

Cognition domain

**10th Washington Group meeting Luxembourg
3-5 November 2010**

Andres Montes

ESCAP Statistics Division

Definition

- Cognition is a mental function which includes specific activities such as remembering, concentrating, learning and being able to analyze problems, find solutions and taking decisions.
- Problems in cognition, when severe, typically lead to a loss of independence that is difficult to manage since there are no assistive devices.

Cognitive test main results

- Based on the results from the cognitive test, it was decided to retain the main question COG_SS for the field test and add COG_1 to address the issue of whether COG_SS is double-barreled;
- Also kept COG_2 eliminating the phrase ‘important things’;

Cognitive test main results

- Retained questions COG_3 and COG_4;
- Given the wide range of different items reported between those answering ‘some difficulty’ and those responding a ‘lot of difficulty’ and ‘cannot do at all’, a set of probe questions P_COG_3 was included to investigate what respondents were thinking about when answering positively to having difficulty remembering and concentrating.

Field test questions

- COG_SS. Do you have difficulty remembering or concentrating - no difficulty, some difficulty, a lot of difficulty, cannot do at all
- COG_1. Do you have difficulty remembering, concentrating, or both? - difficulty remembering only; difficulty concentrating only; difficulty with both remembering and concentrating
- COG_2. How often do you have difficulty remembering? - sometimes, often; all of the time

Field test questions

- COG_3 Do you have difficulty remembering a few things, a lot of things, or almost everything? - a few things; a lot of things; almost everything
- P_COG_3 Which of the following statements, if any, describe your difficulty remembering? a) I forget things because I am busy and have too much to remember; b) My difficulty is getting worse; c) My difficulty has put me or my family in danger; d) I only forget little or inconsequential things; e) I must write down important things, such as my address or when to take medicine, so that I do not forget; f) My family members or friends are worried about my difficulty remembering; g) My difficulty is normal for someone my age

Field test questions

- COG_4 – ‘if difficulty concentrating only’ to COG_1, how much difficulty do you have concentrating for ten minutes? - a little; a lot; somewhere in between a little and a lot
- COG_6 How old were you when the difficulty remembering or concentrating began?
- COG_7 How much does your difficulty remembering or concentrating limit your ability to carry out daily activities? - not at all; a little; a lot; completely

Field test results

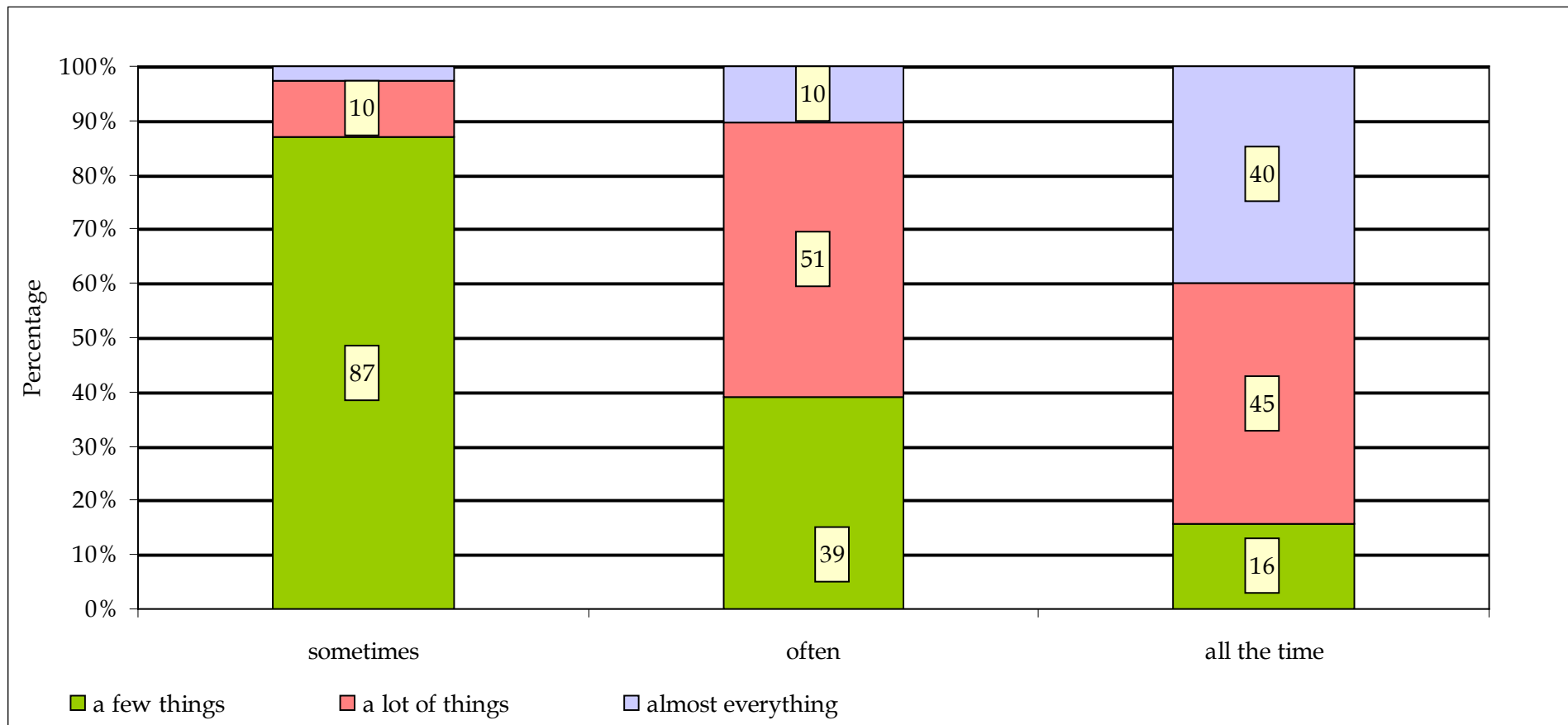
- **COG_SS & COG_1** The ‘concentrating only’ category never surpasses 10 percent. This points to the fact that concentrating is not recognized as the main difficulty in this question by the large majority of respondents.

