

# Social Participation in Late Life: The Role of Out-of-Home Mobility

Findings from the MOBILATE project "Enhancing Mobility in Later Life"  
2000-2002

**Heidrun Mollenkopf**

*University of Heidelberg*

(Former German Centre for Research on Ageing, DZFA)

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# Introduction

Social participation is considered to be a crucial element in the quality of life of people of all ages.

**With age, the maintenance of social participation out of one's home becomes increasingly difficult** because of

- declining health
- increasing importance of environmental barriers, and
- unfavourable regional conditions, especially in rural areas.



# Overview

- **Mobility patterns of older Europeans**
- **Urban and rural settlements of Finland, Germany West and East, Hungary, and Italy**
- **Social, cultural, and physical activities of older adults in different European regions**
- **How satisfied are older adults with their possibilities to take part in activities?**
- **The impact of personal and environmental conditions on participation and satisfaction with these opportunities**
- **The main obstacles to moving about**
- **Findings based on a European survey: the MOBILATE project “Enhancing Mobility in Later Life“.**



# The MOBILATE Project - - -

- - - was a study of

- **how men and women in later adulthood manage their daily commutes - - -**
- **in urban and rural areas of five European countries,**
- **and which conditions they feel promote or hinder their ability to get around;**
- **the MOBILATE Survey 2000 included 3,950 older adults**  
(stratified by age (55-74 years and 75+ years old)  
and gender (50% men – 50% women))
- **and combined different data sources** (persons and environments),  
**and strategies** (questionnaires and diaries).





# The MOBILATE Consortium



**German Centre for Research on Ageing at the University of Heidelberg (DZFA), Germany  
Department of Social and Environmental Gerontology  
(Coordination)**



**INRCA, Istituto Nazionale Riposo e Cura Anziani,  
Dipartimento Ricerche Gerontologiche, Ancona, Italy**



**University of Jyväskylä, Department of Psychology, Finland**



**Delft University of Technology, Faculty of Architecture,  
The Netherlands**



**Hungarian Academy of Sciences, Institute of Sociology, Hungary**

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# Environmental and social conditions differ with regards to . . .

- 1. geographical and climate conditions**  
*(long winter in Finland, hot summer in Italy)*
  - 2. population density and land use** *(densely settled areas in the Netherlands, sparsely settled areas in Finland)*
  - 3. level of mechanization** *(especially low availability of private cars in Hungary, good public transport systems in Finland)*
  - 4. welfare regimes** *(the Nordic model, the South European model, most of the continental countries in between)*
  - 5. cultural traditions** *(importance of the family in Italy and Hungary)*
- ... and hence indicate European diversity.**



# Personal conditions differ and change with age

- **The people who move, walk, drive, travel, etc. and their living conditions differ as well and are subject to permanent change:**

- Health status; economic and social resources; **needs and motives.**
- Possible loss of function of the senses, declining motor performance, and growing prevalence of chronic illness.
- Retirement frees up a great amount of time and energy.
- Grown children leave home and one must cope with the loss of close relationships.



**All these changes demand a growing measure of mobility if the elderly person is to continue being part of society.**

# The MOBILATE Project: Theoretical Background

## The project's aim ---

(based on an environmental gerontology perspective)

- was to better understand this complex interplay between
  - older adults' personal competencies and resources
  - and aspects of their physical and social environments
  - and



**the role of out-of-home mobility for social participation and quality of life in old age.**



# The MOBILATE Project: Theoretical Background

## The project's aim ---

(based on an environmental gerontology perspective)

- was to better understand this complex interplay between
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  - and aspects of their physical and social environments.



