

Session 2: Cognitive and Field testing of the Extended Question Sets

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...from Census to Survey:

Review of the development of the extended question sets

Potential sources of disability data

- ✓ National censuses
- Specialized surveys
 - Health or disability surveys
 - Other population surveys

...from Census questions to Survey modules

- A set of 6 questions on disability for use on national Censuses has been developed, tested and adopted by the Washington Group on Disability Statistics
- The next step is to look beyond Censuses and focus on surveys
- Determine how the Short Set of 6 questions can be expanded and further developed for use in disability modules in larger surveys or disability surveys

Washington Group/Budapest Initiative/UNESCAP Activities and Workplan

Row	Questionnaire Topic/Type	Basic Activity Domains										Complex Activity Domains			
		Vision (1)	Hearing (1)	Mobility	Communi- cation	Cognition/ remembering	Upper Body	Learning/ understanding	Affect	Pain	Fatigue	ADL/ IADL	Getting Along with People	Life Activities	Participation in Society
Capacity	Short Set Single Questions (1)						d	a	X	X	X	d	X	X	X
	Extended Set Multiple Questions (1)					c			c	c	c	b	X	X	X
Performance	Use of Assistive Devices Micro-E (2)									X	X	X	X	X	X
	Functioning with Assistance, Micro-E (2)									X	X				
5	Age at Onset													X	X
6	Cause													X	X
7	Duration													X	X
8	Impact	→										---	?---	?---	?→
9	Meso-Environment (3)														
10	Macro-Environment (4)	To be obtained through other sources, not personal survey data collections													
	ICF Chapter Reference - Activities/Participation	ICF-1	ICF-1	ICF-4	ICF-3	ICF-1,2	ICF-4	ICF-1	ICF-2	(5) See Note below	ICF-5,6	ICF-7	ICF-8	ICF-9	

Domains (columns)

- Basic Activity Domains
 - Vision
 - Hearing
 - Mobility
 - Cognition/remembering
 - Upper body
 - Learning/ understanding
 - Affect
 - Pain
 - Fatigue

Domains (columns)

- Complex Activity Domains
 - ADL/IADL
 - Getting along with people
 - Life activities
 - Participation in Society

Questionnaire Topic/Type (rows)

- ▶ Capacity:
 - ▶ Short set questions
 - ▶ Extended set – multiple questions
- ▶ Performance
 - ▶ Use of assistive devices (micro-environment)
 - ▶ Functioning with assistance
 - ▶ Age at onset, Cause, Duration
 - ▶ Impact
 - ▶ Meso-environment
 - ▶ Macro-environment

Row	Questionnaire Topic/Type	Basic activity domain
		Mobility
Capacity	Short Set Single Questions	
	Extended Set Multiple Questions	
Performance	Use of Assistive Devices	
	Functioning with Assistance, Micro-E	
5	Age at Onset	
6	Cause	
7	Duration	
8	Impact	
9	Meso-Environment	
10	Macro-Environment	
	ICF Chapter Reference -	ICF-4

Row	Questionnaire Topic/Type	Basic activity domain
		Mobility
Capacity	Short Set Single Questions	
	Extended Set Multiple Questions	
Performance	Use of Assistive Devices	
	Functioning with Assistance, Micro-E	
5	Age at Onset	
6	Cause	
7	Duration	
8	Impact	
9	Meso-Environment	
10	Macro-Environment	
	ICF Chapter Reference -	ICF-4

Additional domain specific Extended questions

Age at onset

How old were you when the difficulty walking or climbing began?

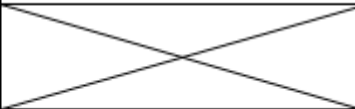






Impact

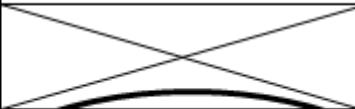






How much does your difficulty walking or climbing limit your ability to carry out daily activities?

1. Working to support you or your family?
2. Working outside the home to earn an income?
3. Going to school or achieving your education goals?
4. Participating in leisure or social activities?
5. Getting out with friends or family?
6. Doing household chores such as cooking and cleaning?
7. Using transportation to get to places you want to go?
8. Participating in religious activities?
9. Participating in community gatherings?

