



## Field-testing an earlier draft of the WG/UNICEF Question Set in Cameroon and India



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1. Measuring Disability
2. Building Evidence study – Aims and Objectives
3. Building Evidence study – Methods
4. Field testing the WG/UNICEF ESF in Cameroon and India



# 1. Measuring Disability



# 1. Measuring Disability

Type	Example	Pros	Cons
1. Direct Questioning	“Do you have a disability?”	-Rapid - Limited Space	- Underreport (stigma + lack of self identification)
2. Self-reported functional limitation	“Do you have difficulty in seeing?”	-Simple to administer - Info on experience/impact	- Limited data for planning services/interventions
3. Objective clinical criteria on impairment	Visual Acuity measurement	- Info on impairment type, severity and causality for intervention	-Resource intensive - Impairment only one component of disability
4. Self-reported restrictions in participation	“Do you have difficulty getting and keeping a job in your current environment?”	- Understand accommodations and impact	- Does not give information on what accommodations (if any) are

- Different methods provide different information within the overall framework of the ICF
- Different methods preferable depending on aims and objectives



## 2. Building Evidence Study aims and Objectives



## 2. Study Aim



To develop a comprehensive population-based survey methodology that is compatible with the ICF, and to explore the inter-relationship between the *different* components of this framework.



## 2. Study Objectives



1. Identify available tools for disability measurement
2. Develop comprehensive survey methodology to explore components of the ICF
3. Explore the relationship between disability measurement options within the context of the ICF



## 2. Study Objectives



4. Assess the impact of disability on access to education, livelihoods, participation and quality of life
5. Identify socio-demographic, economic, environmental and clinical predictors of access to health, education and employment among people with disabilities



### 3. Building Evidence study - methods





## 3. Methods – Study Design Overview

1. All age population-based survey of:
  1. Self reported functional limitations
  2. Clinically measured visual impairment, hearing impairment, musculoskeletal impairment and depression
  
2. Nested Case-control study (age 5+):  
CASES: People with disabilities  
CONTROLS: People without disabilities



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CASES: People with disabilities  
CONTROLS: People without disabilities



Inc. module on  
participation

# 3. Methods – Study Settings



Cameroon: North West Region  
(July-Sept 2013)



India: Mubabnager, Andra Pradesh  
(Feb-April 2014)





## 3. Methods – Sampling

### 1. Sample size

- 4,056 per country (precision 20%, 95% CI, design effect of 1.5 and 20% non-response)

### 2. Selection of clusters (villages): 51 clusters of 80 people per site

- Probability proportionate-to-size sampling

### 3. Selection of households within clusters

- Compact segment sampling
- All eligible participants enumerated and asked to attend screening





# 3. Methods – Screening Protocol

## 5. Screening tools

1. WG/UNICEF and WG-ESF Self-Reported Screen (2+)\*
2. PHQ-9 Clinical Depression Screen (18+)
3. RAAB Vision Screen (all ages)
4. WHO E&H Hearing Screen (all ages)
5. RAM Musculoskeletal Screen (all ages)

CAUTION: STABILITY STUDY 2013 - Screening and Evaluation Questionnaire

Cluster no: [ ] Household no: [ ] Subject ID no: [ ] Interviewer ID no: [ ]

**PHQ-9 Questions for all participants 17**

Are you going to miss you or the questions about how you have been feeling recently. Please tell me if you do not understand a question, and I will repeat it. Over the last two weeks, how often have you been bothered by any of the following problems?

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0 (0)	1 (1)	2 (2)	3 (3)
2. Feeling down, depressed, or hopeless	0 (0)	1 (1)	2 (2)	3 (3)
3. Feeling tired or having low energy	0 (0)	1 (1)	2 (2)	3 (3)

**SECTION 4 - PHQ-9 responses to PHQ-9 PHQ-9 NEXT SECTION**

4. Trouble falling asleep, sleeping too much	0 (0)	1 (1)	2 (2)	3 (3)
5. Poor appetite or overeating	0 (0)	1 (1)	2 (2)	3 (3)
6. Feeling bad about yourself - or that you are a failure or have let yourself or your family down	0 (0)	1 (1)	2 (2)	3 (3)
7. Trouble concentrating on things, such as reading the newspaper or watching television	0 (0)	1 (1)	2 (2)	3 (3)
8. Moving or speaking so slowly that other people could have noticed. Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual	0 (0)	1 (1)	2 (2)	3 (3)
9. Thoughts that you would be better off dead or of hurting yourself in some way	0 (0)	1 (1)	2 (2)	3 (3)

CAUTION: STABILITY STUDY 2013 - Screening and Evaluation Questionnaire

Cluster no: [ ] Household no: [ ] Subject ID no: [ ] Interviewer ID no: [ ]

**PHQ-9 Clinical Depression Screen (18+)**

Are you going to miss you or the questions about how you have been feeling recently. Please tell me if you do not understand a question, and I will repeat it. Over the last two weeks, how often have you been bothered by any of the following problems?

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2. Feeling down, depressed, or hopeless	0 (0)	1 (1)	2 (2)	3 (3)
3. Feeling tired or having low energy	0 (0)	1 (1)	2 (2)	3 (3)
4. Trouble falling asleep, sleeping too much	0 (0)	1 (1)	2 (2)	3 (3)
5. Poor appetite or overeating	0 (0)	1 (1)	2 (2)	3 (3)
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- Clinical examination, diagnosis and referral for all participants screening positive to any clinical screen
- Case/Control interviews for all participants screening positive to **any** screen aged 5+



# 3. Methods – Screening Protocol

## 5. Screening tools

1. WG/UNICEF and WG-ESF Self-Reported Screen (2+)\*
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- Case/Control interviews for all participants screening positive to **any** screen aged 5+

**\*NB. Children 8-17 (unless unable to communicate) respond independently (recorded)**

The image shows a screenshot of a questionnaire titled "CAUTION Disability Study 2013 - Screening and Examination Questionnaire". It includes sections for "PHQ-9 Questions for all participants 17" and "RAM Musculoskeletal Screen". The PHQ-9 section contains questions about mood, interest in activities, sleep, energy, concentration, thoughts of death, and suicidal thoughts. The RAM section contains questions about pain, difficulty with activities, and physical symptoms. The form has columns for "Not at all", "Several Days", "More than Two Weeks", and "Not Sure".



# 3. Methods – Screening Protocol

## 5. Screening tools

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- Clinical examination, diagnosis and referral for all participants screening positive to any clinical screen
- Case/Control interviews for all participants screening positive to **any** screen aged 5+

\*NB. Children 8-17 (unless unable to communicate) respond independently (recorded)

The image shows a screenshot of a questionnaire titled "CAUTION STABILITY STUDY 2013 - Screening and Examination Questionnaire". It includes fields for "Cluster no.", "Household no.", "Subject ID no.", and "Interviewer ID no.". The main section is "PHQ-9 Questions for all participants 17", with instructions: "Are you going to ask your five questions about how you have been feeling recently. Please tell me if you don't understand a question, and I will repeat it. Over the last two weeks, how often have you been bothered by any of the following problems?".

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0 (0)	1 (1)	2 (2)	3 (3)
2. Feeling down, depressed, or hopeless	0 (0)	1 (1)	2 (2)	3 (3)
3. Trouble falling asleep, sleeping too much, or waking up too early	0 (0)	1 (1)	2 (2)	3 (3)
4. Feeling tired or having less energy	0 (0)	1 (1)	2 (2)	3 (3)
5. Trouble concentrating on things, such as reading the newspaper or watching television	0 (0)	1 (1)	2 (2)	3 (3)
6. Moving or speaking so slowly that other people could have noticed. Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual	0 (0)	1 (1)	2 (2)	3 (3)
7. Thoughts that you would be better off dead or of hurting yourself in some way	0 (0)	1 (1)	2 (2)	3 (3)

Below this is a section for "RAM Musculoskeletal Screen" with questions like "Do you have any pain or discomfort in your neck, shoulders, arms, wrists, hands, or fingers?" and "Do you have any pain or discomfort in your back, hips, knees, or feet?".