**Are there characteristic travel patterns related to personal and structural variables?**



# Travel patterns of older adults in urban and rural areas of five European countries



# Mean number of journeys

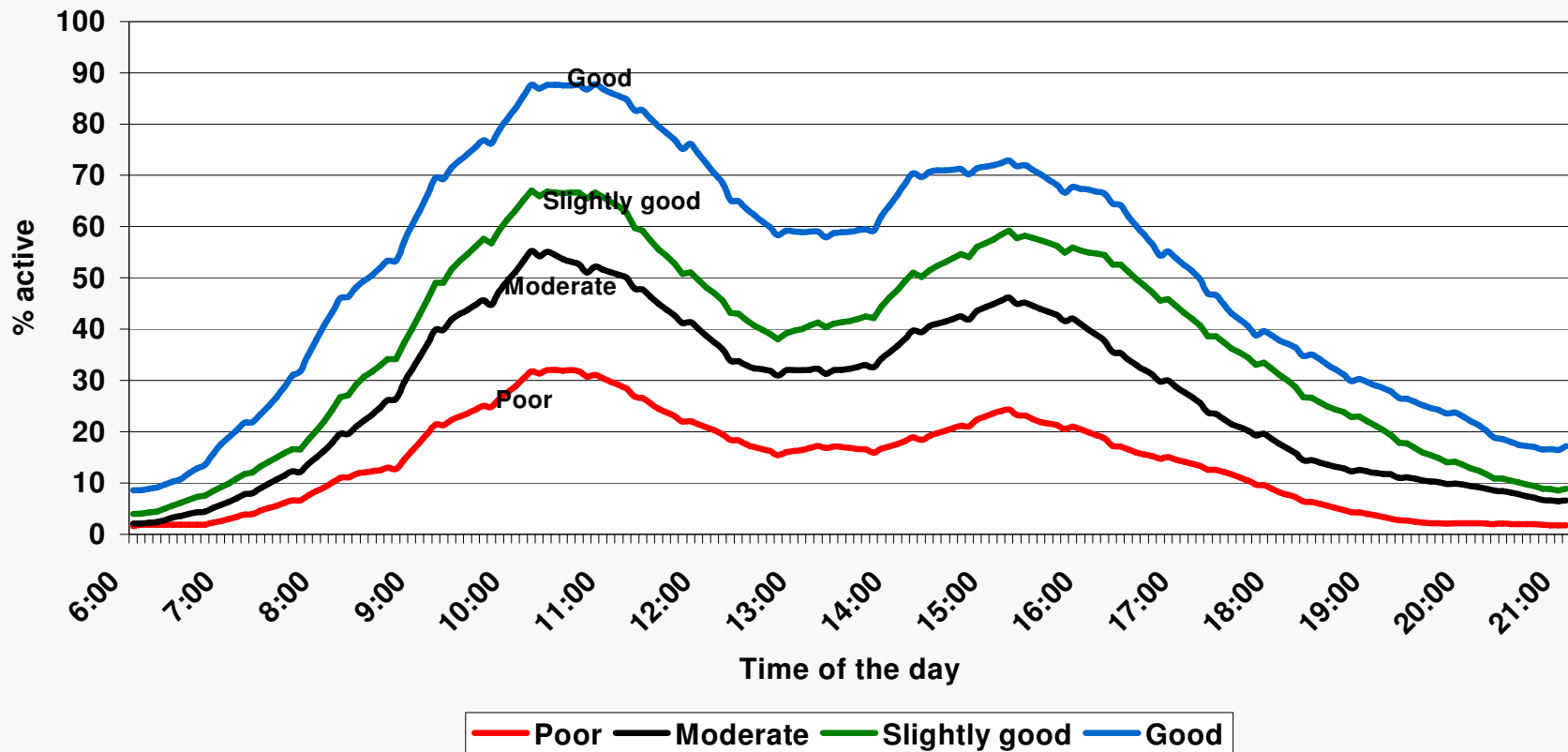
Variable (M)	Finland		Germany East		Germany West		Hungary		Italy		The Netherlands	
	urban	rural	urban	rural	urban	rural	urban	rural	urban	rural	urban	rural
<b>Total</b>	1.4	1.2***	0.9	0.9	0.9	1.0	0.9	0.6***	1.2	1.1	0.8	0.5***
<b>Use of car</b>												
no car	1.1	0.9	0.8	0.8	0.7	0.7	0.9	0.6	0.8	0.8	0.7	0.3
passengers	1.3	1.1	1.0	0.6	0.8	0.9	0.7	0.6	0.8	0.8	0.7	0.7
drivers	1.7	1.5	1.0	1.1	1.1	1.2	1.0	0.6	1.5	1.5	0.9	0.6

Means; N=3934 respondents; urban/rural differences \*\* p<.01; \*\*\* p<.001; based on diaries.



