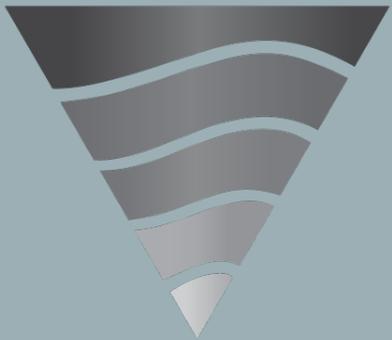


INVESTIGATING THE ACCURACY OF OPIOID USE, MISUSE, IMPAIRMENT AND ADDICTION RESPONSES

CCQDER



Collaborating Center for Question Design and
Evaluation Research

Kristen Miller, PhD

THIS PRESENTATION

- Provide Background about CCQDER
- Describe Cognitive Interviewing Methodology at NCHS
- Discuss the CCQDER Opioid Project

CCQDER STAFF



PRINCIPLE ACTIVITIES

1. Methodological Research Program

- Development of question evaluation methods
- Study of the question response process in relation to data quality

2. Questionnaire Design Research Lab

- Question Development and Testing Projects
- For NCHS, CDC, HHS, and others

3. Question Evaluation Applications

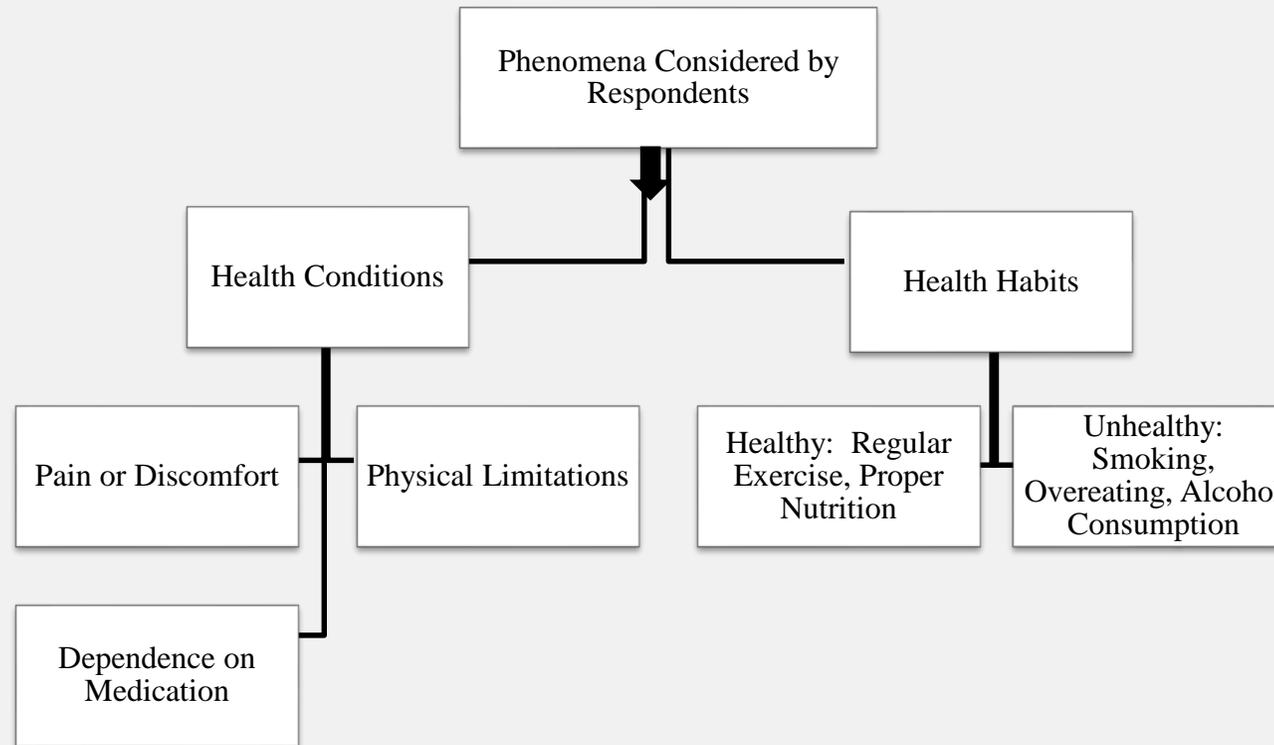
- Q-Notes: Data entry and analysis tool for cognitive interviewing studies
- Q-Video: Cognitive Interview/Data Storage
- Q-Bank: Online library of question evaluation findings