# 4. Field-testing WG-UNICEF ESF for children



DOMAIN TYPE	AGE GP	No.	DOMAIN OF FUNCTIONING
Basic activity domains	2-17	D1	Seeing
		D2	Hearing
		D3	Walking
		D4	Understanding
		D5	Being Understood
		D6	Learning
	5+ only	D7	Remembering
		D8	Self Care

DOMAIN TYPE	AGE GP	No.	DOMAIN OF FUNCTIONING
Complex activity/ participation domains	2-17	D9	Controlling Behaviour
		D10	Playing
	5+ only	D11	Worry
		D12	Completion of Task
		D13	Accept Change
		D14	Get along with other children

Draft Module Domains

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Draft Module Domains

# 4. Field-testing WG-UNICEF ESF for children

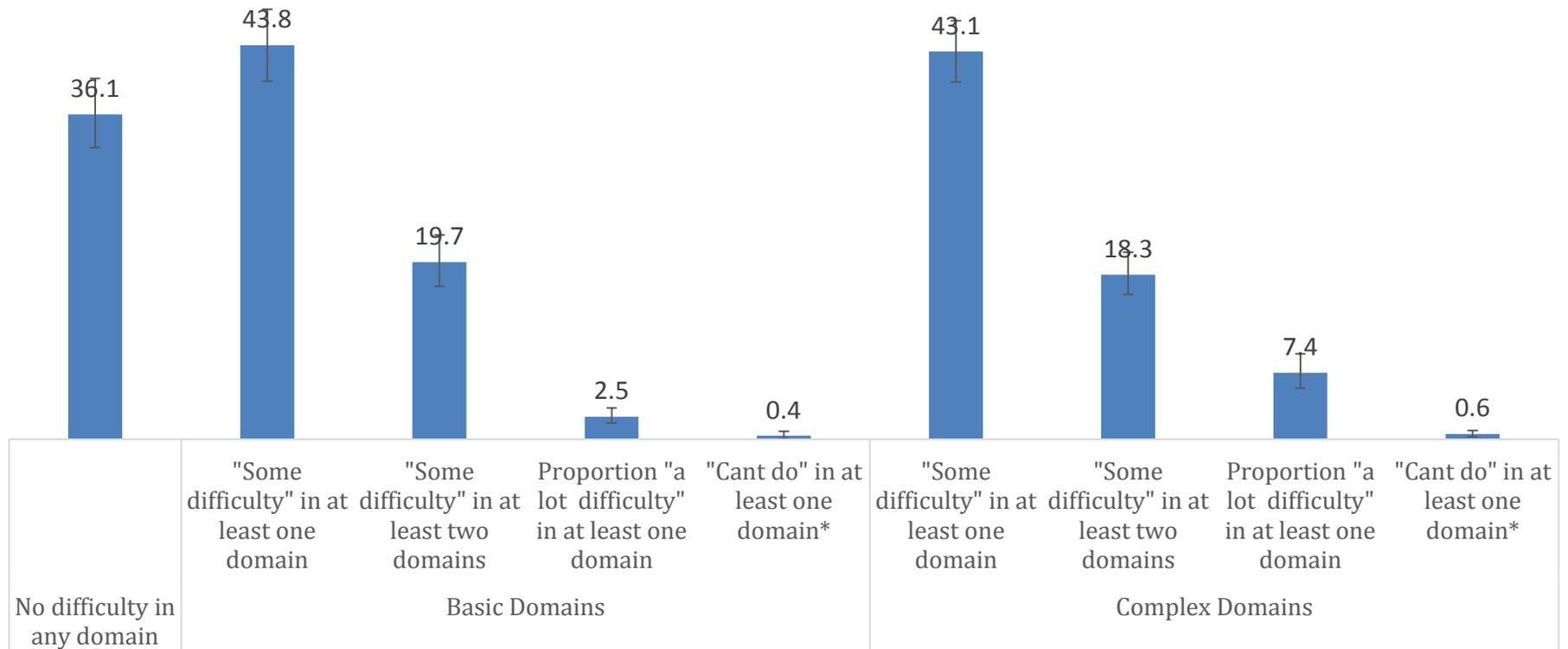
## Cohort Descriptives

	Cameroon			India		
	Male	Female	Total	Male	Female	Total
	n (%)	n (%)	n (100%)	n (%)	n (%)	n (100%)
2 to 5	237 (46.9)	268 (53.1)	505	113 (48.5)	120 (51.5)	233
6 to 9	256 (51.3)	243 (48.7)	499	163 (53.8)	140 (46.2)	303
10 to 13	230 (51.7)	215 (48.3)	445	138 (50.5)	135 (49.5)	273
14 to 17	126 (47.7)	138 (52.3)	264	161 (55.1)	131(44.9)	292
Total	849 (49.6)	864 (50.4)	1,713	575 (52.2)	526 (47.8)	1,101

