

**General Statistical Office of Viet Nam**

**Country Report  
Results of The Cognitive Test On  
Washington Group Disability Questions**

**Ha Noi-2006**

# **REPORT ON THE RESULTS OF THE TEST FOR WASHINGTON GROUP'S QUESTION SET**

## **I. Introduction.**

Vietnam is one of the first statistical office in Asia participating the both cognitive and field test for the set of questions designed by Washington Group on Disability Statistics. This is one of activities that Viet Nam is carrying out in attempts to promote and improve the disability statistics in Viet Nam.

The results of the test are very important in carrying out the goal of GSO to apply a disability module in VHLSS2006 and in Population Census 2009.

This document presents results and experiences of General Statistical Office from the test.

## **II. Methodology:**

### **1. Translations of questions:**

Questions in the original questionnaire were translated into Vietnamese language by a group of experts working in Medical Committee Netherlands-Vietnam (MCNV) which carrying out on the health area in Vietnam since 1986. After the first draft done by Ms. Huynh Huong Thanh, Mr. Pham Dung and Ms. Anneke Maasre checked it as the checkers. They were checking the English and Vietnamese version.

MCNV transfer the second draft to GSO. Mr. Nguyen Phong and Ms. Nguyen Bui Linh checked the second draft. After the meeting with MCNV translators to discuss and reconcile discrepancies, GSO had the third version for experts to review.

The fourth version was used for training. During the training, the participants reviewed and contribute for the fourth translation where some questions were revised.

Here are the key persons for translation process from MCNV and GSO:

Mr. Pham Dung MD, MPH - CBR Officer - MCNV

Ms. Huynh Huong Thanh, CBR and IE Project Assistant - MCNV.

Ms. Anneke Maarse, Senior Advisor, MCNV.

Mr. Nguyen Phong, MA - Director of the Statistical Social and  
Environmental Department - GSO.

Mr. Nguyen Bui Linh, MA - Statistician, Statistical Social and  
Environmental Department - GSO.

## 2. Questionnaire

Questionnaire for the cognitive test provided by Washington Group with some following changes:

- The cover page: Adding ID code: Code/name of province, name and code of household, name and code for interviewer, date and time of interviewing, name and code of data entry operator.
- Income level of household: Changing to the four categories to classify economic status of a household: Rich, about average, poor, very poor. The first two categories are fitted to the non-poor and the rest are the poor household.
- Debriefing Interviewers: Keeping some blank lines for interviewers writing down their comments and notes.
- Introduction to the respondent: It is revised for being suitable with Vietnam.

## 3. Selecting respondents

There were 134 people selected for interviewing from Ha Noi and Thai Binh province. The respondents were selected purposively for specific characteristics such as their gender, type of disability, various age groups.

**Ha Noi**: There were 87 disable respondents. They were selected from disable associations through NGO - Disability Forum:

- Deaf-and-Dump Xa Dan School

- Ha Noi Deaf Association
- Bright Future Group
- Hanoi Disable Student Club Of Management College
- Ha Noi Disable Club Of Students
- Hold The Future Group
- Hope Club
- Integration Club (Hoa Nhap Club)
- The Center For Art Vocational Guidance
- You & I Group

For selecting PWD, GSO sent official letter to Disability Forum Viet Nam to have their cooperation. From a list PWD provided by Disability Forum Viet Nam, GSO selected PWD by types of disability and sex. After selecting respondents, Disability Forum Viet Nam sent invitation letters for the associations and for every PWD.

**Thai Binh:** Thai Binh were also the province GSO conducted the field test. There were 47 disable respondents selected for interviewing. GSO and Thai Binh PSO selected purposively two communes, one from Urban and the other from rural area. There were 6 staff of Thai Binh PSO and GSO conducted screening survey to have a list of PWD. They worked with Head of the villages to have the list of PWD in the villages. There were 50 PWD selected from the two villages/wards.

#### **4. Interviewers:**

There were 18 persons chosen to be interviewers and supervisors. They were from General Statistical Office (GSO) and MCNV. 2 persons from MCNV (two these ones translated English into Vietnamese questions) and two disability persons (mobility), The appendix 1 shows the list of interviewers and supervisors of the cognitive test.

Criteria for selecting interviewers were experience and professional competence. Most of interviewers are experiences in household living standard survey/census, in sociological surveys or in researching with health/disability area. They had bachelor degree, trainings in statistics area or social science. The disable interviewers have contributed important comments for the results of the test.

## **5. Training interviewers:**

All interviewers participated the one and half day training course conducted in Ha Noi from 25/02/2006 to 26/02/2006. Contents of the training course were:

- Introducing with interviewers purposes and methods of testing, methods of interviewing and filling questionnaire for every questions.
- Introducing methods of working with PWD by the two disable participants.
- Practicing interview section.
- Evaluating the training.