ANALYTIC GOALS OF COGNITIVE INTERVIEWING STUDIES

- Cognitive Testing: Conducting interviews to “look for problems.”
- Construct Validity Study: Identifying the constructs captured by individual questions by identifying the specific **phenomena that account for respondents’ answers.**
- Comparability Study: Determining whether constructs are **consistently captured across salient** respondent groups.

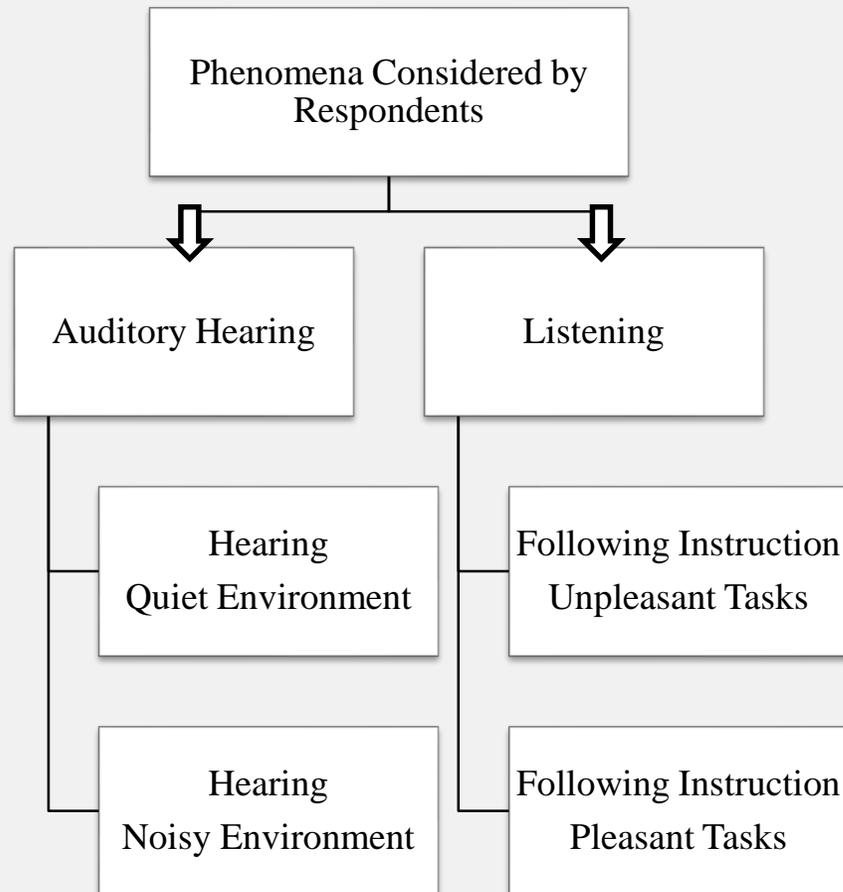
Visual Representation of Construct Schema

Question: In general, would you say your health is excellent, very good, good, fair or poor?