# 4. Field-testing WG-UNICEF ESF for children

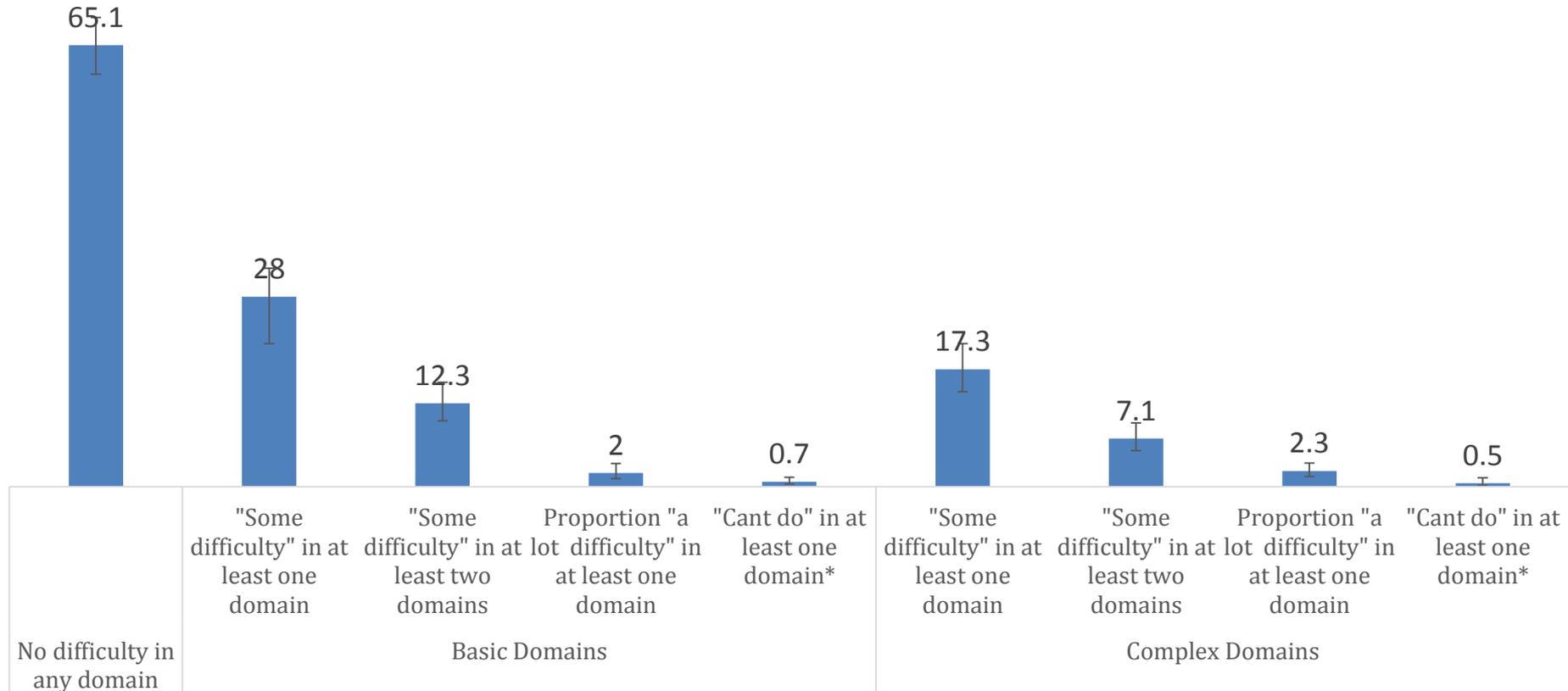


## Overall endorsement - Cameroon

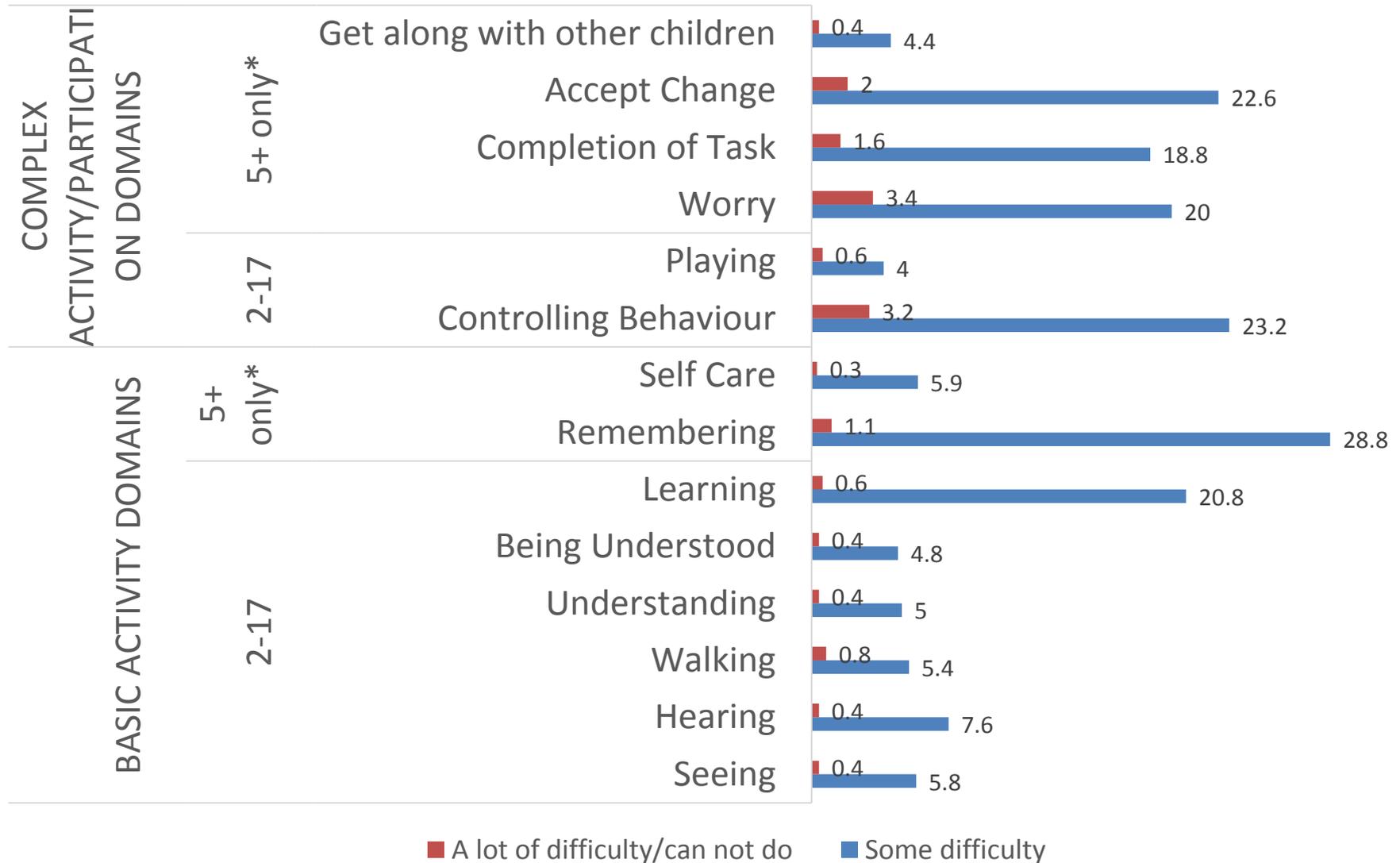


# 4. Field-testing WG-UNICEF ESF for children

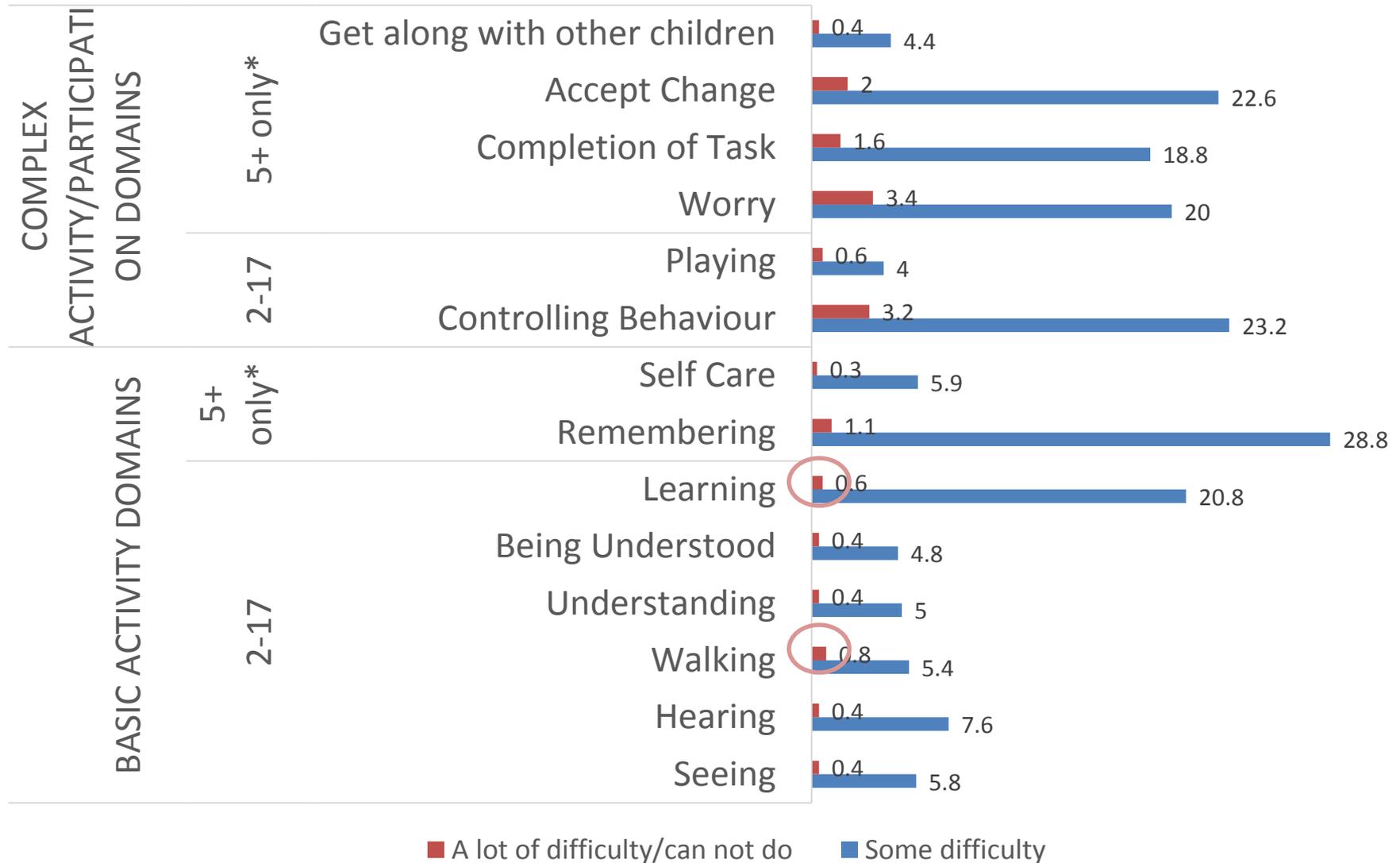
## Overall endorsement - India



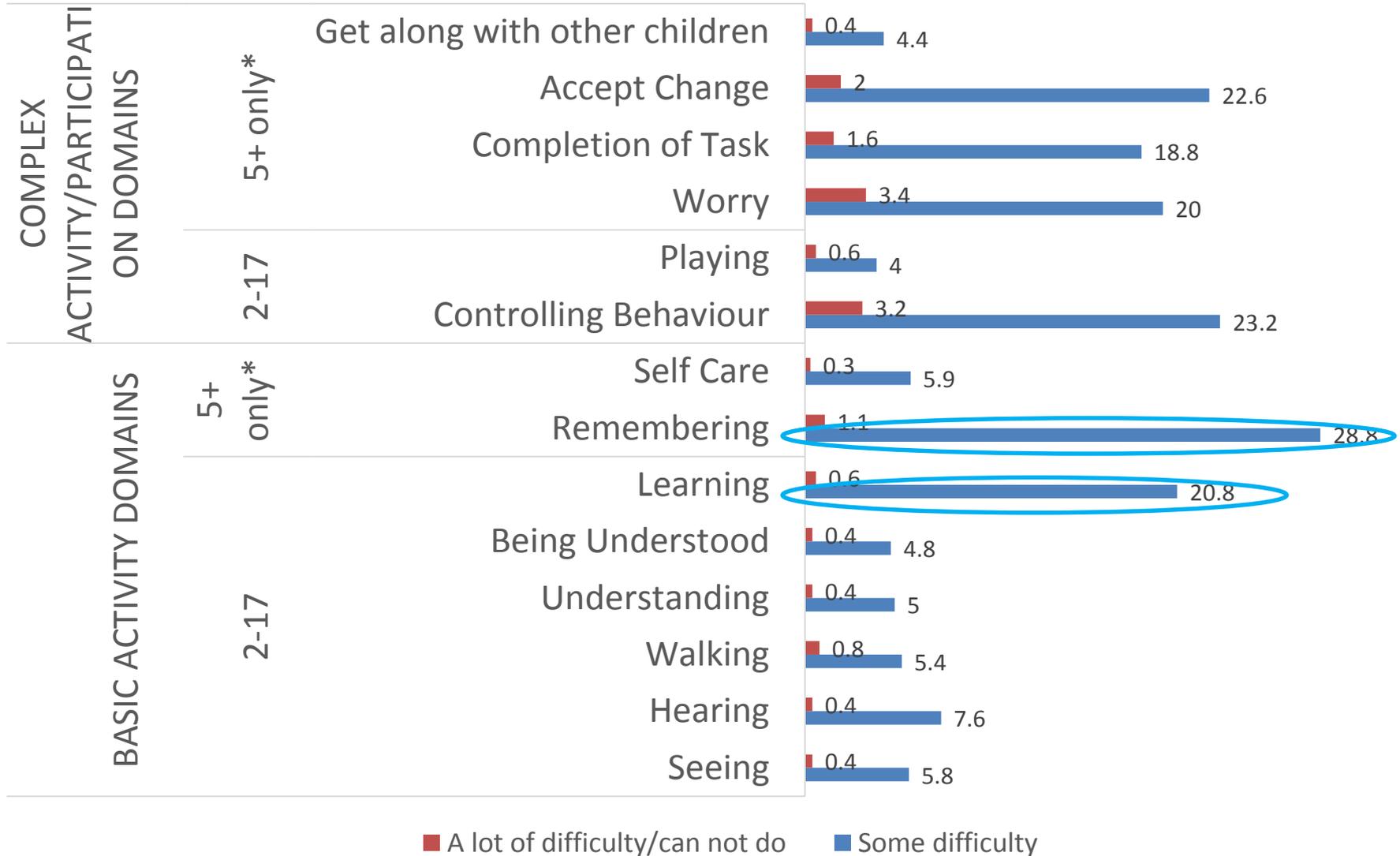
# 4. Proportion Endorsing Each Domain - Cameroon