All interviewers had a half-day to learn experiences from Ha Noi before interviewing the rest of respondents in Thai Binh province.

## **6. Selecting interpreters for interview**

There are 9 deaf persons who were interviewee of the test. Of which, there were 6 persons (with deaf and dump) from Ha Noi sample. The test used two sign-language interpreters to support for interviewing in Ha Noi.

Comments and conclusion for using sign-language interpreters:

- Idiolect of the deaf –and-dump persons are limited, so they were difficult to understand the words such as “concentrate” in the cognitive question WG3 (Do you have difficulty remembering or concentrating?) or “Health condition” in the communication question WG 6 (Because of a physical, mental or health condition, do you have difficulty communicating, for example understanding or being understood by others?)

- In generally, understanding and answering questions depended very much on interpreters.
- Proxy interview will be better in context of survey or census.

### **III. Implementing of the field work:**

The fieldwork of the cognitive test was conducted in Ha Noi and Thai Binh province. All the self-report parts were completed before the proxy-report questions.

#### **1. Hanoi:**

87 disable respondents were interviewed from 25/02 to 27/02/2006. GSO and Disable forum Vietnam had invited PWD (together with his/her relative for each) going to the Disability Forum Vietnam's office for interviewing. Interviewing respondents outside of their home had some following limitations:

- Founding some cases that PWD were flinched or shy of answering questions asked by strangers.
- Not all invitees came to participate the interview because of obstacles of traveling or being busy with earning their living (especially proxy-response).
- The space of Disable Forum Viet Nam's Office were large, each of the interviews were arranged a private table, however people with hearing difficulties might be interfered from 8-10 interviews carried out at the same time.

#### **2. Thai Binh:**

47 disable respondents were interviewed from 3/3/2006 to 05/02/2006. GSO had sent official letters to People committee of commune for their supports for the test. GSO mobilized about 10-15 guiders to get to the households (generally they were heads of villages). All PWDs and their

relatives (one for each household) were made an appointment from the previous day by guiders.

### 3. Length of an interview.

Mean time for interviewing a questionnaire is approximately one hour (minimum: half hour, maximum: approx. 2 hours).

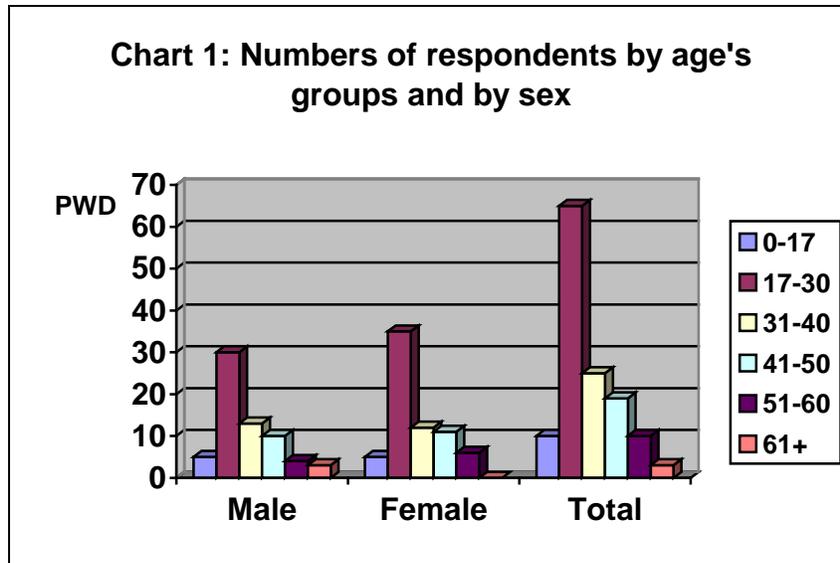
## **IV. Characteristics of the respondent sample:**

Of the 134 respondents, there were 69 females (approx. 51.5%); most of respondents were belonging to age's groups of 17-50 years old (82.9%) and average age of 32.4 years old. (See table 1).

