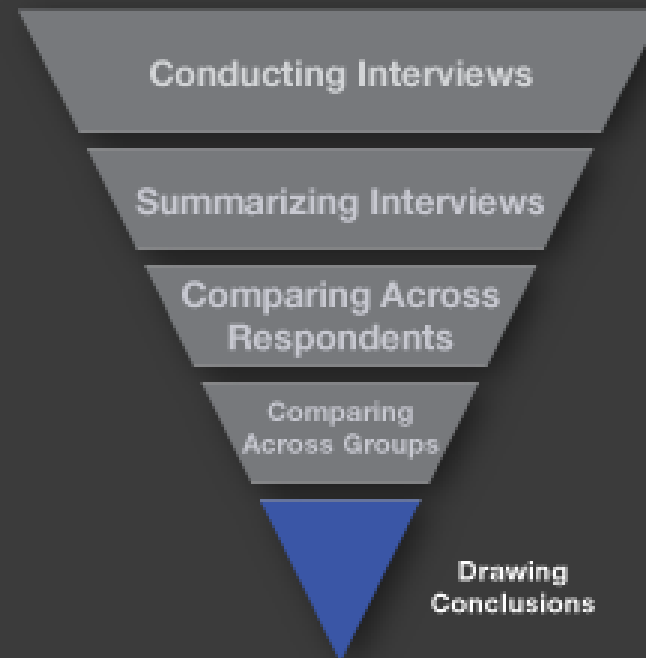
	n	yes
No Difficulty	3	2
Some Difficulty	4	2
A lot of difficulty	1	6
Cannot do at all		2

Comparative Analysis

RespondentID	Narrative
CD17	When asked the question, the respondent sigh and shook her head. She said that she typically fights with her child about eating the food that she is given. She is very frustrated by this problem. Her child refuses to eat any type of vegetable and only certain types of fruit. She said that the only time that her child will eat what she is given is when they have pizza, macaroni and cheese, and hot dogs. She answered 'a lot of difficulty' as opposed to 'cannot do,' because on these occasion (when they have pizza, etc) the child will eat.

Level Five: Drawing Conclusions

- Report template
- Summary tables
- Thematic schema



Report Template

4. Does [he/she] wear glasses? (2-17)

Answer	Cases
Yes	12
No	13

---Themes

Asked for clarification::

No: - 8 Cases

Yes: - 17 Cases

Changed answer::

No: - 12 Cases

Yes: - 13 Cases

Distance::

Close distance: - 10 Cases

Far distance: - 9 Cases

Unable to determine: - 6 Cases

One of the household members wears glasses or contact lenses::

No: - 9 Cases

Unable to determine: - 8 Cases

Yes: - 8 Cases

**Q-BANK:
DISSEMINATING
FINDINGS**

Q-Bank Users

- Data Analysts
- Questionnaire Designers
- Survey Methodologists
- Survey Managers

Q-Bank Benefits

- Deeper understanding of what survey variables are capturing
- Share/view findings from studies conducted at other organizations
- Resource to learn more and dialog about Question Evaluation
- Mechanism to compare different methods and findings

Searching Q-Bank

Quick Search

Keyword: *

Display: * Reports Questions

[Search Q-Bank](#)

Question Search

Select **population** for questions about individuals or **establishment** for questions about organizations.

Population
 Establishment

Question Topic:

Survey Title:
















Testing Agency:

Keyword:

[Search](#) [Help](#) [Search Q-Bank](#)