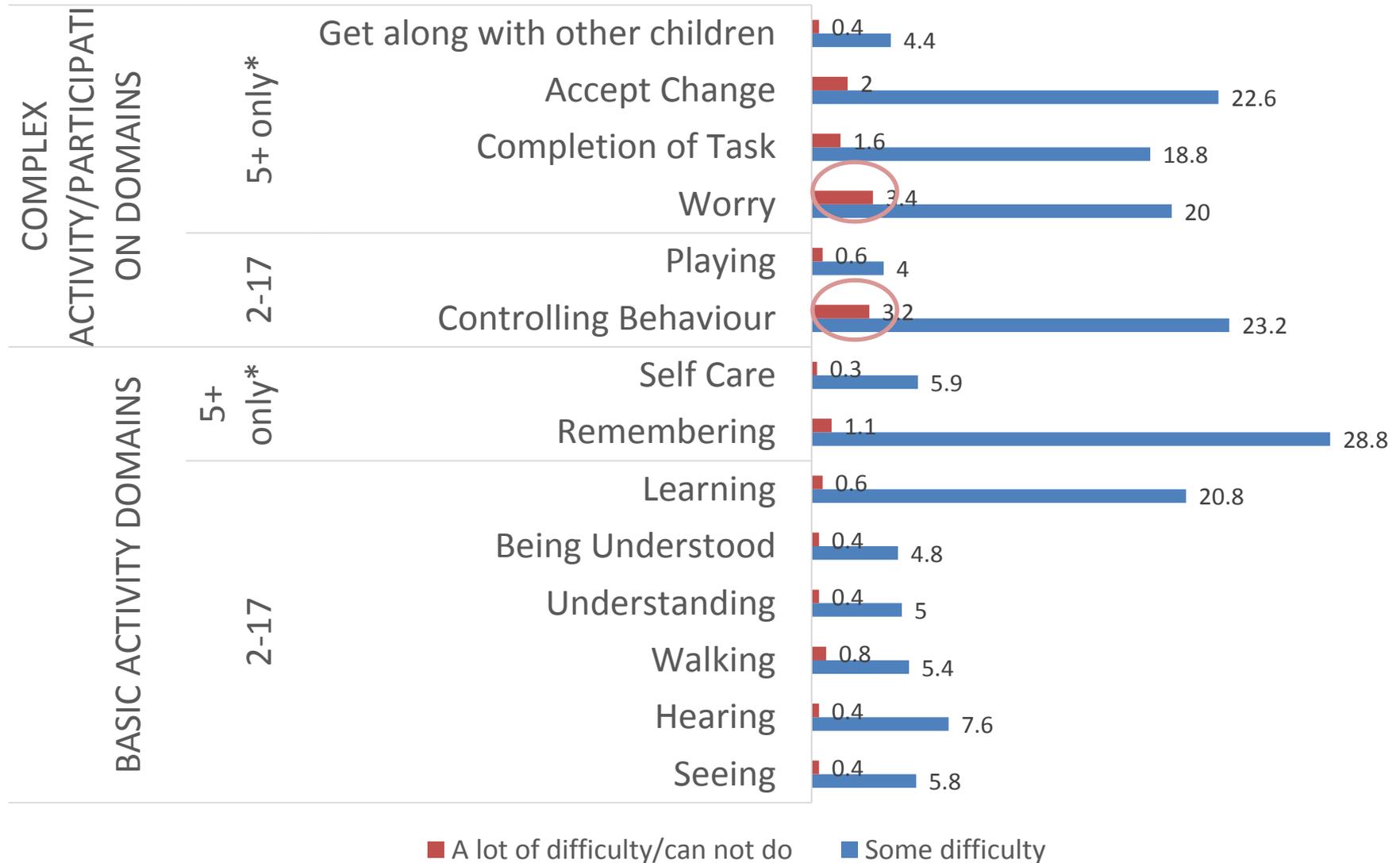
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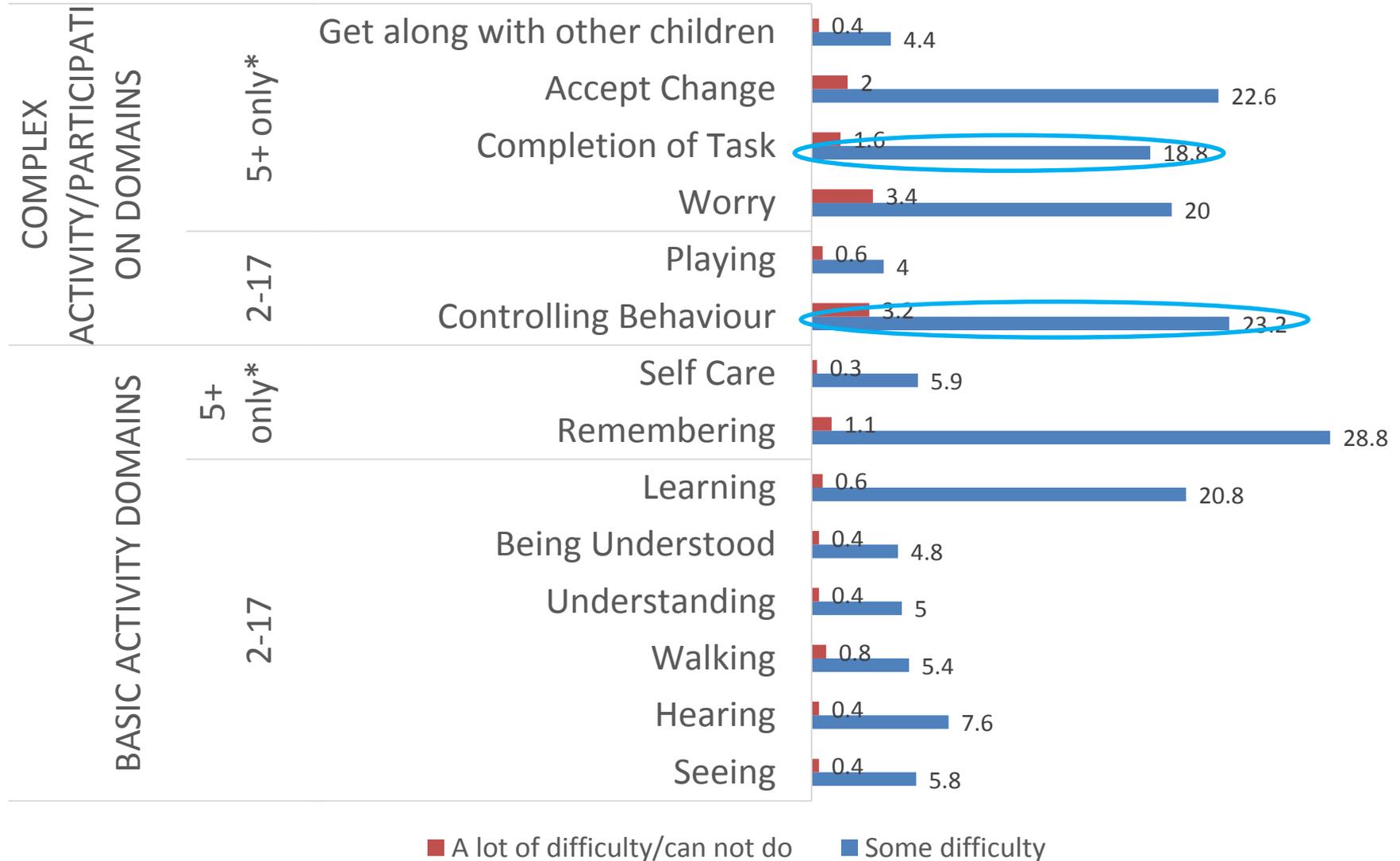
# 4. Proportion Endorsing Each Domain - Cameroon