**Table 01: Distribution of respondents by age's groups and gender**

	Sex				Total	
	Male		Female		Count	Col (%)
	Count	Col (%)	Count	Col (%)		
<b>0-17</b>	5	7.7	5	7.2	10	7.5
<b>17-30</b>	30	46.2	35	50.7	65	48.5
<b>31-40</b>	13	20.0	12	17.4	25	18.7
<b>41-50</b>	10	15.4	11	15.9	21	15.7
<b>51-60</b>	4	6.2	6	8.7	10	7.5
<b>61+</b>	3	4.6	0	0	3	2.2
<b>Total</b>	65	100.0	69	100.0	134	100.0
		48.5		51.5		100

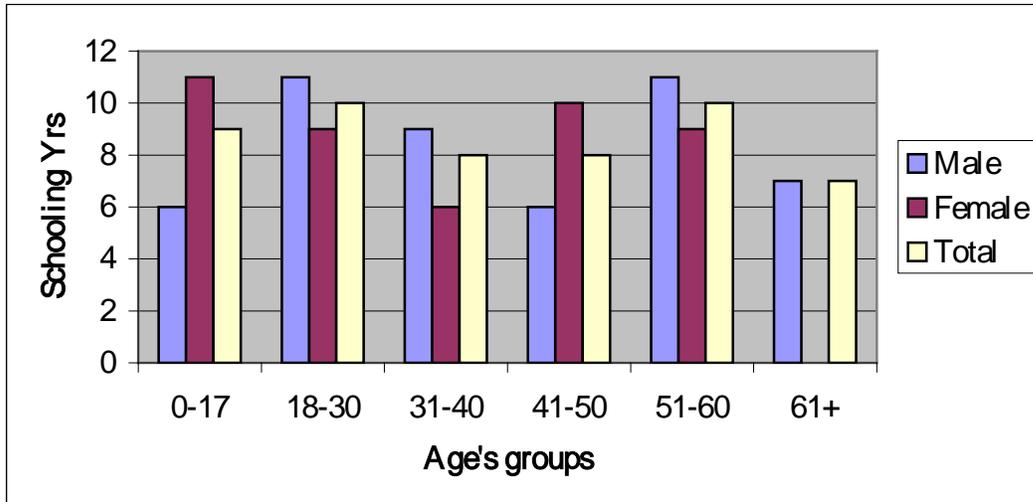
**Source: Cognitive test of WG question**



**Table 2: Mean of Schooling years of respondents (years)**

	Gender		Total
	Male	Female	
<b>0-17</b>	6	11	9
<b>18-30</b>	11	9	10
<b>31-40</b>	9	6	8
<b>41-50</b>	6	10	8
<b>51-60</b>	11	9	10
<b>61+</b>	7	.	7
<b>Total</b>	9	9	9

**Chart: Schooling years of respondents by age groups**



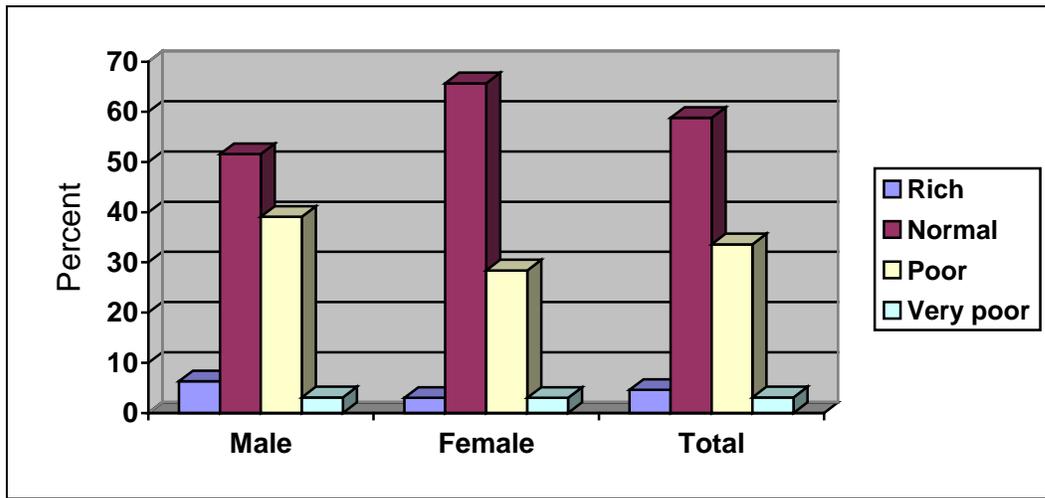
**Table 3: Main work status of respondents by types of work and gender (%)**

	Gender		Total
	Male	Female	
Paid work	23.1	22.7	22.9
Self employed, such as own your business or farming	26.2	22.7	24.4
Non paid work, such as volunteer or charity	3.1	3	3.1
Student	15.4	21.2	18.3
Keeping house/Homemaker	3.1	9.1	6.1
Retired	13.8	4.5	9.2
Unemployed (health reasons)	6.2	3	4.6
Other	9.2	13.6	11.5
<b>Total</b>	100	100	100