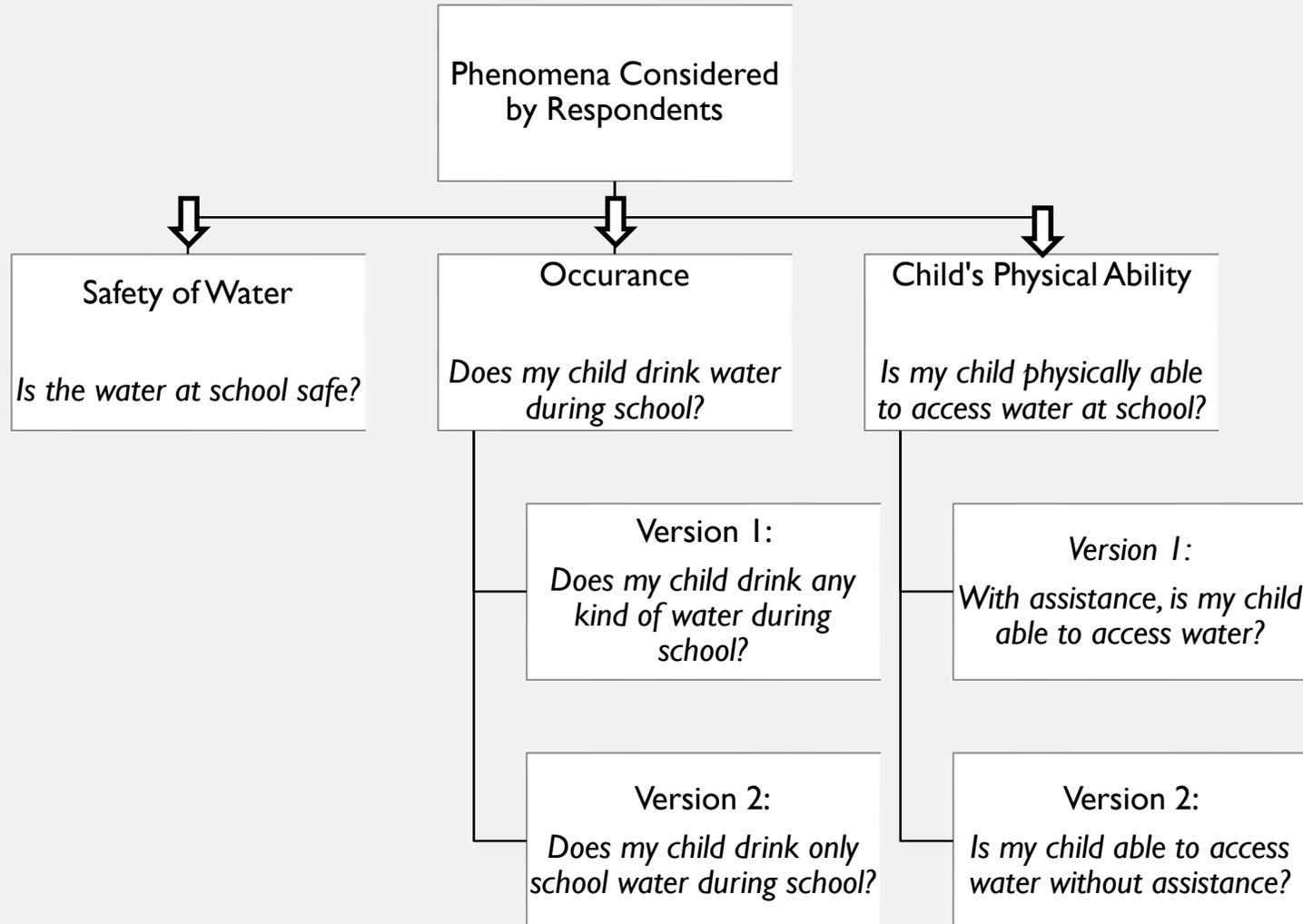
Visual Representation of Construct Schema

Question: Does your child have difficulty hearing?



Visual Representation of Construct Schema

- United States/English, Jamaica/English: Does your child use drinking water facilities at school?
- India/Hindi: क्या (नम) स्कूलों के पन पनक सवध क आसन सइस्तम लकर सकत/सकत ह?



APPLICATION

- 2012 CCQDER Project
- Development of the NHIS sexual identity measure
- Widely used question: Do you think of yourself as heterosexual, gay, bisexual or something else?
- High missing rates, particularly for racial/ethnic minorities, low education & women
- Questionably high rates of bisexual reports among racial/ethnic minorities, low education & women

SEXUAL IDENTITY ESTIMATES

DO YOU THINK OF YOURSELF AS HETEROSEXUAL, GAY, BISEXUAL OR SOMETHING ELSE?