# Impact of individual conditions

Groups of elderly people with different health conditions active out of the home



# Use of transport modes in five European countries

	Finland	Germany East	Germany West	Hungary	Italy	Nether- lands	Total
On foot	38	50	54	67	40	32	46
car (as driver)	31	22	30	6	42	30	28
car (as passenger)	14	12	7	4	15	13	11
bus	3	4	1	16	4	8	5
tram	-	2	2	-	-	-	1
special service	3	2	1	0	2	2	2
taxi	1	0	0	0	0	0	0
bicycle	15	11	8	17	1	15	10
<b>Total trips N =</b>	<b>3353</b>	<b>2963</b>	<b>3117</b>	<b>1750</b>	<b>2974</b>	<b>1666</b>	<b>15824</b>

Percentages; N = 3934 respondents.



## Main transport modes in five European countries (%)

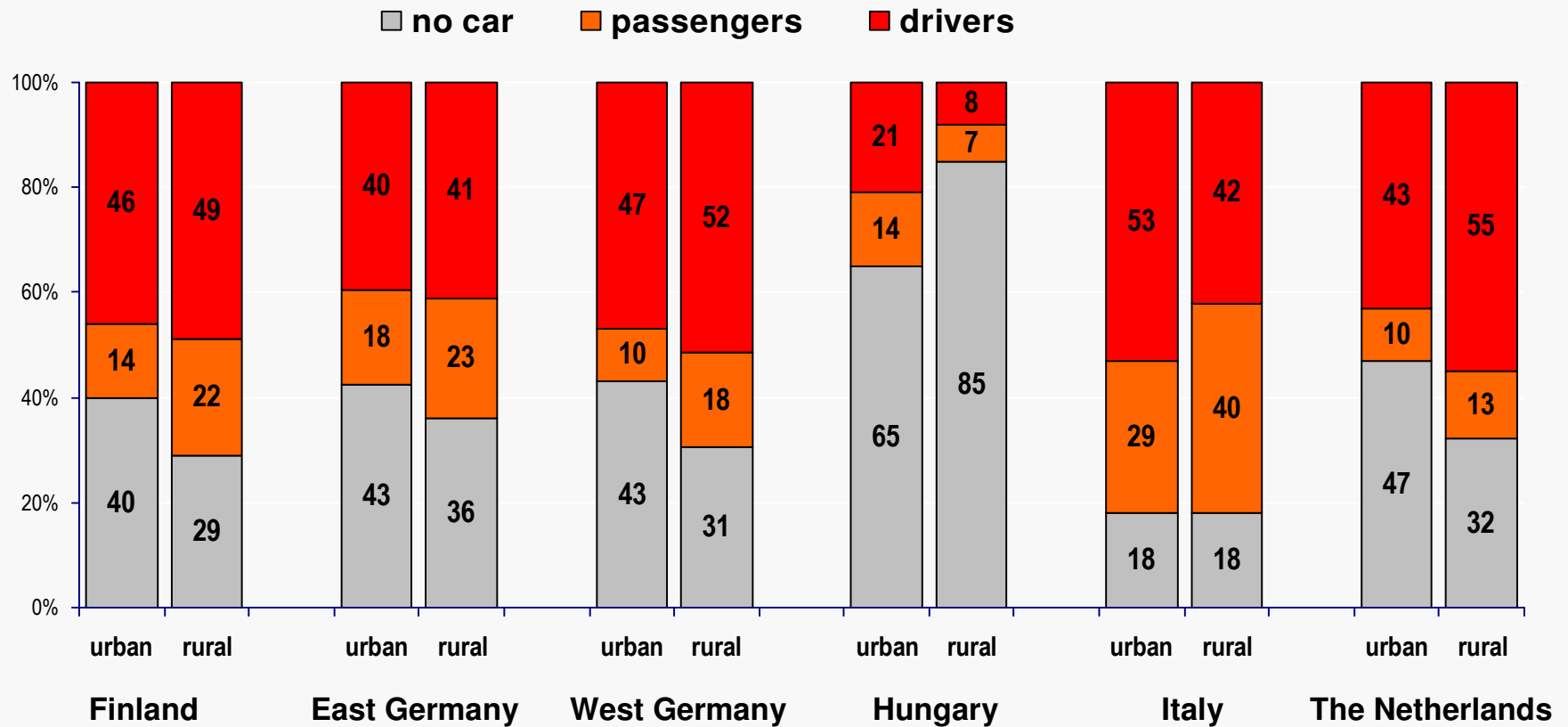
	Urban areas				Rural areas			
	55-74		75+		55 -74		75+	
	Men	Women	Men	Women	Men	Women	Men	Women
Public transport	8	15	13	18	5	3	8	4
Car	48	28	27	17	51	34	33	26
Bicycle	8	9	6	3	13	16	13	9
On foot	37	48	54	62	30	47	46	60
N Trips	1506	1674	270	471	1494	1363	264	336