**Table 4: Respondents by economics status of households (self-report of respondents)**

	Gender		Total
	Male	Female	
Rich	6.3	3.0	4.6
Normal	51.6	65.7	58.8
Poor	39.1	28.4	33.6
Very poor	3.1	3.0	3.1
<b>Total</b>	100	100	100

**Chart: Economics status of households of respondents by sex**



**Table 5: Marital status of respondents by age and gender (%)**

	Gender		Age's groups				Total
	Male	Female	0-30	31-40	41-50	51+	
<b>Married</b>	36.9	16.2	9.5	44.0	47.6	53.8	26.3
<b>Widowed</b>	0.0	1.5		0.0	4.8	0.0	0.8
<b>Divorced</b>	6.2	1.5	1.4	4.0	9.5	7.7	3.8
<b>Separated</b>	1.5	4.4	1.4	4.0	4.8	7.7	3.0
<b>Never Married</b>	55.4	76.5	87.8	48.0	33.3	30.8	66.2
<b>Total</b>	100	100	100	100	100	100	100

## V. Results:

### **1. The results of six core questions designed by Washington Group.**

The Table 6 shows the percentage of people by levels of difficulty. Percent of people with no difficulty is highest in comparison with other questions and the difference between the self and proxy-respondents are small. The differences between the self and proxy-respondents will be analyzed parts bellow.

The percent of people who cannot do at all are around 1 to 9%.

Table 6: Number of obs and percentage of people by levels of difficulty

	Count					Percent				
	No diff.	Some diff.	A lot diff.	Unable	Total	No diff.	Some diff.	A lot diff.	Unable	Total
WG1 (self)	54	31	9	3	97	55.7	32.0	9.3	3.1	100
WG1 (proxy)	54	32	8	3	97	55.7	33.0	8.2	3.1	100
WG2 (self)	72	11	8	7	98	73.5	11.2	8.2	7.1	100
WG2 (proxy)	70	10	9	9	98	71.4	10.2	9.2	9.2	100
WG3 (self)	51	36	9	0	96	53.1	37.5	9.4	0.0	100
WG3 (proxy)	63	25	7	1	97	64.9	25.8	7.2	1.0	100
WG4 (self)	33	29	31	7	100	33.0	29.0	31.0	7.0	100
WG4 (proxy)	28	35	30	7	100	28.0	35.0	30.0	7.0	100
WG5 (self)	65	18	10	5	98	66.3	18.4	10.2	5.1	100
WG5 (proxy)	56	26	14	2	98	57.1	26.5	14.3	2.0	100
WG6 (self)	43	31	18	1	93	46.2	33.3	19.4	1.1	100
WG6 (proxy)	52	19	21	1	93	55.9	20.4	22.6	1.1	100

## 2. Interview coding:

The table 7 shows the results from three interview coding questions. Here are some comments from the table:

- The W4 seem to be easier for interviewer to understand (Do you have difficulty walking or climbing steps?): Percentage of interviewees needs to clarify the question is smallest in comparison with the other core WG questions (8.1% for self report, 2.2% for proxy-report), there are only 12.6% having any difficulty with using response options.
- There are more than 80% and 69% interviewees (self-report and proxy-report respectively) asked for clarification or qualify their answer for the WG3 (Do you have difficulty remembering or

