

Mobility

10th meeting of Washington Group
on Disability Statistics

Questions for Cognitive testing

1. *SS: Do you have difficulty walking or climbing steps?*
2. Do you use any equipment or receive help for getting around? (if yes – get type)
3. Do you have difficulty walking 100m on level ground, that would be about [insert country specific example] [without the use of your aid]?
4. Do you have difficulty walking 500m.....
5. Do you have difficulty walking up or down [a flight of steps/12 steps/small hill].....?
6. Do you have difficulty walking around in your home....?
7. How much difficulty did you have in moving around inside your home.....?
8. Ask again WITH aid if use one

Potential problems

- The distance of walking – near or far
- Use of an aid and what counts as an aid
- Technical device vs personal assistance
- The context of walking or climbing stairs
- Underlying etiology of the difficulty – e.g. a problem with feet or legs vs a cardiovascular difficulty vs a vision difficulty.
- The consistency and magnitude of the problem
 - occasional problems (e.g. flare up of rheumatoid arthritis)
 - continuous problems (spinal cord injury)
 - progressive degeneration

Findings from cognitive test

- Consistency is high: 91% of respondents
- Accurate interpretations of intent
- Clear progression from easy to difficult:
 - ‘easy mobility’ = inside home
 - ‘difficult’ mobility = walking a distance and climbing steps
- What is considered ‘part of the person’ vs an external assistive device
- ‘knowing’ a distance reference
 - ‘Walking’ context – respond with difficulty on SS question but still walking long distances; so ‘no difficulty’ on 100m and 500m and 12 steps

Field testing questions

1. *SS: Do you have difficulty walking or climbing steps?*
2. Do you have difficulty walking around inside your home?
3. Do you use any equipment or receive help for getting around? (if yes – what type)
4. Do you have difficulty walking 100m on level ground, that would be about the length of a football field or one city block [without the use of your aid]?
5. Do you have difficulty walking half a kilometre on level ground, that would be the length of 5 football fields or 5 city blocks [without the use of your aid]?
6. Do you have difficulty walking up or down 12 steps [without the use of your aid]?
7. Ask again WITH aid if use one

Question	No diff (%)	Some diff (%)	A lot of diff (%)	Cannot do (%)
ALL RESPONDENTS (N=6309)				
MOB_1: Moving inside home	91	7	2	<1
MOB_4: Walking 100m	87	9	3	1
MOB_5: Walking 500m	80	13	6	1
MOB_6: Climb up and down 12 steps	78	15	5	1
SS: Walking and climbing steps	77	17	6	<1
P_MOB_6: Climb 12 steps with use of handrail	76	15	5	2

- Climbing steps = highest prevalence of difficulty
- Moving around inside home = lowest prevalence of difficulty

Table 8: Responses to MOB_SS(1) by age groups

Do you have difficulty walking or climbing steps?						
Age Group	No	Some	A lot	Unable to	Total persons	
	(%)	(%)	(%)	(%)		
0-17	95	4	1	<1	1,475	
18-30	91	8	1	0	1,478	
31-40	80	16	3	<1	1,004	
41-50	70	22	8	<1	1,008	
51-60	51	37	11	<1	738	
61-70	44	37	19	<1	395	
71+	23	36	34	8	211	
Total	77	17	6	0.4	6,309	

- Increasing age = increasing difficulty

	MOB_5: Walk 500m (without aid)			
MOB_4: Walk 100m (Without aid)	No diff	Some diff	A lot of diff	Cannot do
No diff	4995	430	35	3
Some diff	3	366	202	13
A lot of diff	0	7	161	26
Cannot do	0	0	0	0

- **More difficulty walking 500m than 100m (Pink)**
- **Very few have more difficulty walking 100m than 500m (Blue) – misinterpretations?**

	MOB_6: Climb 12 steps (Without aid)			
MOB_4: Walk 100m (Without aid)	No diff	Some diff	A lot of diff	Cannot do
No diff	4834	563	66	5
Some diff	69	373	126	11
A lot of diff	7	29	135	21
Cannot do	0	1	4	31