Row	Questionnaire Topic/Type	Basic activity domain
		Mobility
Capacity	Short Set Single Questions	
	Extended Set Multiple Questions	
Performance	Use of Assistive Devices	
	Functioning with Assistance, Micro-E	
5	Age at Onset	
6	Cause	
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9	Meso-Environment	
10	Macro-Environment	
	ICF Chapter Reference -	ICF-4

	Basic activity domains
Question topic	Mobility
Short set	Do you have difficulty walking or climbing steps?
	Do you have difficulty moving around inside your home?
Functioning without assistance	<ol style="list-style-type: none"> 1. Do you have difficulty walking 100 (meters/yards) on level ground, that would be about the length of one (1) football field or one (1) city block? 2. Do you have difficulty walking half a km/ a third of a mile on level ground, that would be the length of five (5) football fields or five (5) city blocks? 3. Do you have difficulty walking up or down 12 steps?
Probe	How much difficulty would you have going up or down those steps without using a handrail?
Use of AD/Micro-Environment	<ol style="list-style-type: none"> 1. Do you use any equipment or receive help for getting around? 2. Do you use any of the following? Cane or walking stick? Walker? Zimmer frame? Crutches? Wheelchair? Prothesis(es)? Someone's assistance? Other?
Functioning with Assistance	<ol style="list-style-type: none"> 1. Do you have difficulty walking 100 (meters/yards) on level ground, that would be about the length of one (1) football field or one (1) city block, when using your aid? 2. Do you have difficulty walking half a km/ a third of a mile on level ground, that would be the length of 5 football fields or 5 city blocks, when using your aid? 3. Do you have difficulty walking up or down 12 steps, even when using your aid?

Row	Questionnaire Topic/Type	Basic activity domain
		Anxiety
Capacity	Short Set Single Questions	
	Extended Set Multiple Questions	
Performance	Use of Assistive Devices	
	Functioning with Assistance, Micro-E	
5	Age at Onset	
6	Cause	
7	Duration	
8	Impact	
9	Meso-Environment	
10	Macro-Environment	
	ICF Chapter Reference -	ICF-2

Row	Questionnaire Topic/Type	Basic activity domain
		Anxiety
Capacity	Short Set Single Questions	
	Extended Set Multiple Questions	
Performance	Use of Assistive Devices	
	Functioning with Assistance, Micro-E	
5	Age at Onset	
6	Cause	
7	Duration	
8	Impact	
9	Meso-Environment	
10	Macro-Environment	
	ICF Chapter Reference -	ICF-2

	Basic activity domains
Question topic	Anxiety
Short set	
	How often do you feel worried, nervous or anxious? Daily, Weekly, Monthly, A few times a year, Never
Use of AD/Micro-Environment	Do you take medication for these feelings?
Functioning: Extended questions	<ol style="list-style-type: none"> Thinking about the last time you felt worried, nervous or anxious, how would you describe the level of these feelings? A little, A lot, Somewhere in between a little and a lot Would you say this was closer to a little, closer to a lot, or exactly in the middle?
Probe:	<p>Please tell me which of the following statements, if any, describe your feelings.</p> <ol style="list-style-type: none"> My feelings are caused by the type and amount of work I do. Sometimes the feelings can be so intense that my chest hurts and I have trouble breathing. These are positive feelings that help me to accomplish goals and be productive. The feelings sometimes interfere with my life, and I wish that I did not have them. If I had more money or a better job, I would not have these feelings. Everybody has these feelings; they are a part of life and are normal. I have been told by a medical professional that I have anxiety.

Washington Group's Testing History

- **2005/6: Washington Group Short Set**
 - Structured cognitive test, in-depth field test
 - Countries: Argentina, Brazil, Congo, Egypt, Gambia, India, Kenya, Lesotho, Mauritius, Mexico, Paraguay, Philippines, Tanzania, Uganda, Vietnam
 - Broad understanding of question performance, lack of in-depth
- **2006: Budapest Initiative Cognitive Testing**
 - Separate, not coordinated studies
 - Countries: US, Canada, Italy, Australia
 - Disparate findings, unexplainable differences: not comparable measure or not comparable test?

Washington Group's Testing History

- **2007/8: Budapest Initiative Cognitive Testing**
 - Coordinated data collection; joint analysis
 - Countries: Bulgaria, Germany, Great Britain, Portugal, Spain, Switzerland-French, United States-English/Spanish
 - Tedious, time consuming and lack efficiency
- **2009: UNESCAP Cognitive Testing and Field Testing of Extended Set**
 - Mixed method design; coordinated data collection and joint analysis with Q-Notes
 - Countries: Sri Lanka, Cambodia, Philippines, Maldives, Mongolia, Kazakhstan
 - Need more focus on interviewer training: specifically, detail of notes required and how to conduct analysis

Washington Group's Testing History

- **2010: Granada Group: European Cognitive Testing of Extended Set**
 - Coordinated data collection and joint analysis with Q-Notes
 - Countries: US-English/Spanish, Spain, Germany, Switzerland, Italy, France, Portugal
- **2010: Oman Cognitive Testing of Extended Set**
 - Single country, analysis with Q-Notes
- **2010/2011: ESCAP Round II Cognitive Testing**
 - Coordinated data collection and joint analysis with Q-Notes
 - Countries: Sri Lanka, Cambodia, Philippines, Maldives, Mongolia, Kazakhstan
- **2011: Middle East Cognitive Testing of Extended Set**

