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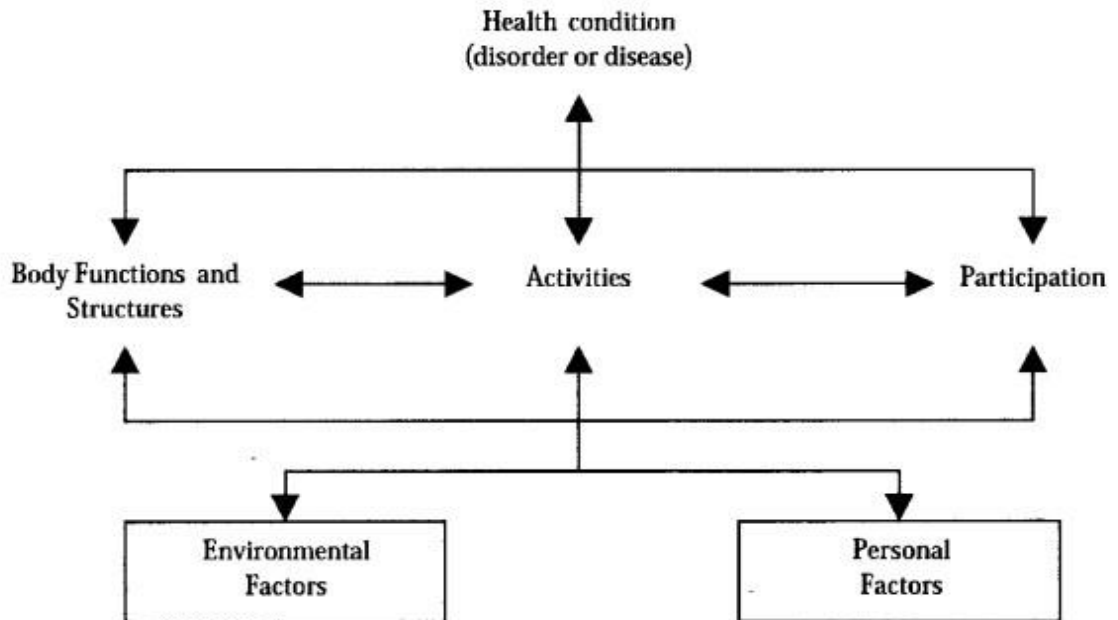
# **Environmental Factors and Participation in Stroke Survivors**

Cross-sectional study for detecting used environmental factors and their significance for participation of people living at home after stroke

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## Objectives, Key Concepts and Conceptual Basis

- Environment as System
- Health – Participation
- Disability after a Stroke



- *Occupational therapy models*
- *International Classification of Functioning, Disability and Health (ICF)*

## Research Question

- **What kind of physical aids (e1), family support (e3) and services (e5) are being used in the south of Switzerland by patients affected by a stroke?**
- **How relevant are these environmental factors for the affected people in terms of participation and integration?**

## Method: Cross-Sectional study with structured interview

### Environmental factors

1. Physical Aids/ Products/ Technologies (e1)
2. Support from people close to the patient (e3)
3. Assistance through external services (e5)

### Participation

1. Hygiene
2. Mobility inside
3. Nutrition/Cooking
4. Household
5. Mobility outside
6. Administration/Communication
7. Work/Leisure