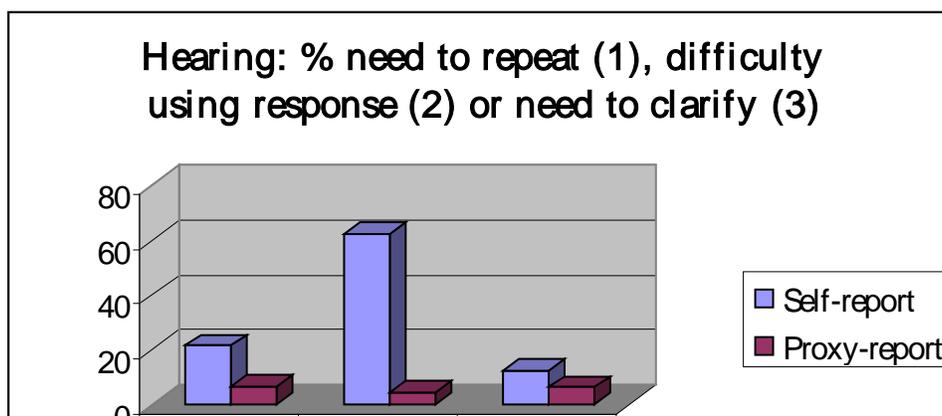
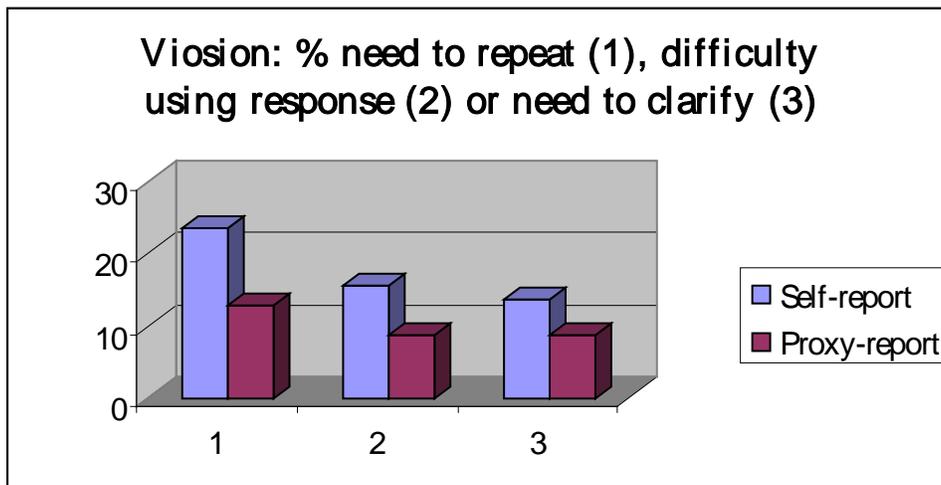
concentrating?). It can be explained by the unclear meaning with the word “concentrating” in Vietnamese for people.

- For the WG2 (Do you have difficulty hearing, even if using a hearing aid?), the percentage of self-report interviewee with any difficulty using the response options is highest in comparison with other core questions, but lowest with proxy-report interviewees (62.5% vs 4.2%). The reason may be from (a) the sample selected purposively from disability, of which there are 25-30% people with some or more difficulty with hearing (b) people are usually difficulty in measuring themselves their hearing ability.
- The table 7 and the following charts show that the percentages of interviewees that say “Yes” for three interview-coding questions for self-report are higher than proxy-report interviewees. There are some opposite impacts to the results: (a) It can be from all self-report interviewees are belonging to any type of disability or (b) it can be the sequence of an interview (completing all the self-report questions before the proxy-report questions). In Ha Noi, there was no impact of (b) because the proxy-interviewees waiting far from the place of interviewing. But in Thai binh province, It were not ensured that the proxy-interviewees were sitting far from the place of the interview because the interviews were carried out at households, they could be sitting beside or around and heard the content of the questionnaire before their turn.

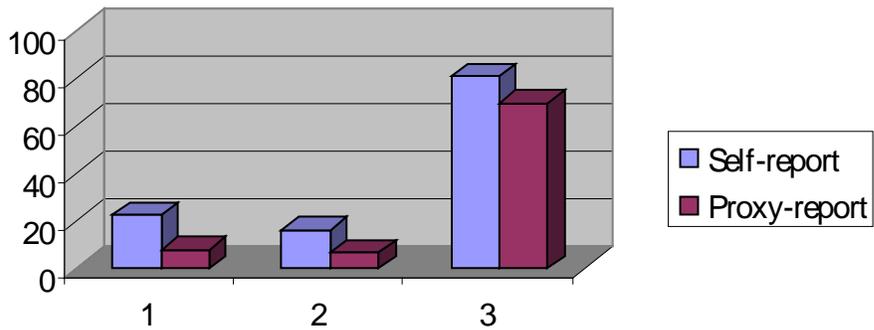
**Table 7: Percentage of interviewees need to repeat any part of question, have any difficulty using the response options or ask for clarify**

	Vision WG1	Hearin g WG2	Cognitive WG3	Mobility WG4	Self- care WG5	Communi- cation WG6	Statistics	
							Min	Max
<b>Self-report:</b>								
1. Need to repeat any part of the question	23.53	21.49	22.81	20.17	16.67	19.47	16.67	23.53
2. Have any difficulty	15.45	62.5	16.36	12.61	13.89	13.73	12.61	62.5