Cognitive Interviewing

Designed to understand the question response process, that is, how respondents:



Examination can identify:

1. Patterns of interpretation
 - How respondents interpret the question from their own perspective and life experience
 - How respondents go about calculating, estimating, and forming answers based on their own experience
2. What the question captures:
 - Out-of-scope interpretations (response error)
 - In-Scope interpretations (non-problematic patterns)
3. Insight into social-cultural factors that impact the response process
 - Illustrate potential for bias/Ensure that data will be comparable
 - Provide explanations for different country/cultural group estimates
 - Translation problems
 - Socio-cultural and economic-related differences

WG Question Evaluation Methods

Cognitive Tests

- Qualitative Data
- In-depth, semi-structured interviews
- Smaller, purposive sample
- Sample design: to uncover all interpretive patterns
- Analysis: qualitative methodologies

Field Tests

- Quantitative Data
- Standardized, structured interviews
- Larger, random sample
- Sample design: to generalize to a population
- Analysis: quantitative techniques

Mixed Method Approach

Cognitive Test: To understand the ways in which a question performs

Field Test: To understand the extent to which patterns

Objective is to identify:

1. Patterns of interpretation
2. Calculation processes
3. Response error problems
4. Interpretive patterns across subgroups

Establish hypotheses for field test

Mixed Method Approach

Cognitive Test: To understand the ways in which a question performs

Field Test: To understand the extent to which patterns exist

Objective is to determine:

1. The extent of problematic patterns
2. The extent occurring in particular subgroups

Test hypotheses from cognitive interviews

Challenges and Improvements

- Learning and improving the method
- Significance in coordinated testing and how to implement
- Issues of translation
- Interviewer training: Focus on detail; Conducting analysis
- How to conduct consistent analyses
- How to document consistently

ESCAP Cognitive & Field Test Summary (1)

- **September 2007:** following the Dublin meeting: establishment of an extended set(s) Working Group;
- **November 2007 – June 2008:** review of existing question sets already in use in other surveys (national or research);
- **July 2008:** a joint Budapest Initiative / Washington Group meeting held in Washington, D.C., to discuss further extended question set development;
- **August 2008 – January 2009:** development of a cognitive test protocol;

ESCAP Cognitive & Field Test Summary (2):

- **16-20 February 2009:** ESCAP/Washington Group training in Bangkok – Cambodia, Kazakhstan, Maldives, Mongolia, the Philippines and Sri Lanka in cognitive and field test procedures and the subsequent cognitive testing in these countries and in Canada, the United States and South Africa;
- **May 2009:** WG Extended Set Analysis Workshop, held in Washington, D.C.;
- the development of a field test protocol and field testing in the same six ESCAP countries; and
- **October 2009:** presentation of results from cognitive testing and preliminary field test results to the ninth meeting of the Washington Group in Dar es Salaam.

ESCAP: Cognitive Test

The WG/ESCAP project uses a mixed method design.

First, 143 total semi-structured, qualitative cognitive interviews were conducted in the participating 6 countries in order to understand the ways in which each question performed. The specific objectives of the cognitive interviewing component were to identify the following interpretive patterns:

1. respondents' understandings of what specific questions were asking,
2. calculation and other processes used by respondents to formulate their answers to the questions, and
3. types of response error problems.

ESCAP: Field Test

- Based on the analysis of those interviews, follow-up probe questions were developed and placed on the field test questionnaire.
- Each country then conducted approximately 1000 standardized survey interviews drawn from a random sample.
- Resulting survey data from the follow-up probe questions were used to examine:
 1. To examine the extent of valid and non-valid interpretive themes
 2. To develop item thresholds for respondents' level of disability
 3. To evaluate cross-cultural equivalence

Granada Group: Cognitive Interviewing Summary

- Loose coalition of various interests
- February, 2010: Granada, Protocol Meeting

- Established 4 objectives

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Objective 1: Testing the WG Questions

Objective 2: Interpretation and Use of Scales

Objective 3: Building Disability

Theory from Bottom Up

Objective 4: Best Practices for

Cognitive Interviewing

- Feb – A

- April, 2

- Prese

- Discuss/Confirm preliminary findings

- Establish analytic direction for each domain

- November, 2010: Luxemburg Meeting

Country Interviews

France	10
Germany	5
Italy	16
Portugal	9
Spain	20
Switzerland	10
United States	20
United States(SP)	10

100

Challenges for Conclusions

- Making sense of disparate conclusions
- Understanding different methods and study designs
 - Weakness and strengths of different methods
- Need to:
 - Use a critical eye
 - At the same time realize the need to make decisions and recommendations
 - Identify future directions