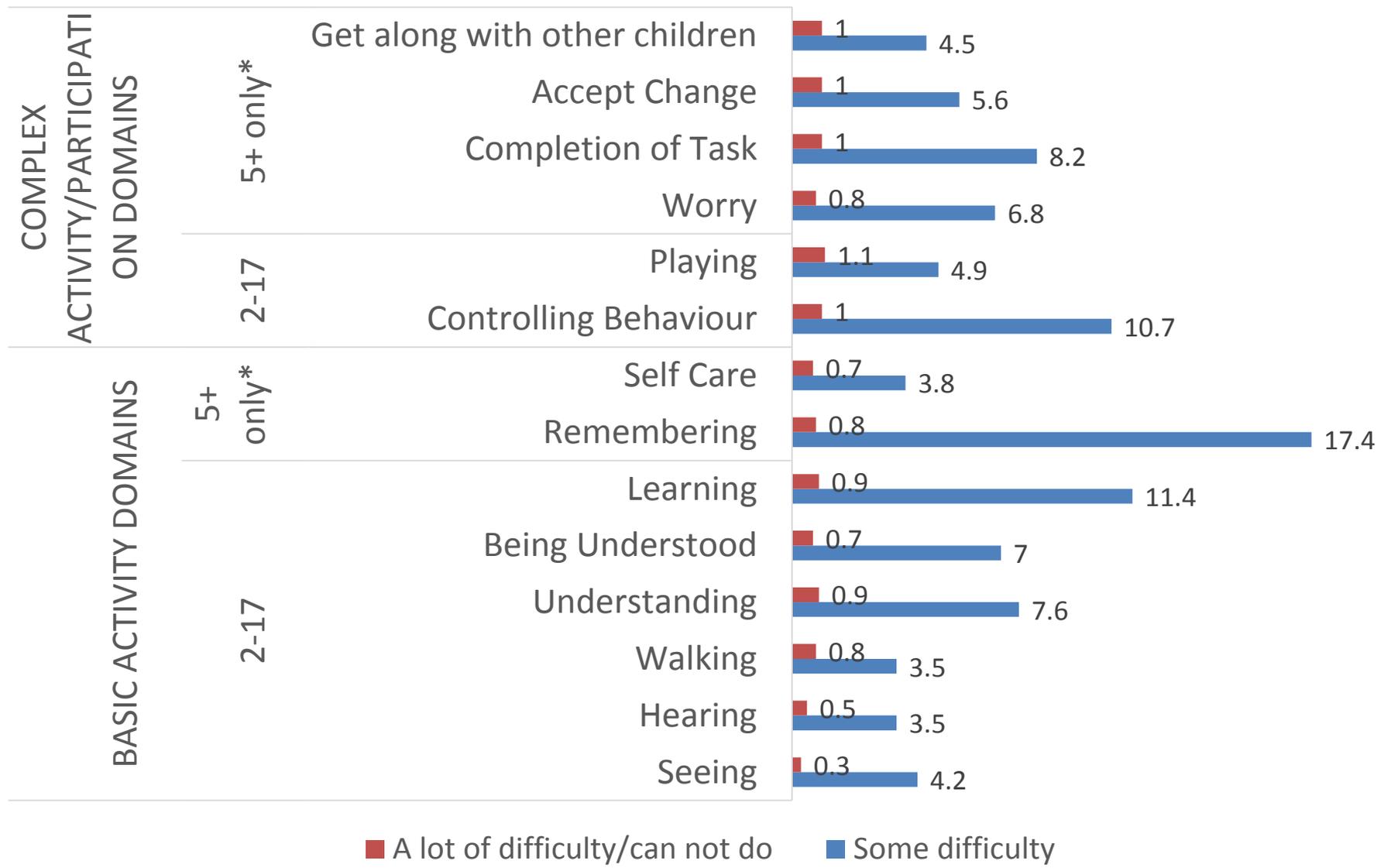
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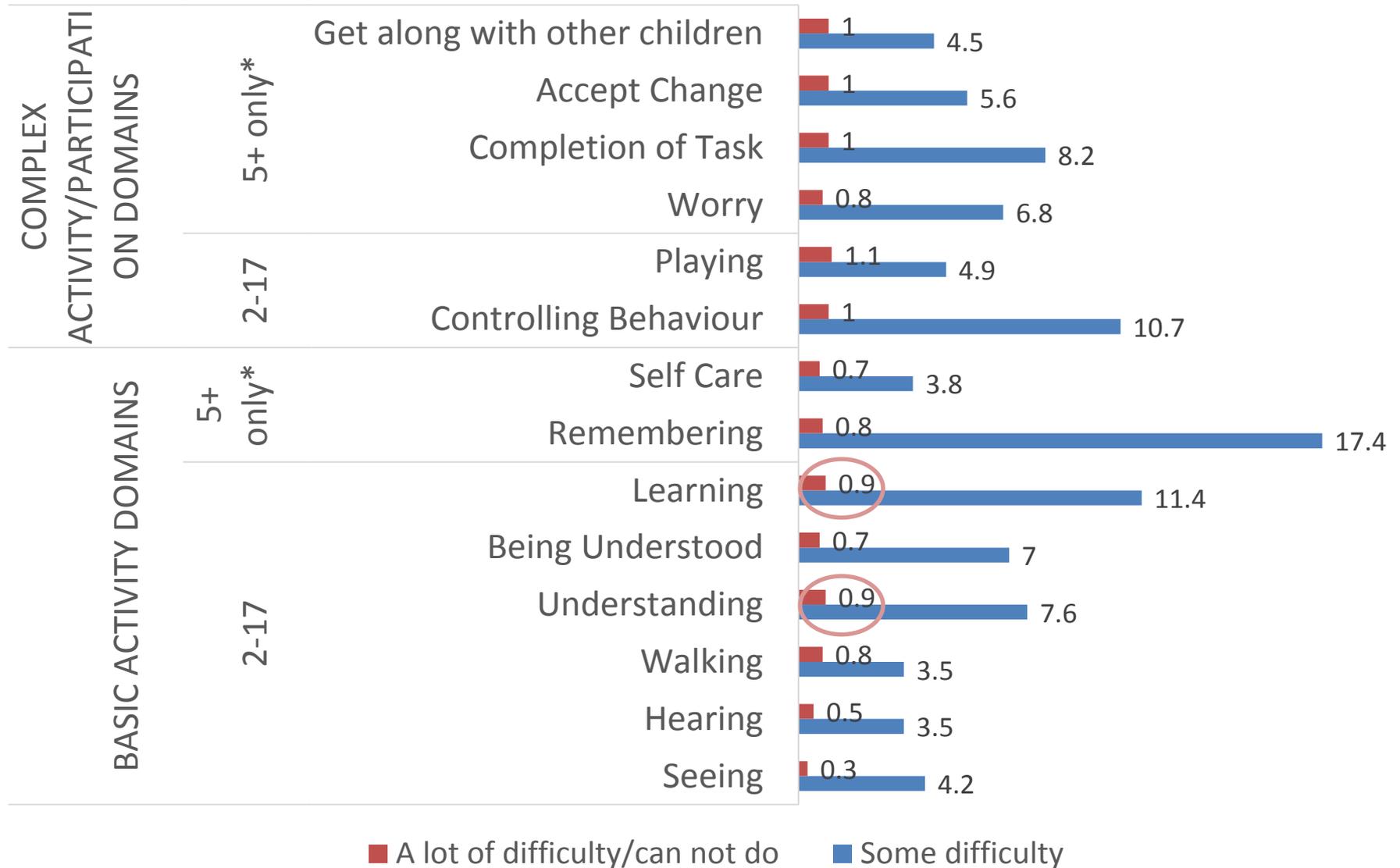
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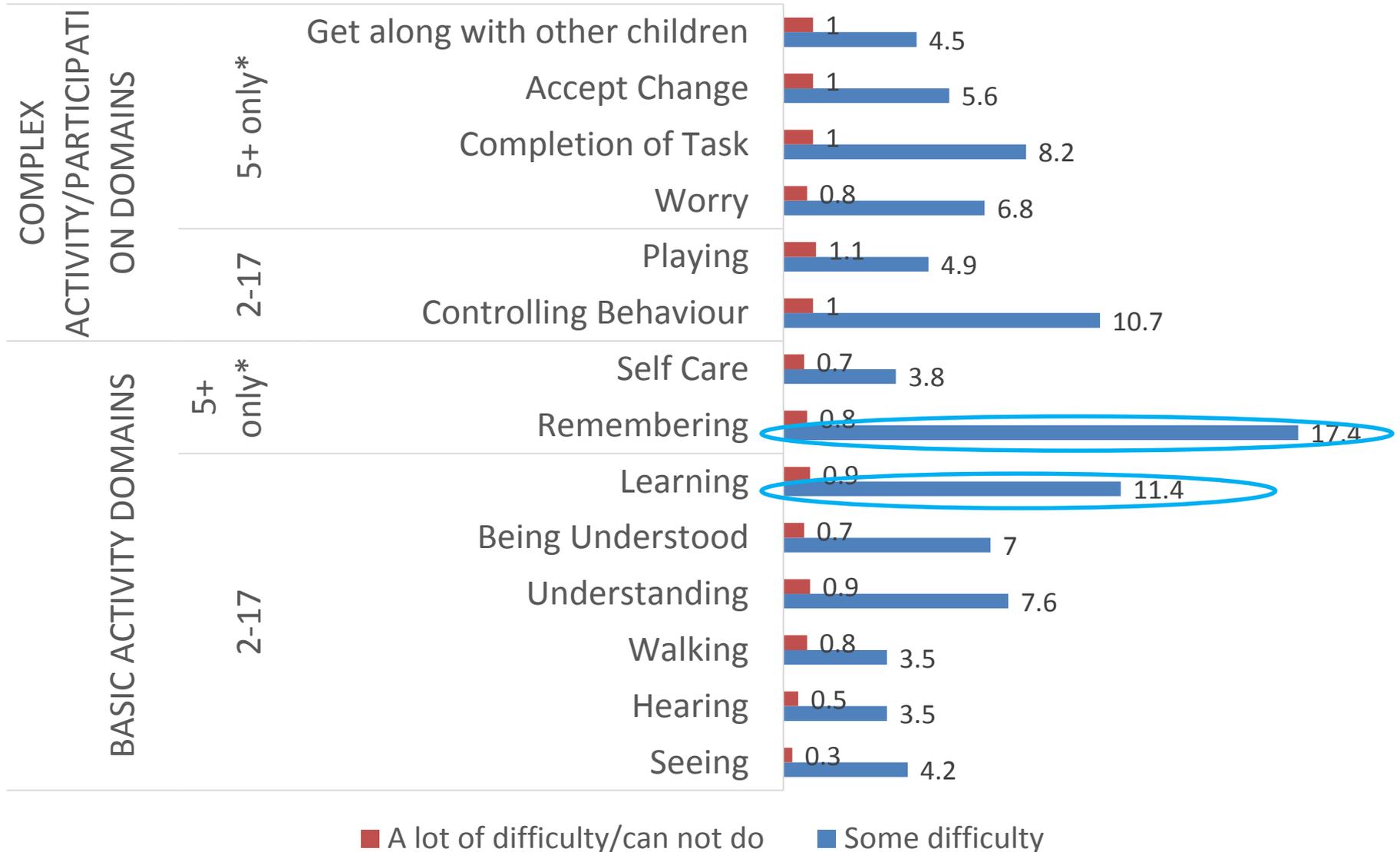
# 4. Proportion endorsing each domain - India