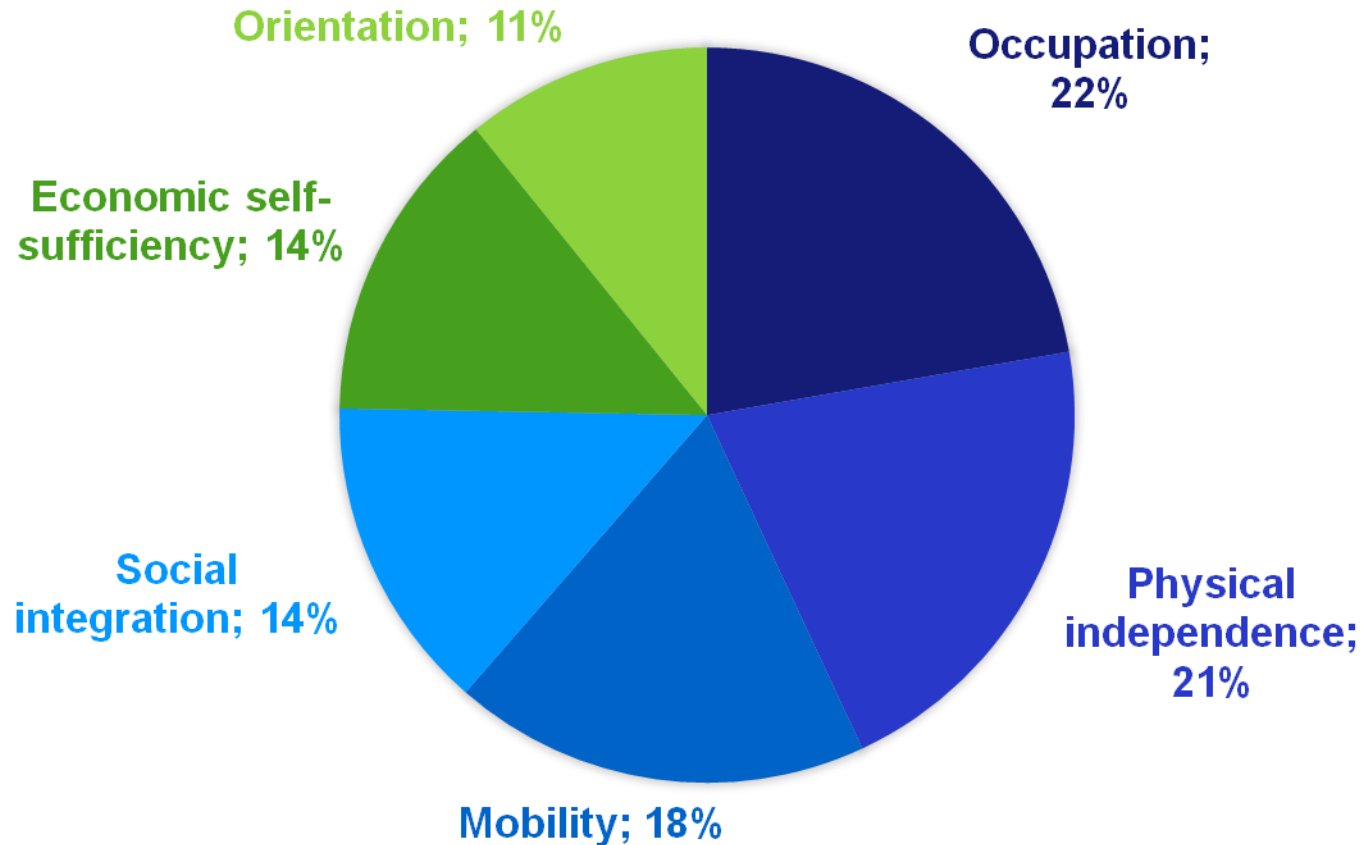
## Sample Test:

**N: 49** 18 women / 31 men stroke survivors (12 months after the incident)

- **Living at home in Ticino**
  - **79% with partner/parents/children**
  - **21% alone**
- **Age: 38 - 90 years (mean 66 y.)**