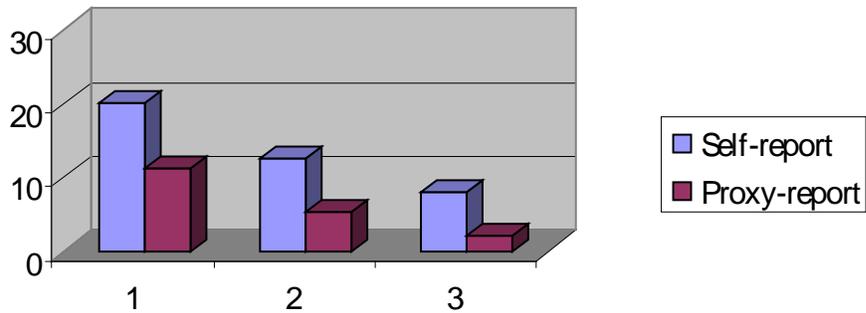
using the response options									
3. Ask for clarification or qualify their answer	13.64	12.4	80.77	8.11	9.35	12.75	8.11	80.77	
<b>Proxy-report</b>									
1. Need to repeat any part of the question	12.87	6.93	8.08	11.22	4.95	15.46	4.95	15.46	
2. Have any difficulty using the response options	8.6	4.21	6.67	5.49	8.51	10.34	4.21	10.34	
3. Ask for clarification or qualify their answer	8.6	6.25	69.44	2.2	4.26	14.29	2.2	69.44	



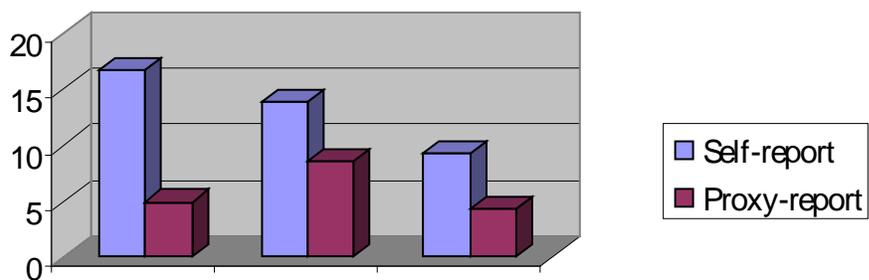
**Cognitive: % need to repeat (1), difficulty using response (2) or need to clarify (3)**

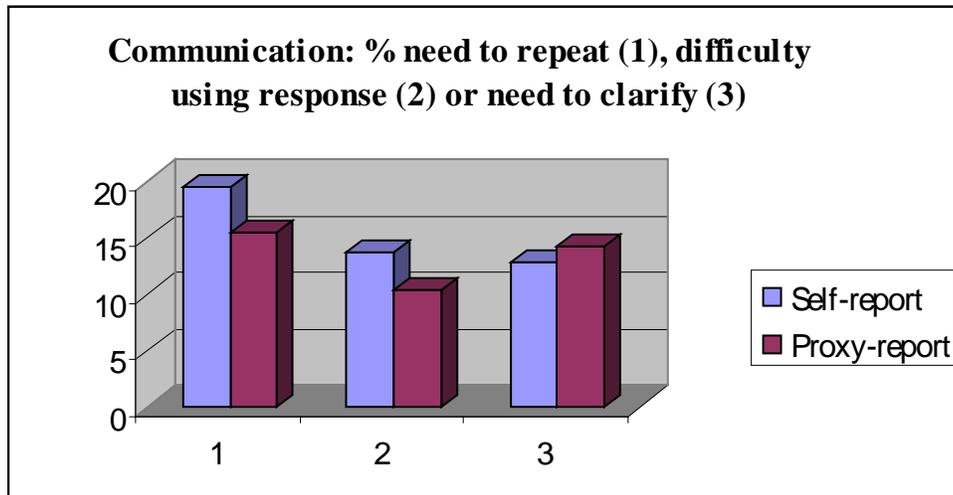


**Mobility: % need to repeat (1), difficulty using response (2) or need to clarify (3)**



**Self-care: % need to repeat (1), difficulty using response (2) or need to clarify (3)**





### 3. The differences from self-report and proxy-report and Index of Inconsistency

The following cross tabs between self-report and proxy-report shows some problems with data:

- The first, of the 134 questionnaires, there are around 34-41 questionnaires without the answer for self-report and/or proxy-report core questions. Checking data we found a fact that the number of missing from proxy-report questionnaire is greater than self-report. The reason is from conducting interviews out-side home (at Ha Noi) and many disable persons came to interviewing place without their relative together with.
- There were the differentials between the prevalent results from self-report and proxy-report. For example:

**Table 9: Hearing: W2 (self-report) and W2 (proxy-report)**

		W2 (proxy)		Total
		Yes	No	
W2 (self)	Yes	14	1	15

	<b>No</b>	4	79	83
<b>Total</b>		18	80	98

From table 9 we can calculate the prevalent rate of hearing disability, they are  $18/98=18.4\%$  (for proxy-response) and  $15/98=15.3\%$  (for self-report). (We defined disability for people with answer's categories of 2 and 3). By this method, we have the prevalent for other questions:

**Table 10: Prevalent rate for six WG questions**

	Prevalent rate (%)	
	Self	Proxy
W1	11.3	12.4
W2	18.4	15.3
W3	8.3	9.4
W4	37.0	38.0
W5	16.3	15.3
W6	23.7	20.4

The disparity of self-report and proxy-report will indicate the problems with the questions. By this way, we can indicate that W2 and W6 are most 'serious'.