Mobility Diary 2000

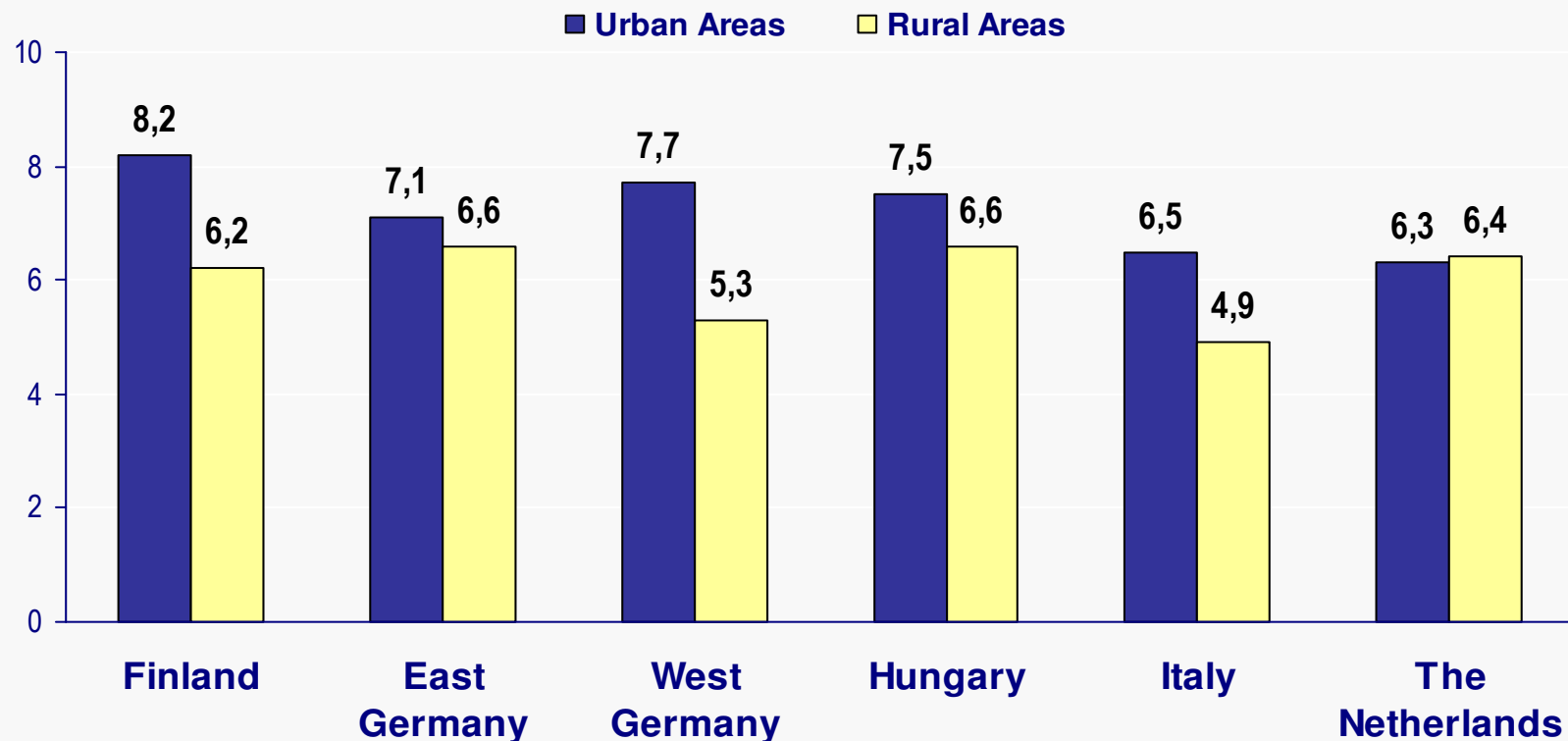


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# Differing conditions in EU: Availability and use of a car



# Satisfaction with public transport



Subjective rating (0=very unsatisfied ; 10=very satisfied; means).



# Satisfaction with Public Transport

	Urban		Rural	
	Men	Women	Men	Women
<b>Finland</b>	8,1	8,4	6,3	6,2
<b>Germany East</b>	6,8	7,4**	6,6	6,6
<b>Germany West</b>	7,4	7,9*	5,4	5,2
<b>Hungary</b>	7,4	7,6	6,7	6,6
<b>Italy</b>	6,5	6,4	5,2	4,7
<b>Netherlands</b>	6,0	6,6*	6,3	6,5

Subjective rating (0=very unsatisfied ; 10=very satisfied; means).

Differences of satisfaction between men and women: \*=p<.01\*\*=p<0.01.



## Satisfaction with possibilities to be mobile

	Urban		Rural	
	Men	Women	Men	Women
<b>Finland</b>	8,9**	8,3	8,3	8,0
<b>Germany East</b>	7,7	7,5	7,8	7,5
<b>Germany West</b>	8,1	7,6	7,7	7,5
<b>Hungary</b>	8,0	7,9	6,4	5,7
<b>Italy</b>	8,7**	7,7	7,8**	6,4
<b>Netherlands</b>	7,8	7,3	7,9	7,7

Subjective rating (0=very unsatisfied ; 10=very satisfied; means).

Differences of satisfaction between men and women: \*=p<.01\*\*=p<0.01.



# Satisfaction with possibilities to be mobile

## **Main predictors of satisfaction with mobility**

**based on a multiple regression analysis,  
including both individual and environmental resources**  
(age, sex, household size, physical mobility, availability and use of car,  
use of public transportation and satisfaction with public transportation)

- **satisfaction with public transportation**
- **physical mobility**