Do you have difficulty remembering, concentrating, or both?

		Remembering only	Concentrating only	Both	Total number of persons
		(%)	(%)	(%)	
Do you have difficulty remembering or concentrating?	Some	68	9	23	1,495
	A lot	40	3	57	252
	Cannot do	14	0	86	14
	Total	63	8	28	1,761

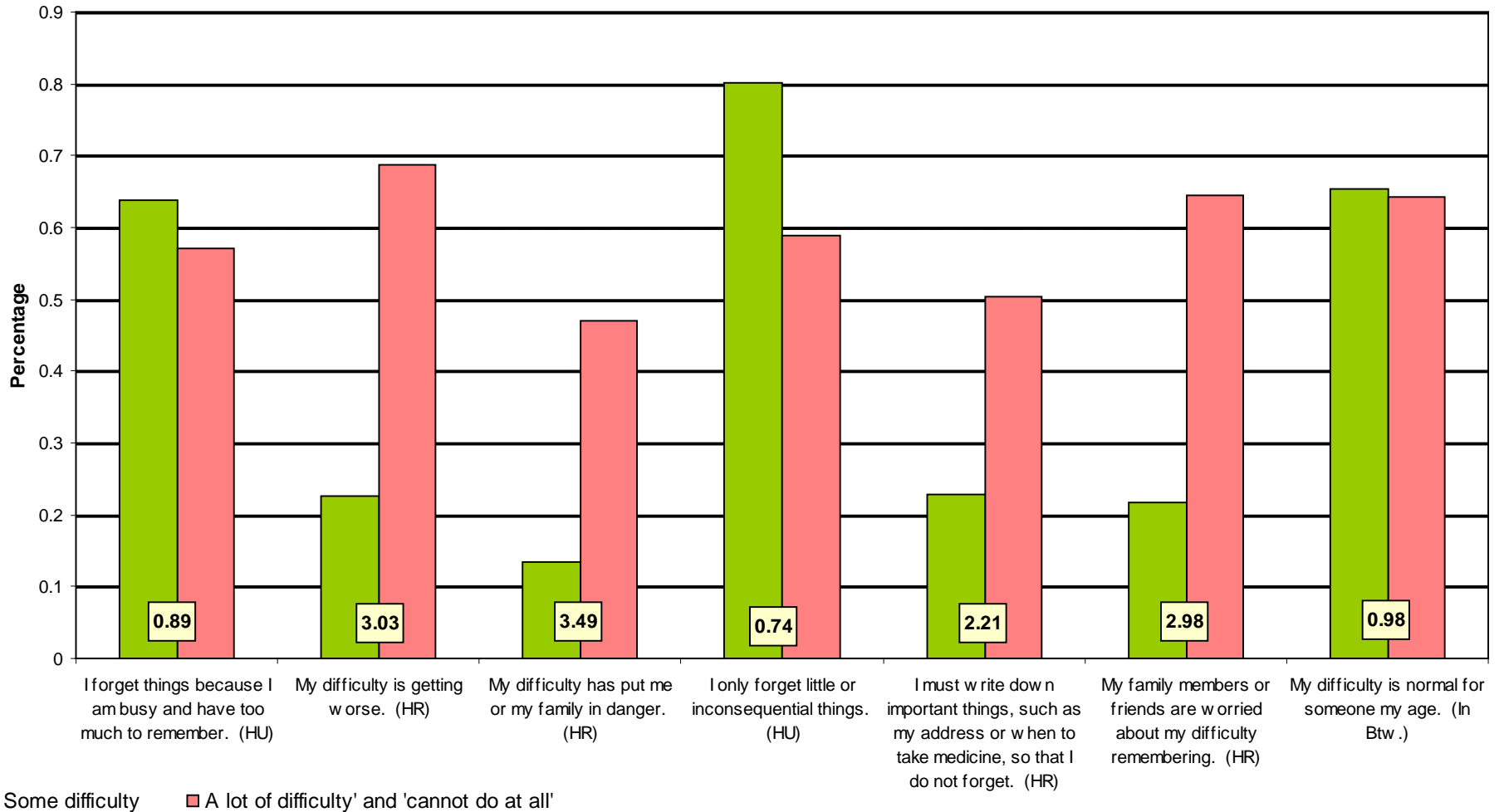
Field test results

- **COG_2 & COG_3** produce reasonably consistent results (also in relation to COG_SS)



Field test results

➤ Probe



Field test results

➤ COG_4 Difficulty concentrating

How much difficulty do you have concentrating for 10 minutes?

		A little	A lot	Somewhere in-between	Total
Do you have difficulty remembering, concentrating or both?	Only concentrating	117 80%	9 6%	20 14%	146
	Both remembering and concentrating	260 55%	129 27%	88 18%	477

Field test results

- Given that cognitive test results were inconclusive, we added a set of behavioural probes to observe whether the respondent had any particular difficulties in understanding and making sense of this question.

Interviewer: Complete BC_1a, BC_1b and BC_1c by yourself and then continue with respondent question COG_4.

BC_3a Did the respondent need you to repeat any part of question COG_4?

- 1. Yes*
- 2. No*

BC_3b Did the respondent have any difficulty using the response options?

- 1. Yes*
- 2. No*

BC_3c Did the respondent ask for clarification or qualify their answer?

- 1. Yes*
- 2. No*

Field test results

- COG_7 asks respondents about the impact of their difficulty on their everyday activities. It is expected that the degree of impact should be directly related to the degree of difficulty in remembering and concentrating.

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