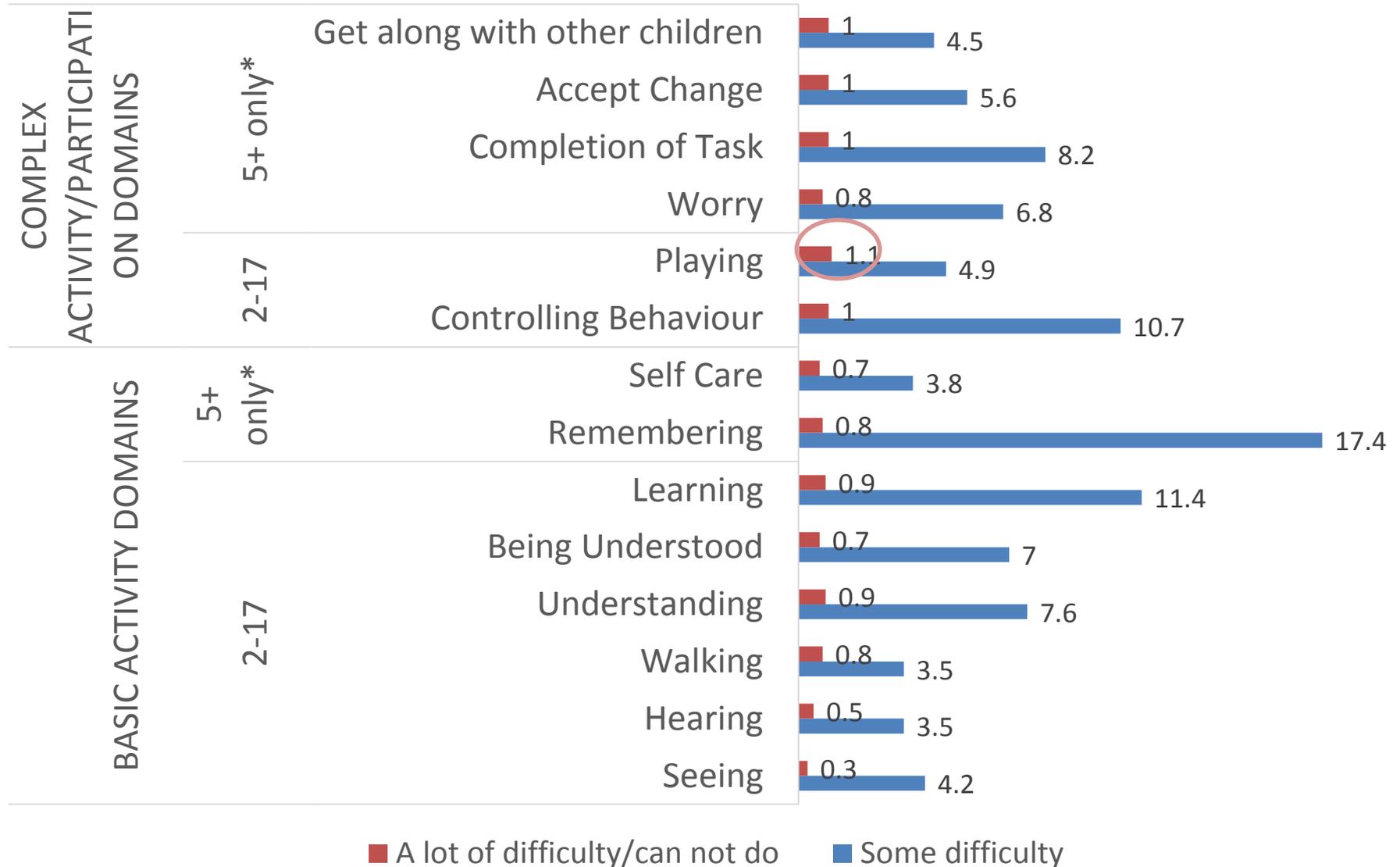
# 4. Proportion endorsing each domain - India



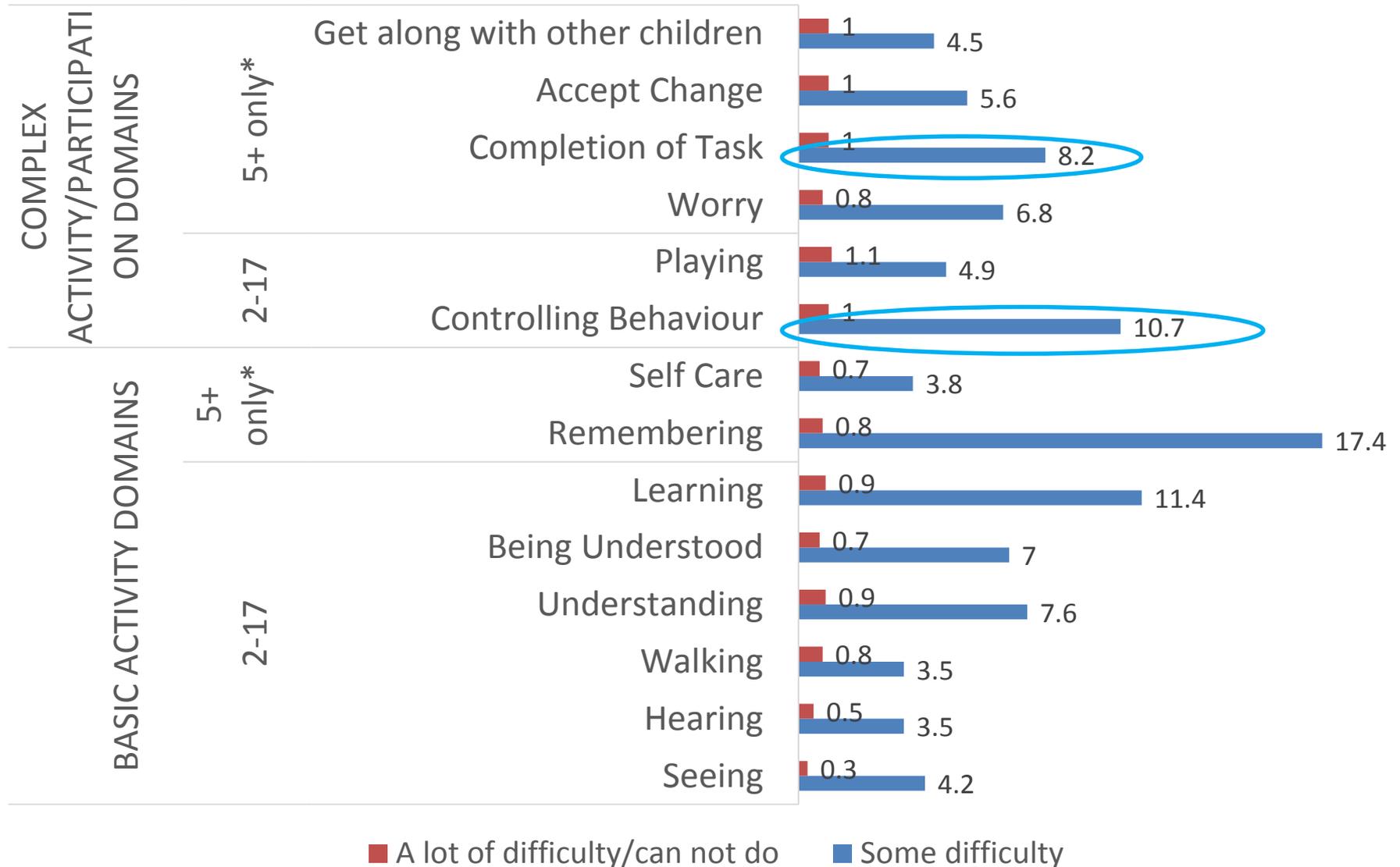
# 4. Proportion endorsing each domain - India