- **More difficulty climbing steps than walking 100m (pink)**
- **More difficulty walking 100m than climbing steps (blue)**
 - don't know about steps or struggle with distance of walking e.g. because of breathing problems

	MOB_6: Climb 12 steps (Without aid)			
MOB_5: Walk 500m (Without aid)	No diff	Some diff	A lot of diff	Cannot do
No diff	4656	301	37	2
Some diff	209	528	54	2
A lot of diff	38	125	209	22
Cannot do	0	6	25	11

- 418 respondents have more difficulty climbing steps than walking 500m (pink)
- 403 respondents have more difficulty walking 500m than climbing steps (blue)
- Two separate components of mobility

	P_MOB_6: Without handrails			
MOB_6: Climbing up/down 12 steps	No diff	Some diff	A lot of diff	Cannot do
No diff	4724	150	13	2
Some diff	68	785	90	20
A lot of diff	3	26	236	64
Cannot do	0	0	2	67

1. Diagonal most responses – no difference with and without handrail

2. Pink = more difficulty WITHOUT rails (expected)

3. Green = less difficulty WITHOUT rails (misinterpretation?)

ALL RESPONDENTS USING A MOBILITY AID (N=133)

Question	No diff (%)	Some diff (%)	A lot of diff (%)	Cannot do (%)
Walking 100m				
Without aid	17	34	34	15
With Aid	19	45	29	7
Walking 500m				
Without aid	15	19	53	12
With aid	6	41	40	13
Climbing up and down 12 steps				
Without aid	9	18	49	21
With aid	3	42	38	14

- Move towards less difficulty : increasing ‘some difficulty’
- Very small numbers relatively - ? More impact in high income context

	MOB_11: Impact on daily activities				Total
MOB_SS: Walking and climbing steps	None (%)	A little (%)	A lot (%)	Completely (%)	%
No diff (%)	59	37	3	<1	100
Some diff (%)	40	55	5	<1	100
A lot of diff (%)	16	40	37	5	100
Cannot do (%)	4	4	25	68	100
	MOB_11: Impact on daily activities				
MOB_6: Climbing 12 steps (without aid)	None (%)	A little (%)	A lot (%)	Completely (%)	
No diff (%)	58	40	2	<1	100
Some diff (%)	39	56	5	<1	100
A lot of diff (%)	16	43	36	3	100
Cannot do (%)	12	23	35	30	100

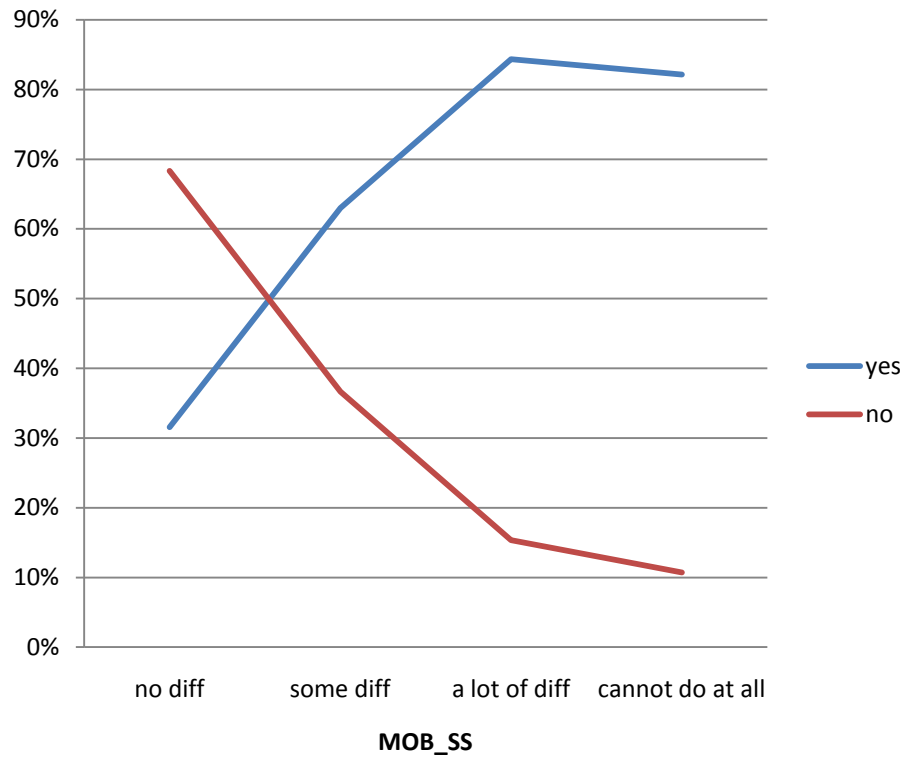
The greater the severity of difficulty the more the impact