		Not at all	A little	A lot	Completely	Total number of persons
Difficulty remembering or concentrating	Some	46	50	4	0	1,481
	A lot	14	40	43	2	248
	Cannot do	7	14	29	50	14
	<i>Total</i>	41	48	9	1	1,745

Conclusions

- The principal conclusion of this chapter is that the vast majority of respondents report having difficulties remembering only, or both remembering and concentrating.
- Extensive analysis of the cognitive data, as well as of all field test questions – including the probes – lead to the conclusion that the threshold between ‘in scope’ and ‘out of scope’ responses can be delineated with reasonable confidence.

Conclusions

- The relationship between the level of difficulty remembering and concentrating (COG_SS), the frequency of forgetting (COG_2) and number of things forgotten (COG_3) is close.
- There is not enough information in both the cognitive and the pilot tests to allow for concrete recommendations on the concentrating question (COG_4) for which further testing is required.

Recommended questions

- 1. Do you have difficulty remembering or concentrating?
 - 1) no difficulty (*if 'no difficulty', skip Cognition domain*)
 - 2) some difficulty
 - 3) a lot of difficulty
 - 4) Cannot do at all/ unable to do

- 2. Do you have difficulty remembering a few things, a lot of things, or almost everything?
 - 1) A few things
 - 2) A lot of things
 - 3) Almost everything

Recommended questions

- 3. How old were you when the difficulty remembering or concentrating began?
Age in years _____

- 4. How much does your difficulty remembering or concentrating limit your ability to carry out daily activities?
 1. Not at all
 2. A little
 3. A lot
 4. Completely

Thank you

www.unescap.org/stat/disability/analysis