Q-Bank Search Results

1 2

Survey Title	Question	Test Date	
TUS-CPS	<u>During the PAST 12 MONTHS, have you TRIED to QUIT smoking COMPLETELY?</u>	12/2004	
TUS-CPS	<u>Have you EVER stopped smoking for one day or longer BECAUSE YOU WERE TRYING TO QUIT SMOKING?</u>	12/2004	
TUS-CPS	<u>Overall, on a scale from 1 to 10 where 1 is NOT AT ALL interested and 10 is EXTREMELY interested, how interested are you in quitting smoking?</u>	12/2004	
TUS-CPS	<u>If you did try to quit smoking altogether in the next 6 months, how LIKELY do you think you would be to succeed -- not at all, a little likely, somewhat likely or very likely?</u>	12/2004	
Not Applicable	<u>How old were you when you first started smoking cigarettes fairly regularly?</u>	02/2009	
TUS-CPS	<u>At what age did you first start to smoke cigarettes every day?</u>	02/2009	
TUS-CPS	<u>What is the total number of years you smoked EVERY DAY? Do not include any time you stayed off cigarettes for six months or longer.</u>	02/2009	
TUS-CPS	<u>What is the total number of years you have smoked EVERY DAY? Do not include any time you stayed off cigarettes for six months or longer.</u>	02/2009	
TUS-CPS	<u>During the period you smoked the MOST, how many cigarettes did you smoke each day?</u>	02/2009	
TUS-CPS	<u>How many times during the past 12 months have you stopped smoking for one day or longer because you were trying to quit smoking?</u>	02/2009	
TUS-CPS	<u>Have you ever used any of the following even one time? A regular cigar or cigarillo, or a little filtered cigar</u>	02/2009	
TUS-CPS	<u>Have you ever used any of the following even one time? A pipe filled with tobacco</u>	02/2009	
TUS-CPS	<u>Do you now smoke/use [item/s from J1a] every day, some days, or not at all?</u>	02/2009	
TUS-CPS	<u>On how many of the past 30 days did you smoke/use [item/s from J1a]?</u>	02/2009	
VACS	<u>During the past 30 days, did you smoke cigarettes daily, occasionally, or not at all?</u>	03/2013	

Question Selection

Report

[Gray, C., Chepp, V., 2011, Cognitive Interviewing Evaluation of the Complementary and Alternative Medicine \(CAM\) Supplement for the National Health Interview Survey \(NHIS\), Hyattsville, MD: National Center for Health Statistics.](#)

Report Keywords: No keywords were submitted

Question Text

Introductory Text

Core Question During the past 12 months, did seeing a practitioner for [modality]... Motivate you to cut back or stop drinking alcohol?

Response Option Text Yes No

Interviewer Instruction [ask #6 for respondents who report smoking in core]

Link to Question <http://www.n.cdc.gov/qbank/question.aspx?12374>

Question Information

Question Main Topic	Health
Question Sub Topic	Alternative Medicine
Keyword	practitioner
Survey Title	NHIS
Survey Year	2012

Test Information

Sponsor	NCHS-NHIS
Testing Agency	NCHS
Evaluation Type	Cognitive Interview
Principal Investigator	Caroline Gray
Universe	Population
Test Date	2/2011

Question Details

PRT.3 Do you currently see a practitioner for [modality] more, less, or about the same as you did one year ago?

- 1) More
- 2) Less
- 3) About the same

Most respondents appeared not to have trouble answering this question, though one recurring issue did emerge. Specifically, for those who no longer practice the modality the options did not always appear so straightforward. Several of these respondents explained that at the time of the interview they were no longer seeing the practitioner and thought that the question might not be applicable. For instance, one respondent who was answering for his son who had seen a practitioner in the past 12 months but was not seeing a practitioner at the moment, hesitated before answering “more.” He answered this way, however, because a year ago he was not seeing a practitioner at all, but he *had* seen a practitioner over the course of the previous 12 months. It may be that the “one year ago” reference is vague or unclear, or perhaps too broad. However, it is not clear what a solution to this might be.

For respondents who see a practitioner only sporadically or on an “as needed” basis, this question may also be difficult to answer. For instance, one respondent who had used

Q-Suite Features

- ⦿ Collaboration
- ⦿ Consistency
- ⦿ Transparency

- ⦿ Q-Notes: Qualitative Analysis Software
- ⦿ Q-Bank:
 - Library of Evaluation studies
 - Resource on Question Evaluation

Q-Suite Next Steps

◎ Q-Notes

- Run a public beta test Summer 2014*
- Export feature to submit into Q-Bank

◎ Q-Bank

- Continue increasing content
- Inclusion of all methods in Q-Bank
- Pilot test with NHIS to link key variables to Q-Bank testing reports

Questions or Feedback?

◎ Contact Us:

- QBank@cdc.gov

◎ Visit:

- www.cdc.gov/QBank
- www.cdc.gov/QNotes