Scale of difficulty

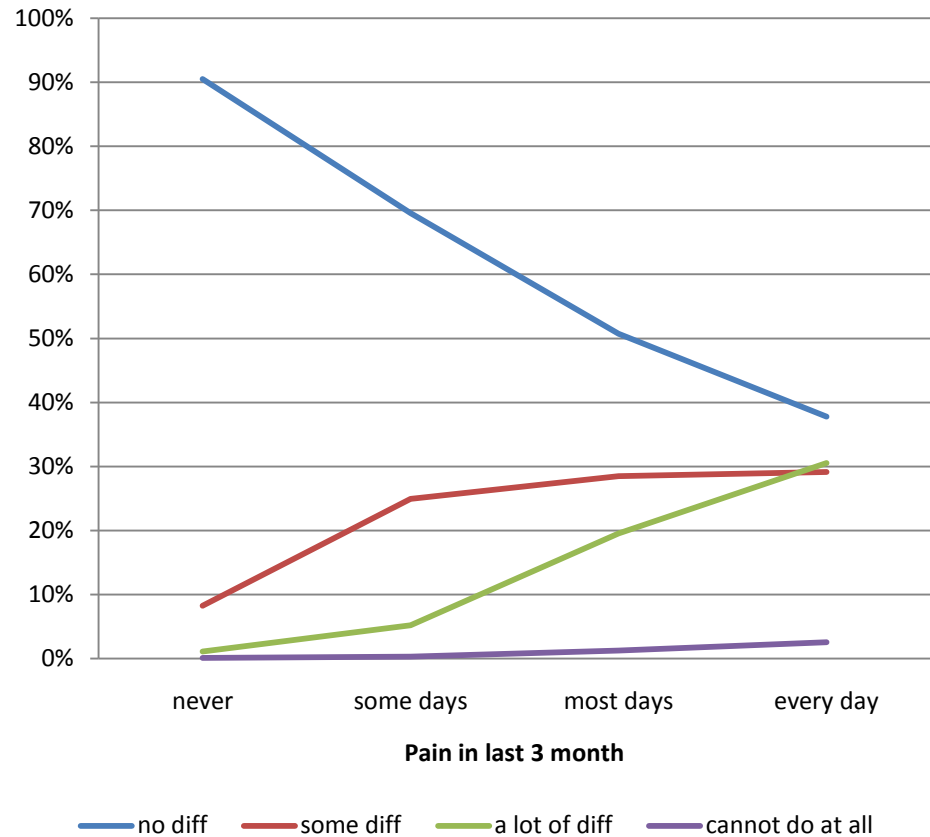
1. Moving around inside home
2. Walking 100m
3. Walking and climbing steps / Walking 500m /
Climbing steps

Pain and Mobility

MOB_SS by 'have frequent pain' (PAIN_1)