## Weight of the different domains on the experienced disability

### London Handicap Scale (LHS)

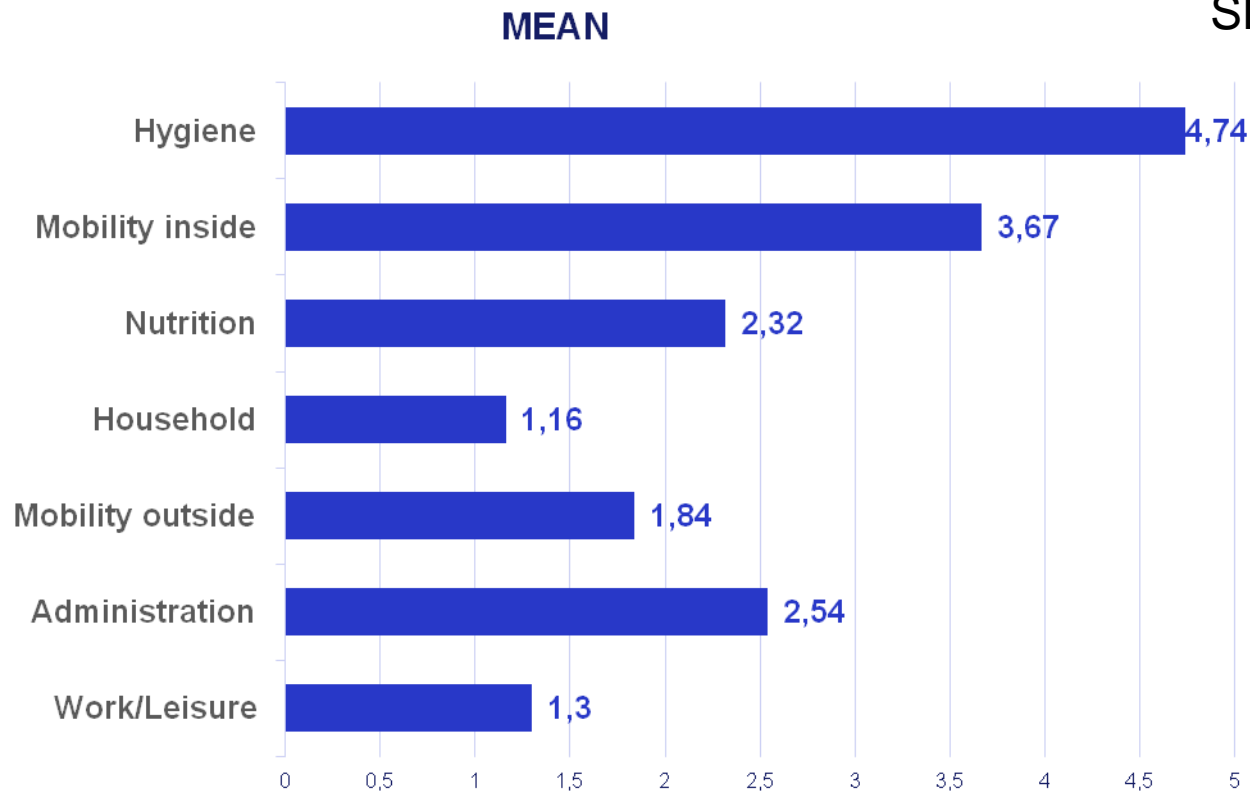


## Results:

- **Use of single environmental factors**
- **Combination within an activity group**
- **Importance for participation**