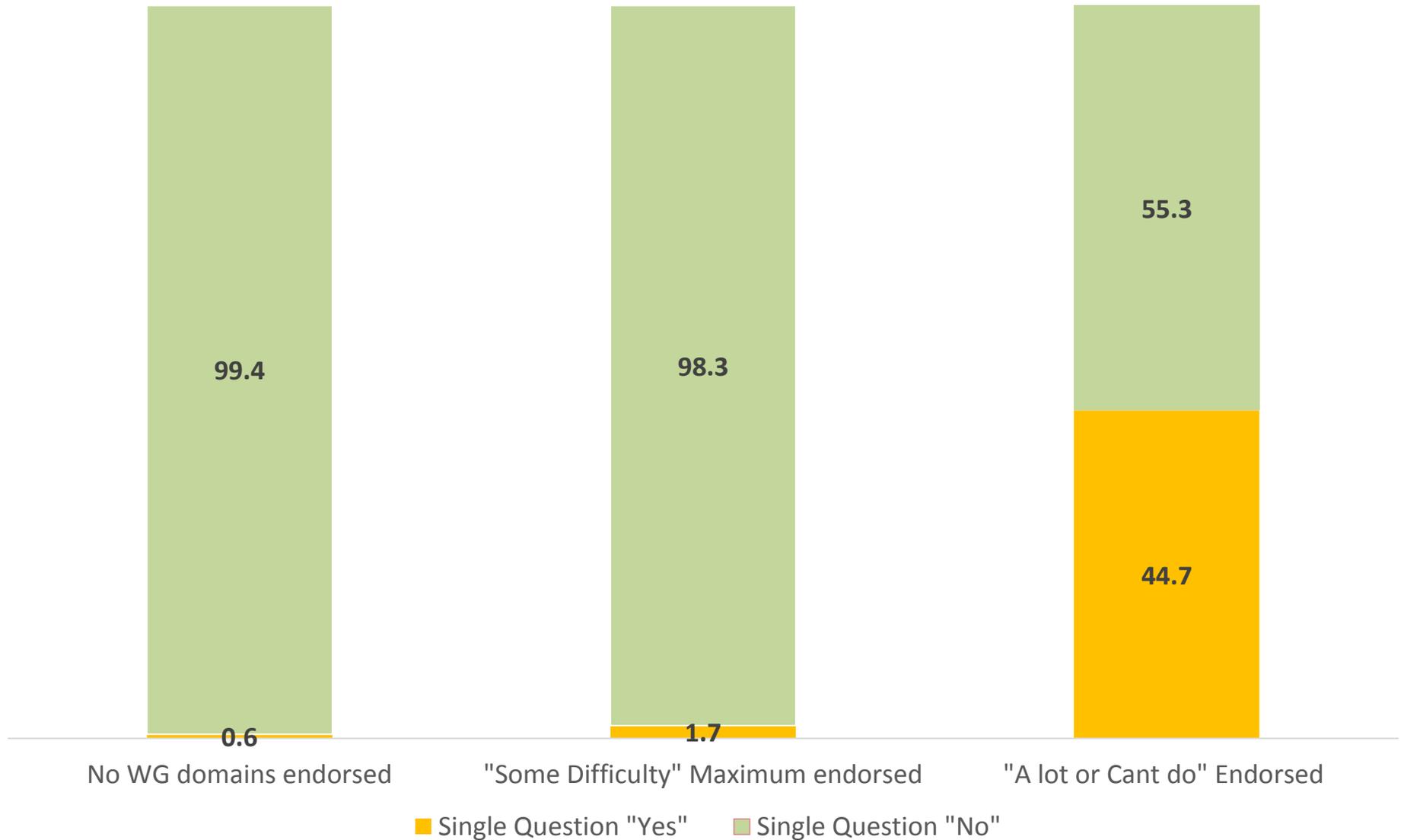
# 4. Proportion endorsing each domain - India



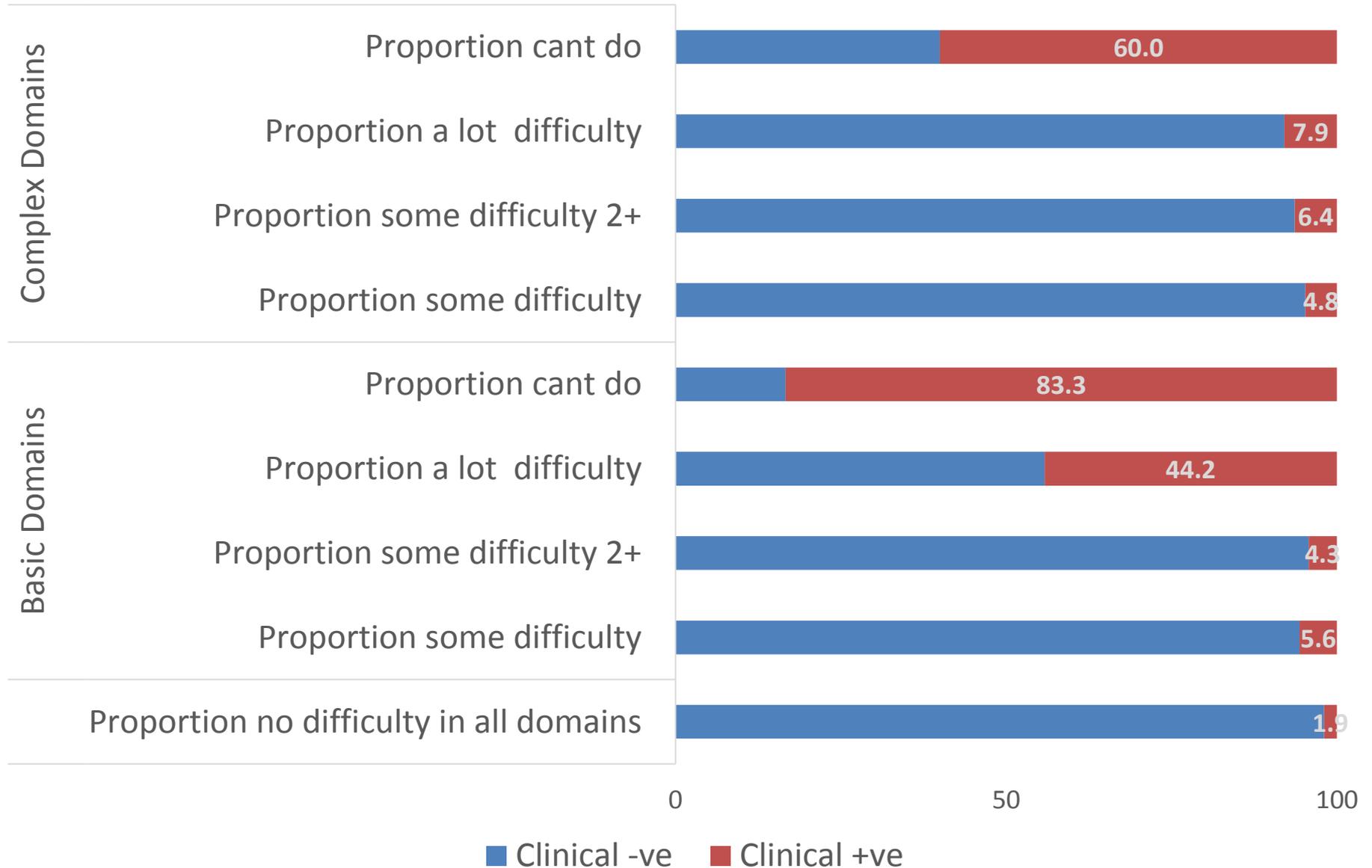
# 4. Proportion endorsing each domain - India