How ever, the mentioned way cannot give us the deeper details, and we haven't got confident basics to believe.

For this reason, we calculate the Index of Inconsistency (IOI) (see the method in the appendix 2).

We look firstly in the bold cells (Aggregate IOI) to measure totally (Table 11). From the 6 core questions, we have the three best questions: W4 (39.5%), W1 (43.0), W2 (45.4%) and the most three worst questions: W3 (68.6%), W6 (54.7%), W5 (51.3%).

How we can explain the highest aggregate IOI of W3? They mean that:

- The question may be unclear. It may be from combining the two phrases: (a) remembering; (b) concentrating. It made interviewee have some difficulties to understanding the question.

- The concept itself may not be difficult to measurable. Most interviewers and respondents feel difficult to understand or explain the word “concentrating”.
- This is a cognitive question; the proxy-report may be not selected well. For example: They are not the most closely with/ not understand the self-report, uneducated persons....
- Problems with training/manual training?
- Too small sample.

By this explaining, we can explore data to find the root problems to deal with. However, a part of the problems maybe from small sample.

Similarly, for W6 question, we can see that the question is too long for people to understand: The respondents have to understand “physical, mental or health condition” (not easy to understand or to explain meaning of the phrase); then have to know the two phrases “understanding” others and “being understood by others”. The question should be separated for easier to understand.

For W5 question, people can understand bias between “ability” and “fact”. Many children in the city are able to care themselves, but they are always to be helped by adult or housekeepers so that they don’t know how or rely on others. In this case, people are usually answering: “oh, difficultly, he/she can not do him/herself?” If the interviewer were coding, he/she had made a mistake. This is also a problem of training.

Table 11: The Index of Inconsistence

**Vision: W1 (self-report) and W1 (proxy-report)**

		WG1 (proxy)				Total	IOI
		0	1	2	3		
WG1 (self)	0	46	7	1	0	54	33.4
	1	8	21	2	0	31	49.4
	2	0	4	4	1	9	58.0
	3	0	0	1	2	3	34.4
Total		54	32	8	3	97	43.0

**Hearing: W2 (self-report) and W2 (proxy-report)**

		WG2 (proxy)	Total

		0	1	2	3		
<b>WG2 (self)</b>	<b>0</b>	64	8	0	0	72	35.8
	<b>1</b>	5	2	4	0	11	90.6
	<b>2</b>	1	0	5	2	8	45.1
	<b>3</b>	0	0	0	7	7	13.6
<b>Total</b>		70	10	9	9	98	45.4

**Cognition: W3 (self-report) and W3 (proxy-report)**

		<b>WG3 (proxy)</b>				<b>Total</b>	
		0	1	2	3		
<b>WG3 (self)</b>	<b>0</b>	42	8	1	0	51	62.8
	<b>1</b>	15	16	4	1	36	68.3
	<b>2</b>	6	1	2	0	9	81.6
	<b>3</b>	0	0	0	0	0	....
<b>Total</b>		63	25	7	1	97	68.6

**Mobility: W4 (self-report) and W4 (proxy-report)**

		<b>WG4 (proxy)</b>				<b>Total</b>	
		0	1	2	3		
<b>WG4 (self)</b>	<b>0</b>	27	6	0	0	33	16.5
	<b>1</b>	1	19	9	0	29	59.5
	<b>2</b>	0	10	20	1	31	49.5
	<b>3</b>	0	0	1	6	7	15.4
<b>Total</b>		28	35	30	7	100	39.5

**Self - care: W5 (self-report) and W5 (proxy-report)**

		<b>WG5 (proxy)</b>				<b>Total</b>	
		0	1	2	3		
<b>WG5 (self)</b>	<b>0</b>	50	15	0	0	65	45.0
	<b>1</b>	5	10	3	0	18	69.7
	<b>2</b>	1	1	8	0	10	37.8
	<b>3</b>	0	0	3	2	5	44.1
<b>Total</b>		56	26	14	2	98	51.3

**Communication: W6 (self-report) and W6 (proxy-report)**

		<b>WG6 (proxy)</b>				<b>Total</b>	
		0	1	2	3		
<b>WG6 (self)</b>	<b>0</b>	35	6	2	0	43	53.3
	<b>1</b>	17	11	3	0	31	75.0
	<b>2</b>	0	2	15	1	18	29.2
	<b>3</b>	0	0	1	0	1	...
<b>Total</b>		52	19	21	1	93	54.7

By the above method of analyzing, we can look more details in IOI of every category, explain and find the way to solve the problems.