Survey	% Heterosexual	% Gay men	% Lesbian	% Bisexual	% Other	% DK/Refused
NSFG 2006-08	94.5	0.8	0.5	2.5	0.4	1.2
NSFG 2002-03	89.6	1.1	0.6	2.4	4.2	2.0
NHANES 2001-08	95.7	1.1	0.7	1.9	0.3	0.4
UK: HIS 2010	94.2	1.3	0.6	.05	0.5	3.8
Canada: CCHS 2009 ¹	96.5	1.2		1.0	NA	1.3
YRBS	Boston 2001-2009	88.4	1.1	2.8	NA	7.8
	Chicago 2003-2009	84.9	2.5	3.4	NA	9.6
	Delaware 2003-2009	90.7	1.3	3.7	.7	3.7

Measuring Sexual Identity:

	Identity Characteristics	High rate of 'something else'	High rate of 'don't know'	Misclassification into 'bisexual'
Sexual Minority (L,G,B,T)	<ul style="list-style-type: none"> • Highly salient sexual identity • Understanding of self rooted in complex process • Shifting understandings 	Because uses another label	Because shifting sexual identity	Because interprets question as attraction or behavior, not identity
Sexual Non-Minority (Heterosexual)	<ul style="list-style-type: none"> • Lack of salient sexual identity • Sometimes no concept of sexual identity but rather dis-identification 	Because doesn't know terminology	Because doesn't know terminology	Because believes implies heterosexuality

REVISED SEXUAL IDENTITY QUESTION

Do you think of yourself as...

- Lesbian or gay
- Straight, that is, not gay
- Bisexual
- Something Else
- Don't Know

‘MISSING’ BY RACE/ETHNICITY, SEX, AND SURVEY, AMONG ADULTS AGED 18-44

	Women		Men	
	NHIS: Missing	NSFG: Missing	NHIS: Missing	NSFG: Missing
Race/ethnicity				
Hispanic	1.4	3.0	1.2	3.2
NH white	0.9	0.7	0.9	0.7*
NH black	1.6†	1.5†	0.9*	0.7*
NH other	0.8*	1.3*	1.3*	3.9*

*Estimates have a relative standard error greater than 30% and less than or equal to 50%.

†Estimates have a relative standard error greater than 50% .

‘MISSING’ BY EDUCATION, SEX, AND SURVEY, AMONG ADULTS AGED 18-44

	Women		Men	
	NHIS: Missing	NSFG: Missing	NHIS: Missing	NSFG: Missing
Education				
< HS/GED	2.1	3.3	1.1	2.7
HS/GED	1.2	1.1	0.7*	1.9
Some college	1.0*	0.7†	1.1†	0.8†
Bachelor’s +	0.7	0.8	1.0	0.6*

*Estimates have a relative standard error greater than 30% and less than or equal to 50%.

†Estimates have a relative standard error greater than 50% .

OPIOID COMPARATIVE COGNITIVE INTERVIEWING STUDY

Methodological: Comparative study

What constructs captured by individual questions?

Are they consistently captured across demographic groups in diverse socio-cultural contexts

Assess the feasibility of asking opioid questions on face-to-face household surveys

What topics are possible?

What are the data quality concerns?

Are households the best source for this type of information?

Topics: Opioid Use, Misuse, Impairment, Addiction

Regions: DC Metro; Lexington, KY; Mobile, AL; Seattle, WA; Boston, MA; Wichita, KS; El Paso, TX