## Use of physical aids

N:49  
 MEAN: 13  
 MAX: 26  
 MIN:1  
 SD: 5.5

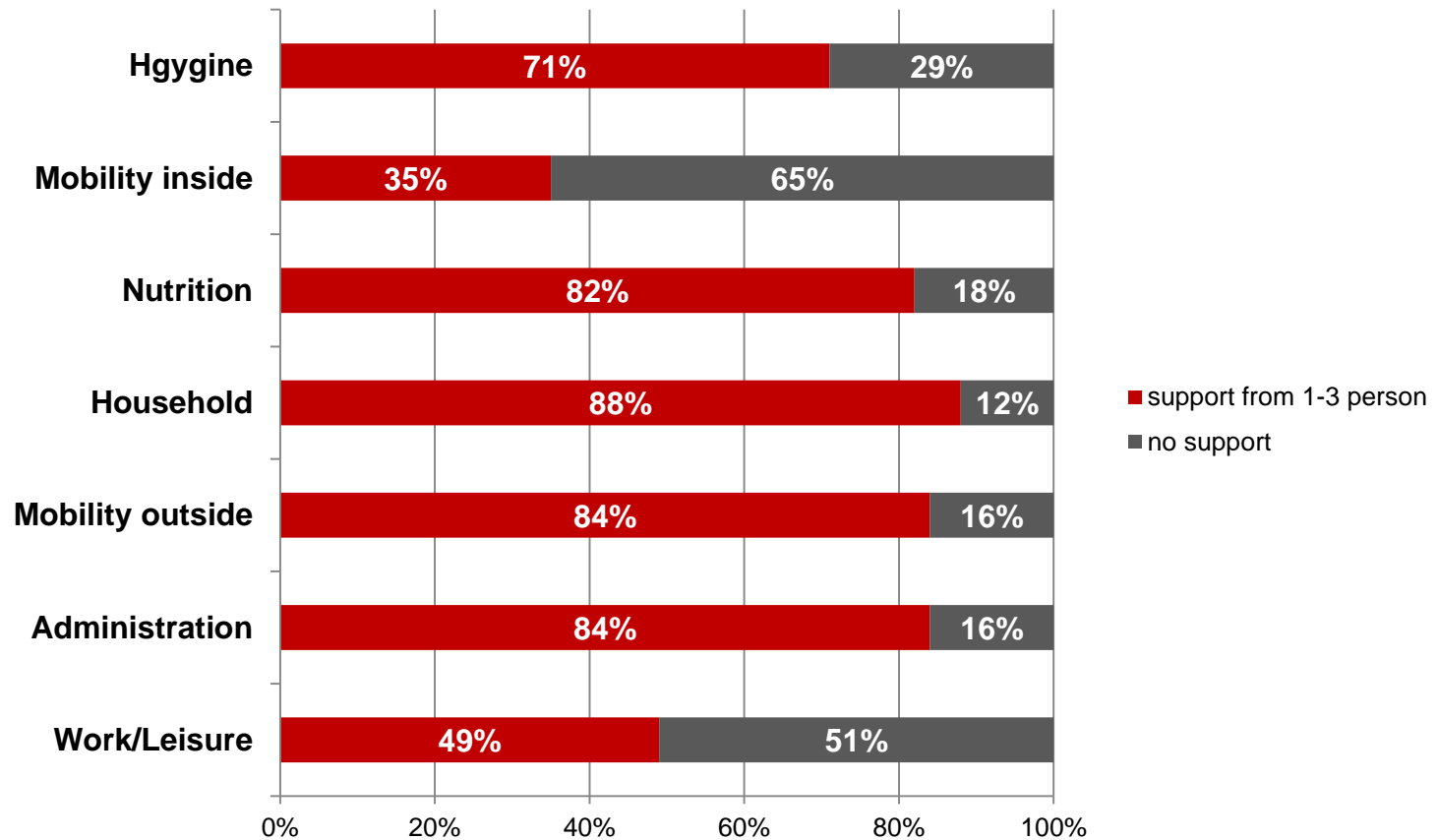




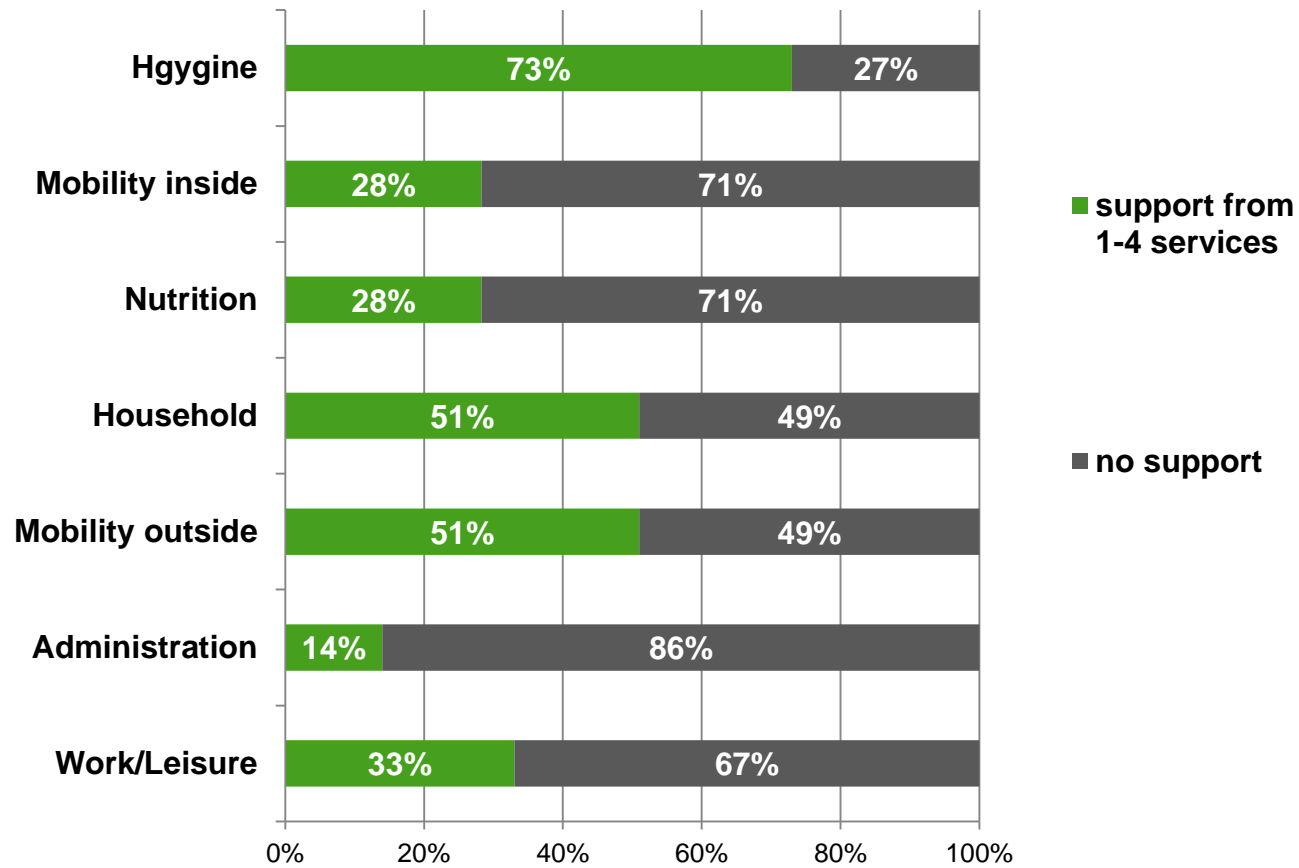
## Variable: Degree of disability (LHS) and age

		Number of tools used		
Activity group	LHS	MEAN	AGE	MEAN
<b>Hygiene</b>	<17	3.4	<66	3.4
	>16	5.1	>65	5.1
<b>Mobility inside</b>	<17	2.5	<66	2.8
	>16	3.7	>65	3.4
<b>Nutrition</b>	<17	2	<66	2.1
	>16	1	>65	1
<b>Mobility outside</b>	<17	1.3	<66	1.4
	>16	1.5	>65	1.5
<b>Total (SD)</b>	<17	11.3(4.9)	<66	11.8(5.3)
	>16	13.5(4.9)	>65	13.0(4.6)

## Support from people close to the patient



## Use of external services



## Facilitating environmental factors

Activity group nr. 5  
“Mobility outside”

Environmental Factors		Type of Aid	Relative Frequency	
	Physical aids		> 75%	
	Support/Relationship			
	Services			
Physical aids	Cane	> 25-75%	55%	
Physical aids	Manual Wheelchair		39%	
Support/Relationship	Children		59%	
Support/Relationship	Partner		51%	
Services	Transportation for the Disabled		29%	
Physical aids	Electric Wheelchair	< 25%	18%	
	Walker		10%	
	Automobile		10%	
	Motorcycle		4%	
	Other		4%	
	Bicycle		2%	
Support/Relationship	Other family members		18%	
Services	Other		12%	
	Train/Bus		12%	
	Airplane		10%	
	Other	10%		
	Taxi	4%		