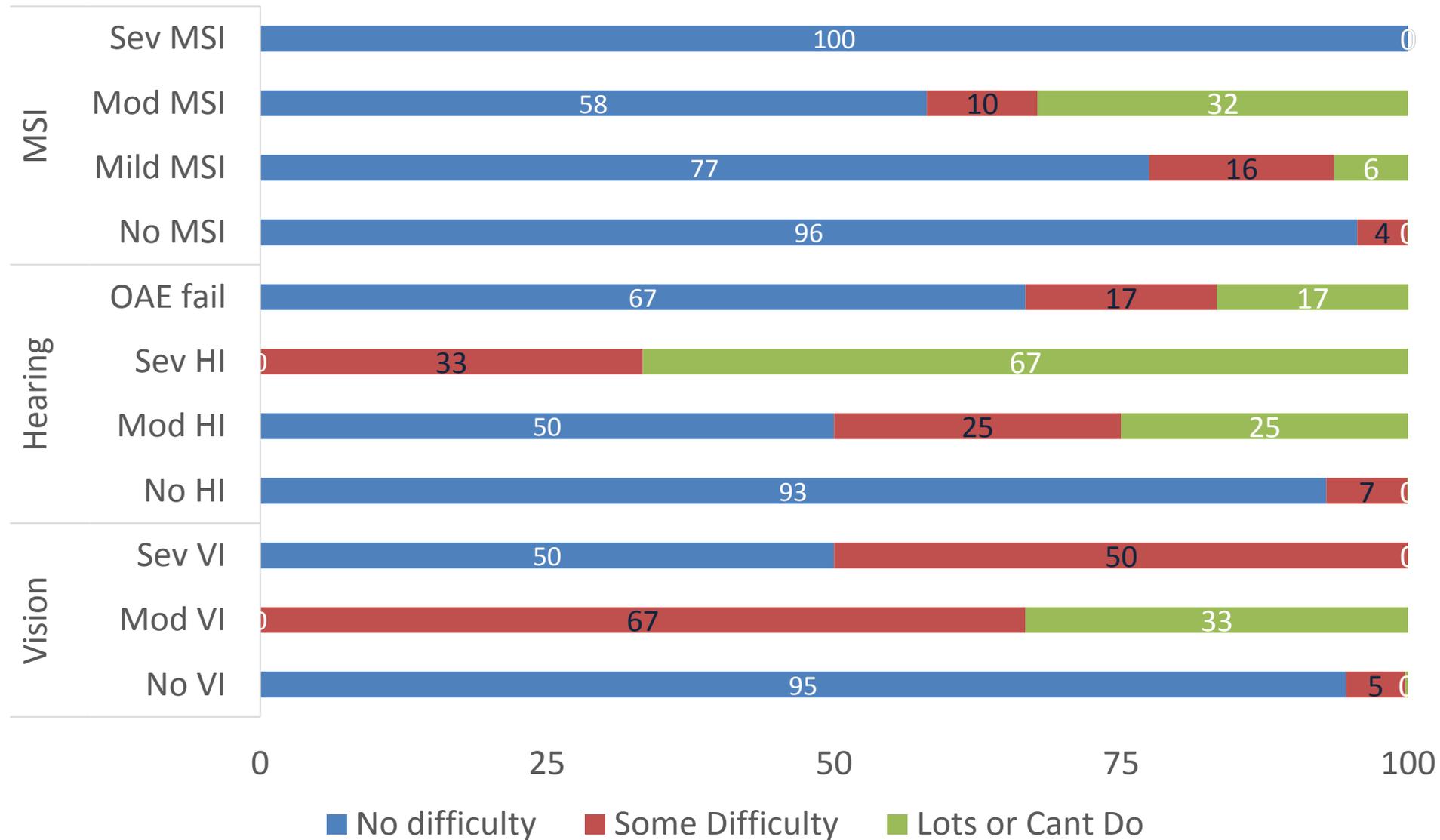
# 4. India – Single question vs. WG



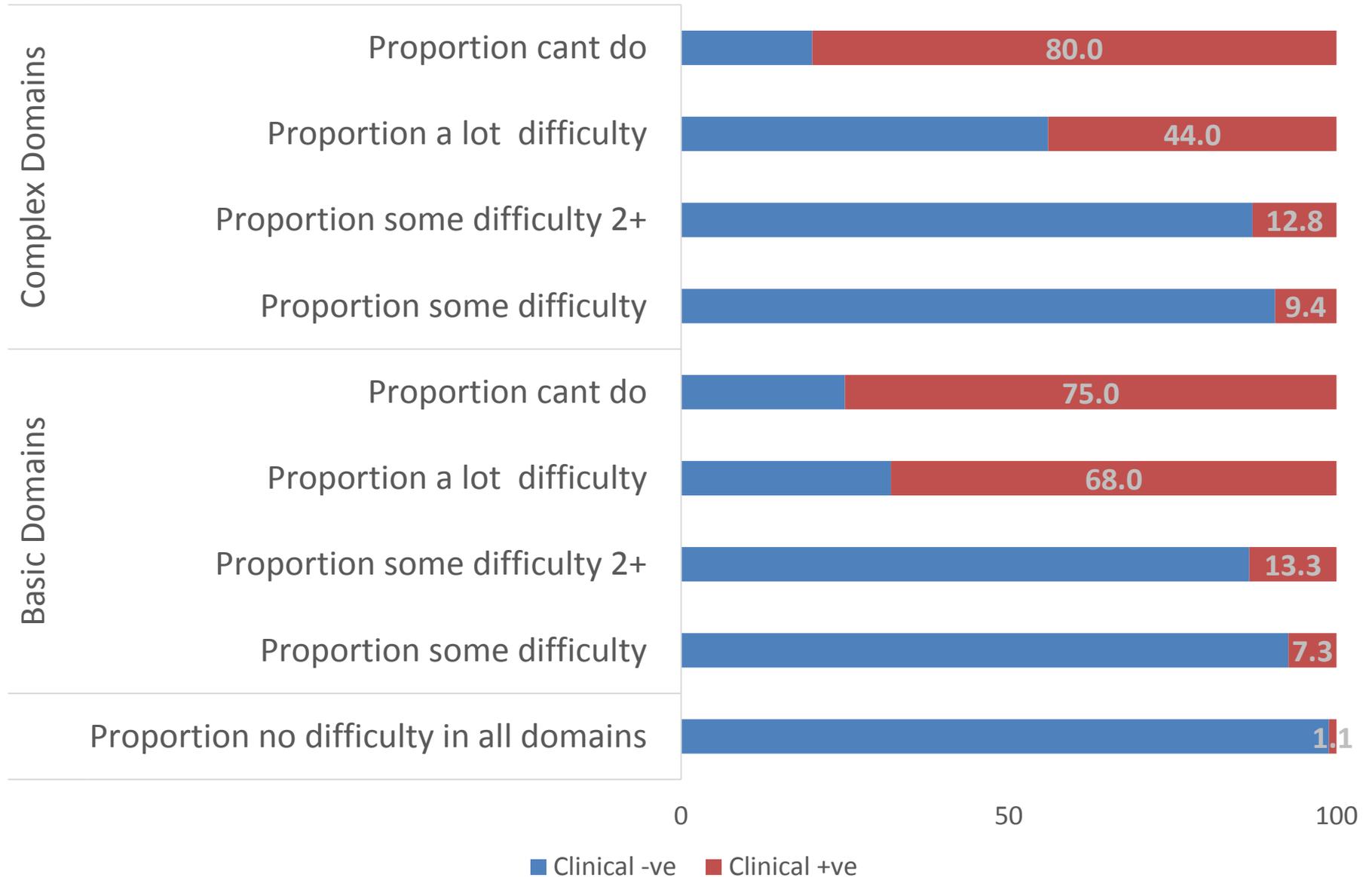
# 4. Relationship to clinical screens - Cameroon



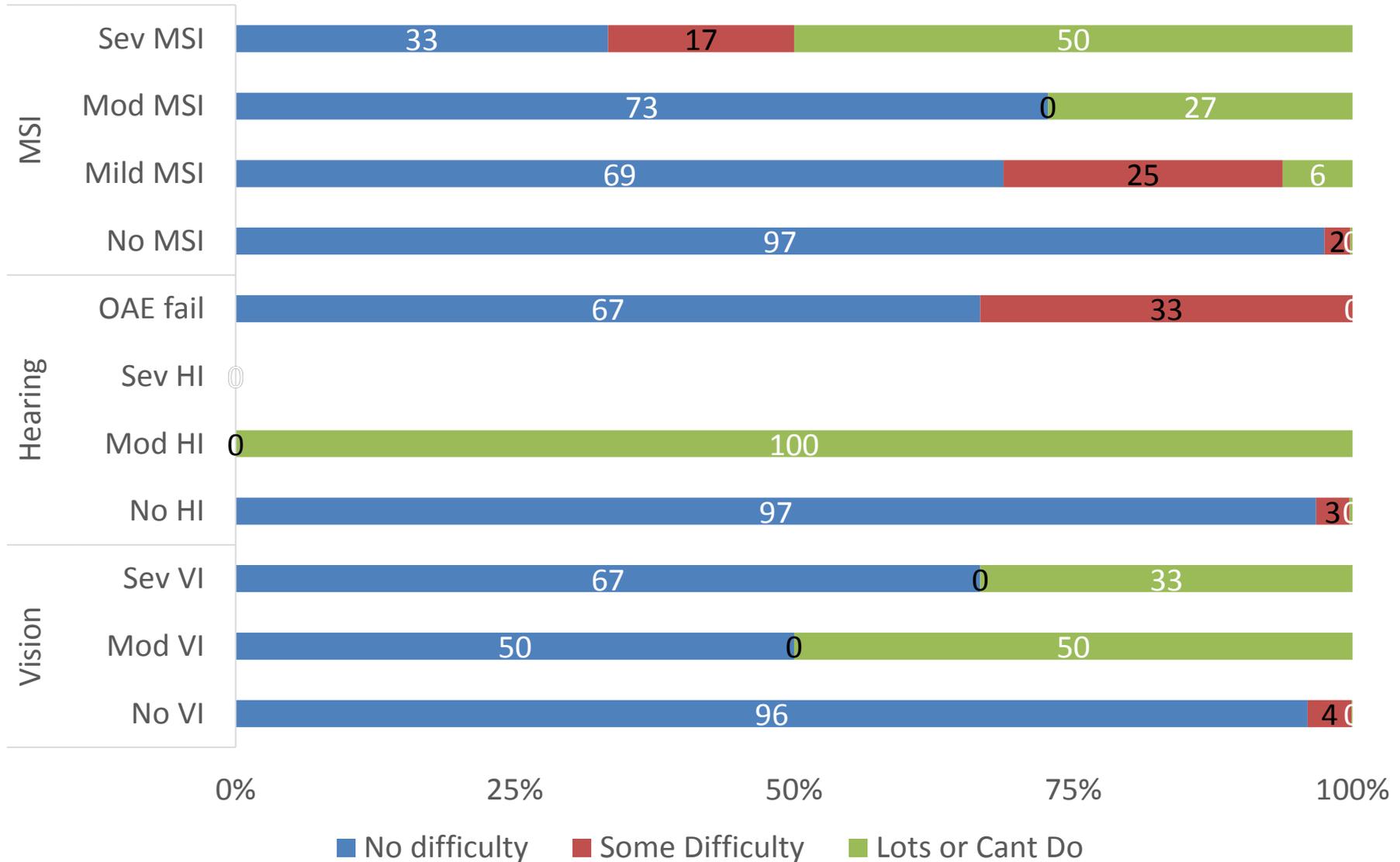
# 4. Relationship to clinical screens - Cameroon



# 4. Relationship to clinical screens - India



# 4. Relationship to clinical screens - India



## 4. Summary of Field Test

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- Almost 3000 children screened
  - 63.9% of children in Cameroon and 34.9% of children in India endorsed at least one domain with at least “some difficulty”
  - Much smaller percentage endorsing at least one domain with at least “a lot or can not do” – 8.9% Cameroon and 3.5% India
  - Similar proportions endorsing basic domains in both countries; higher proportion endorsing complex domains in Cameroon



## 4. Summary of Field Test

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- Reasonable relationship with clinical tools (but small sample) – more false negatives than false positives vs. clinical criteria
- Draft module seen as best available during review but since updated - results as field test
- No strong significant pairwise relationships between domains either country
- <0.5% in Cameroon and 0.6% in India answered “Don’t Know” to any question

## 4. Summary of Field Test

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- Further results from study forthcoming end 2014
  - WG-ESF functional limitations in adults
  - Clinical Impairment prevalence
  - Case-control data on impact of disability
  - Relationship between self-reported functional limitations and objectively assessed impairments



Thank you for listening!

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