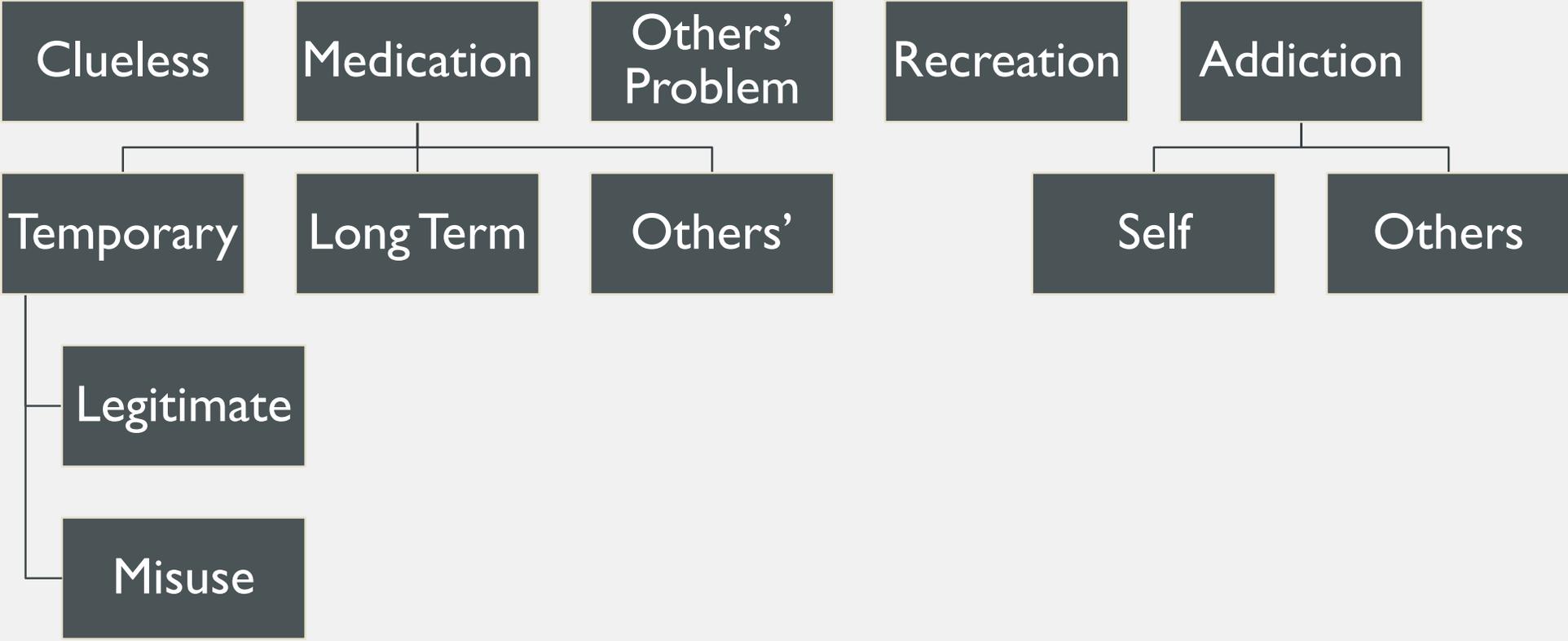
Languages: Spanish, English

OPIOID-USE SCREENER QUESTIONS

1. These next questions are about the use of prescription pain relievers called opioids. When answering these questions, please do not include over-the-counter pain relievers such as aspirin, Tylenol, Advil, or Aleve. During the past 12 months, have you taken any opioid pain relievers prescribed by a doctor or dentist? Examples include hydrocodone, Vicodin, Norco, Lortab, oxycodone, OxyContin, Percocet and Percodan.

2. Please look at the names and pictures of the pain relievers shown below. In the past 12 months, which, if any, of these pain relievers have you used?

RESPONDENT UNDERSTANDINGS OF OPIOID-USE QUESTIONS



OPIOID PROJECT RESEARCH QUESTIONS

- When answering questions about opioid use, what kinds of medication do respondents consider?
 - How is it defined, and what are the parameters for these considerations?
 - Does this vary according to respondents' background, experiences with the medical system, and/or their socio-cultural context?
- How do respondents understand the concept of misuse?
 - For those whose actions would be defined as misuse by the CDC, how do they make sense of or rationalize their actions?
 - How do these personal explanations impact their response to questions about misuse? How consistent are these patterns across differing groups of respondents?
- How do respondents conceptualize the concept of opioid impairment?
 - Are there differences across respondent groups?
 - How do these conceptualizations impact responses to impairment questions?

OPIOID PROJECT RESEARCH QUESTIONS

- Regarding the opioid addiction questions, are respondents able to reflexively examine their actions and accurately report back as would be intended by the CDC?
 - What are the factors that lead to response error?
 - Do these factors vary by question topic? By respondent group?
- In terms of answering questions about usage, are there any cognitive tasks that are overburdensome to the extent that data quality is compromised?
 - If so, what are the characteristics of those questions? Does this differ across respondents?
- Should some types of opioid-related questions be deemed as too sensitive to ask on face-to-face, household surveys?
 - What are the characteristics of those questions? Does this vary across respondents?