## Importance of environmental factors for participation

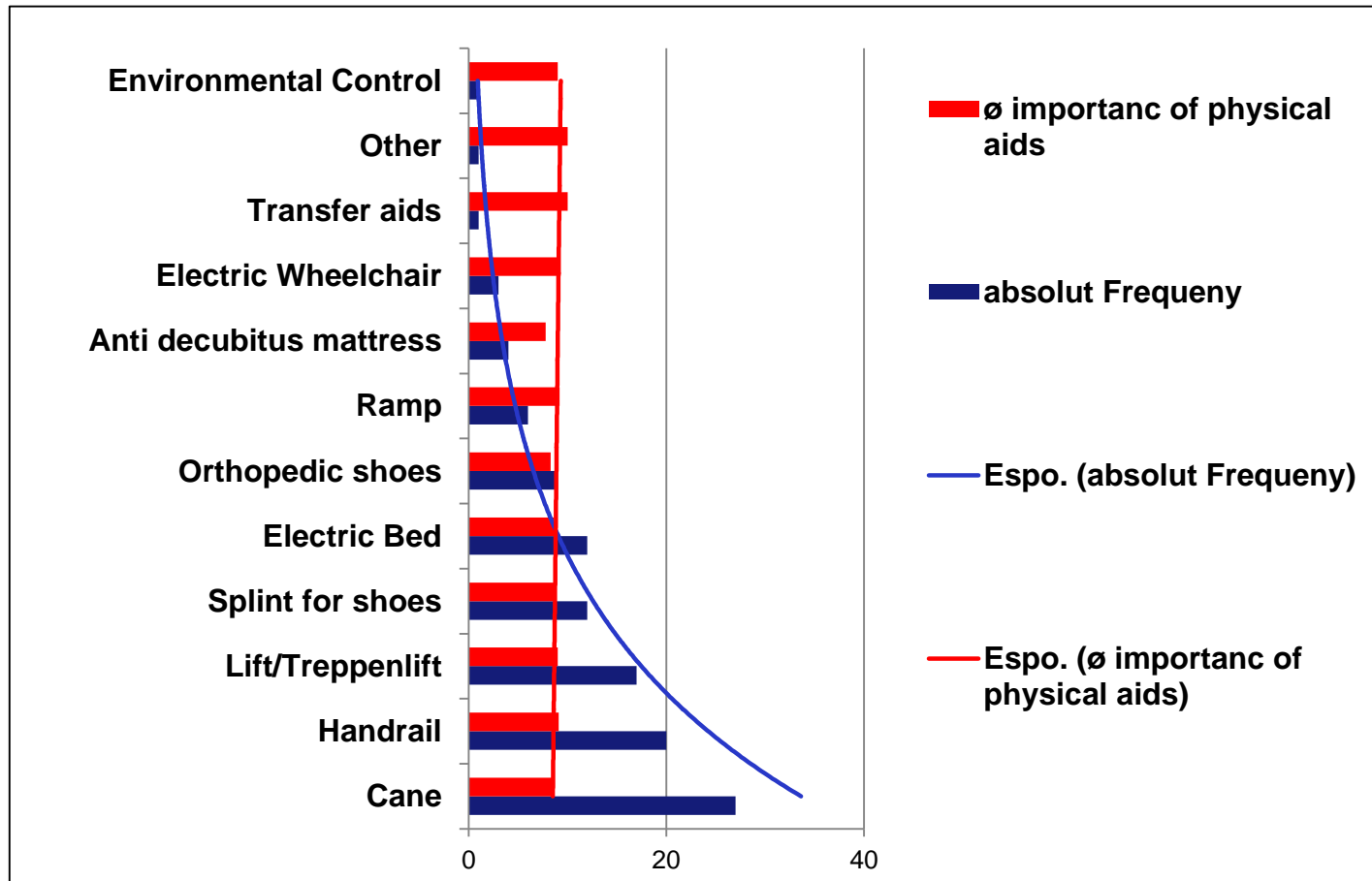
### Categories

unimportant	(<2)
somewhat important	(≥2 - <4)
important	(≥4 - <7)
very important	(≥7 - 9)
indispensable	(≥9 - 10)