## **VI. Recommendations:**

The cognitive test and also field test is very important with Vietnam in attempts to promote the statistical activities on disability area. Of them, the most important activities are applying a disability module in Population Census 2009. Here are some recommendations from experiences of the test:

### **1. Questionnaire:**

#### **(a) Introduction:**

The sentence: *“The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM”* should be added a short paragraph to explain about “health problem” and some examples to illustrate “health problem”.

#### **(b) The questions:**

The W1 is good enough. But the extension question: “Seeing the print in a map, newspaper or book?” may have a problem with the illiterate, they cannot read, so that they are usually answering: “No, I cannot read”.

The W2 is good enough. However, But there a problem with the extension question: “Do you have difficulty hearing what is said in a conversation with one other person in a crowded room?” that we don’t have “a threshold” for a “crowded room”.

The W3 need to be revised. The meaning of “concentrating” is unclear. Interviewees usually asked for clarification or qualify their answer for this question. We should break the questions to ask separately and should put a specific example for “concentrating”.

The W4 is good enough. But should change “climbing steps” to “climbing steps of stare or steps of house”. In Vietnamese language, we cannot use the “steps” alone.

The W5 becomes better if put words to emphasize on “ability”, other than “fact”. Also, need to emphasize these ones in the training manual.

The W6 should separate into the two following questions:

**Do you have difficulty communicating, for example understanding or being understood by others?**

*If say “Yes, Some difficulty or Yes, A lot of difficulty”.* Interviewer asks: **Is it because of because of a physical, mental or health condition?**

**(c). Code of answer options:**

Should use a set of a united codes for the whole questionnaire, for example: Yes=1, No=2.

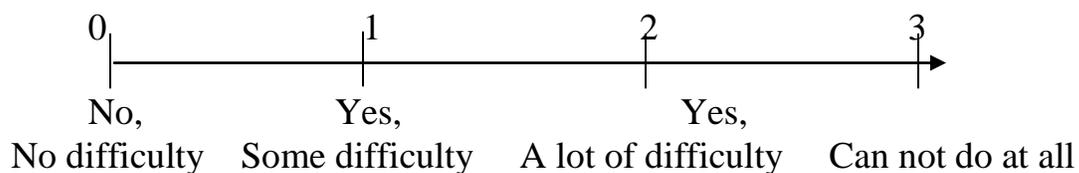
**(d) Design format:**

Regulate a set of fonts using in the questionnaire (for example, italic, bold, capital letter, lower-case letter,) so that interviewers can be easy to follow the process of interviewing and also avoid mistakes.

Also, regulate skip patterns to guide interviewers and avoid mistakes made by interviewers. Skip patterns help for interviewers from repeating unnecessary questions which causing uncomfortable feeling for respondents.

**(e). Design flash card for interviewer.**

There are many questions that repeating the answer options: **“No, No difficulty (0)” “Yes, Some difficulty (1)” “Yes, A lot of difficulty” “Can not do at all”**. **“No Answer/Don’t Know (9)”**. In this case, should design a flash card look like this:



It make easier for respondents to select the answer options, especially the disable persons.

**2. About proxy-respondents:**

In general, we need to research or test on impacts of proxy-respondents to survey or census results. In many cases, the proxy-respondents are better than self-report, For example: Too young or too old people, the mental health problems, ... especially in the context of Census.

Need to regulate the minimum age for proxy-respondents.

**3. The training manual and training:**

The training manual should be put more and more specific examples and should present more clearly.

I. Introduction. ....	2
II. Methodology: .....	2
1. Translations of questions: .....	2
2. Questionnaire .....	3
3. Selecting respondents.....	3
4. Interviewers: .....	4
5. Training interviewers:.....	5
6. Selecting interpreters for interview.....	5
III. Implementing of the field work: .....	6
1. Hanoi:.....	6
2. Thai Binh: .....	6
3. Length of an interview.....	7
IV. Characteristics of the respondent sample: .....	7
V. Results:.....	10
1. The results of six core questions designed by Washington Group. ....	10
2. Interview coding: .....	11
3. The differences from self-report and proxy-report and Index of Inconsistency .....	15
VI. Recommendations: .....	19
1. Questionnaire: .....	19
(a) Introduction:.....	19
(b) The questions: .....	19
(c). Code of answer options:.....	20
(d) Design format: .....	20
(e). Design flash card for interviewer.....	20
2. About proxy-respondents:.....	20
3. The training manual and training:.....	21