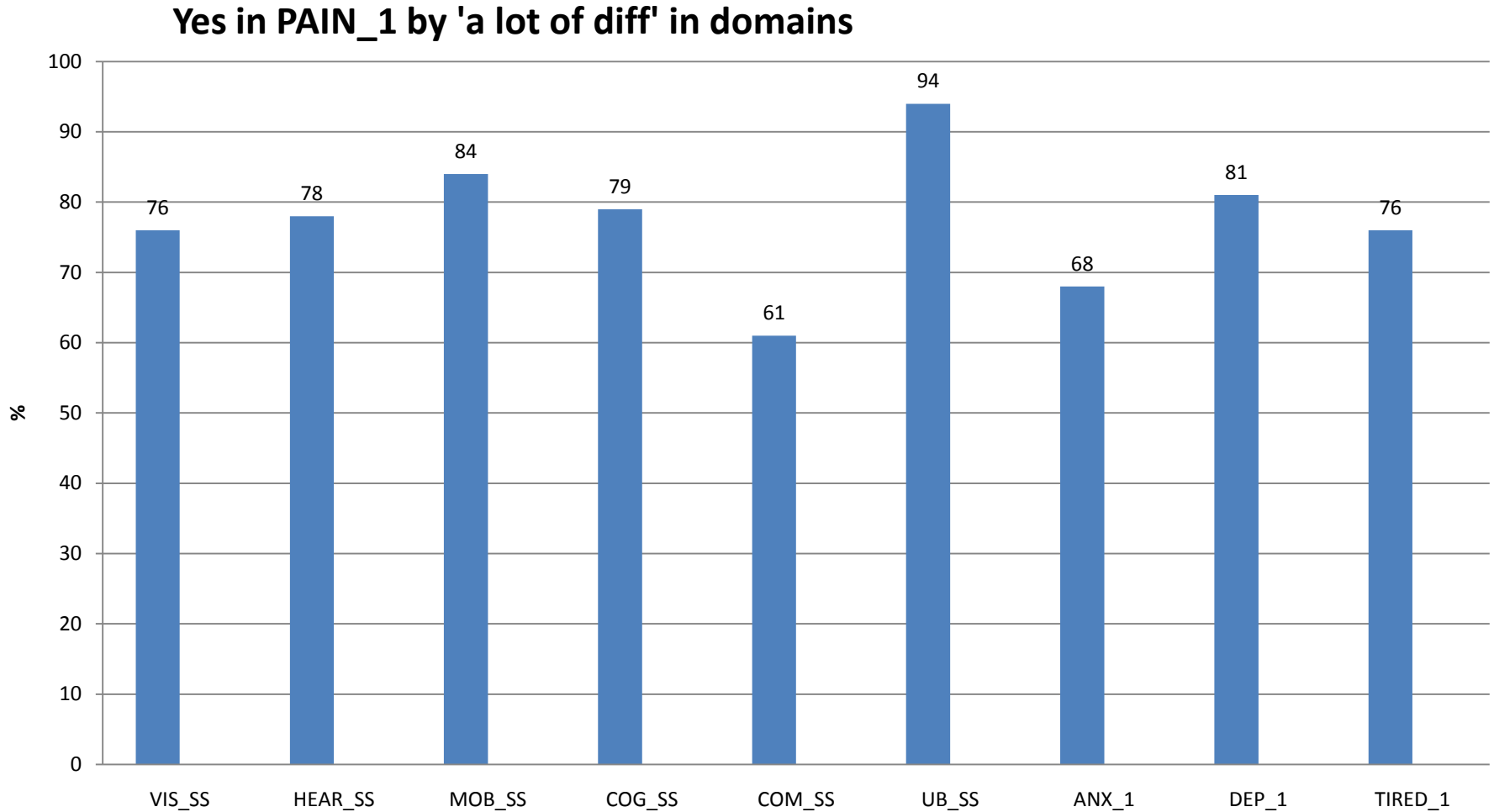


MOB_SS by pain in last 3 months



- Mobility and self are most likely to be linked with pain

Communication and anxiety are least linked with pain



Conclusions

- Good performance of questions
- Do we need all 5 questions? or make a selection as follows:
 - Omit moving inside home (too easy)
 - Choose one of
 - Walking and climbing stairs
 - Walking 500m
 - Climb 12 steps
- Ask 'climbing 12 steps with handrails

Proposal

- MOB_SS: Difficulty walking and climbing steps
- Walking 100m
- Climbing steps
- Use of mobility aid
- MOB_SS WITH mobility aid

Add more Qs if have space