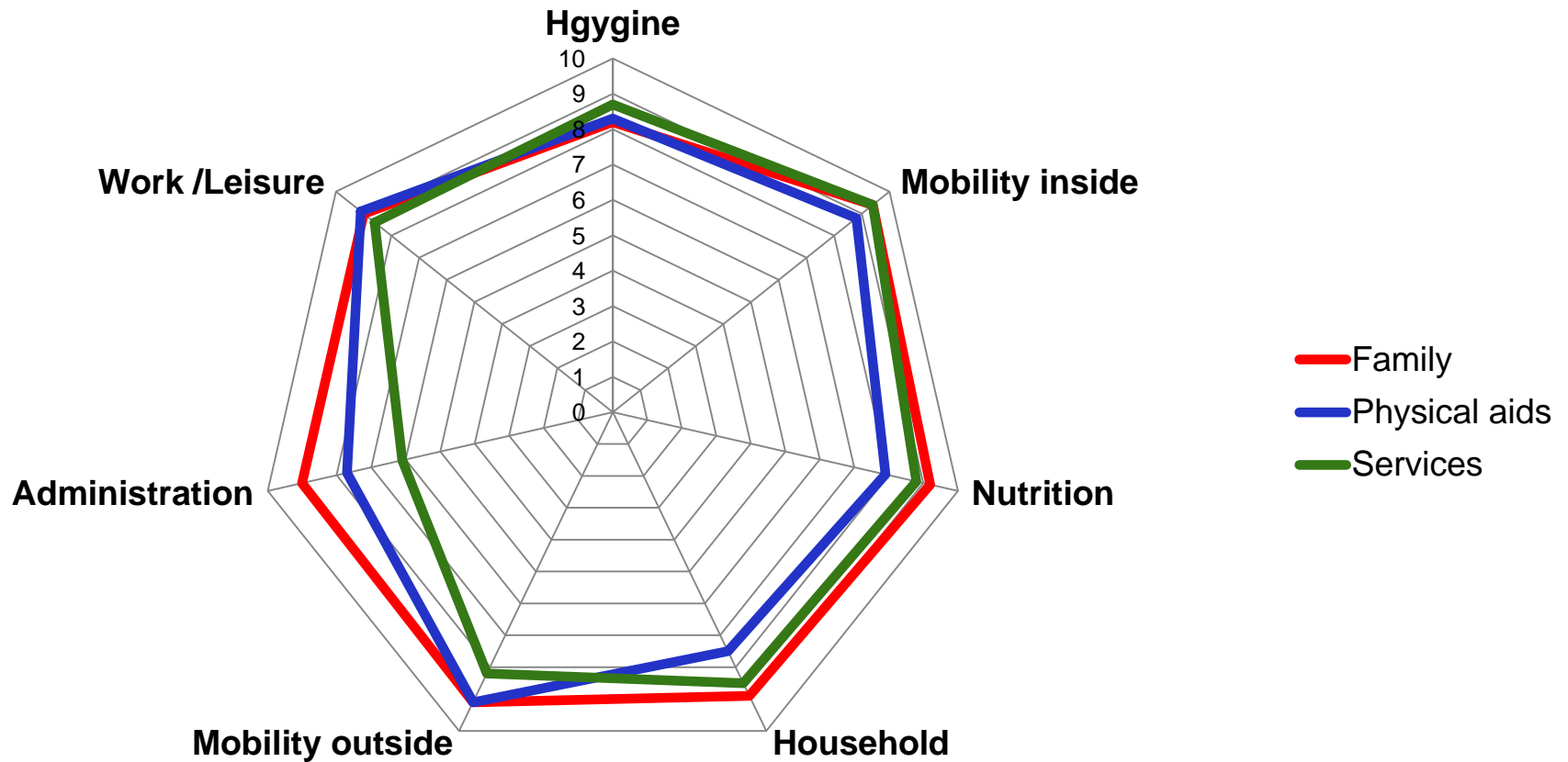
- **Social Network**      **ø 9,2 (indispensable)**
- **Physical Aids**      **ø 8,0 (very important)**
- **Services**      **ø 7,2 (very important)**

# Importance of environmental factors

**Use and importance of physical aids**  
 Mobility inside



# Importance of environmental factors for participation



## Findings and outlook

- Environmental factors have an influence on the potential of integration
- Collective knowledge and scientific basis
- Coordinated outpatient rehabilitation network?
- Leisure activities planning – supply and demand?
- Smart technologies?



Thank you all for your attention