- **ability to actively drive a car.**



## Differing conditions in European regions

- **Satisfaction with mobility possibilities is highest in the Finnish urban area and lowest in the Hungarian rural area.**
- **People are generally less satisfied with public transportation in rural than in urban areas (especially in Italy and western Germany).**
- **The car is more widespread in rural than in urban areas (exception: Hungary).**
- **Italy has the highest, Hungary the lowest proportion of car owners.**

**What impact do these differing conditions have on older adults' out-of-home activities and satisfaction with their possibilities to participate in activities?**



# 5 Characteristic Categories of Activities

## Social Out-of-home Activities

- Meeting friends and relatives
- Going to a café, bar, or restaurant
- Dancing, bowling
- Visiting church, religious events
- Activities in clubs or associations
- Activities for retired people
- Voluntary or charity work

## Physical Activities

- Going out for a walk, strolling through town
- Hiking, riding a bicycle
- Gardening
- Actively pursuing sports
- Watching sporting events (not TV)
- Fishing
- Picking berries and mushrooms

## Social Indoor Activities

- Receiving visits
- Talking on the telephone

## Home Activities

- Watching TV
- Just being cosy at home
- Reading, solving riddles
- Do-it-yourself, handicrafts
- Surfing the Internet
- Playing computer games

## Cultural Activities

- Visiting theatre, concerts, cinema
- Visiting library
- Further education
- Artistic activities

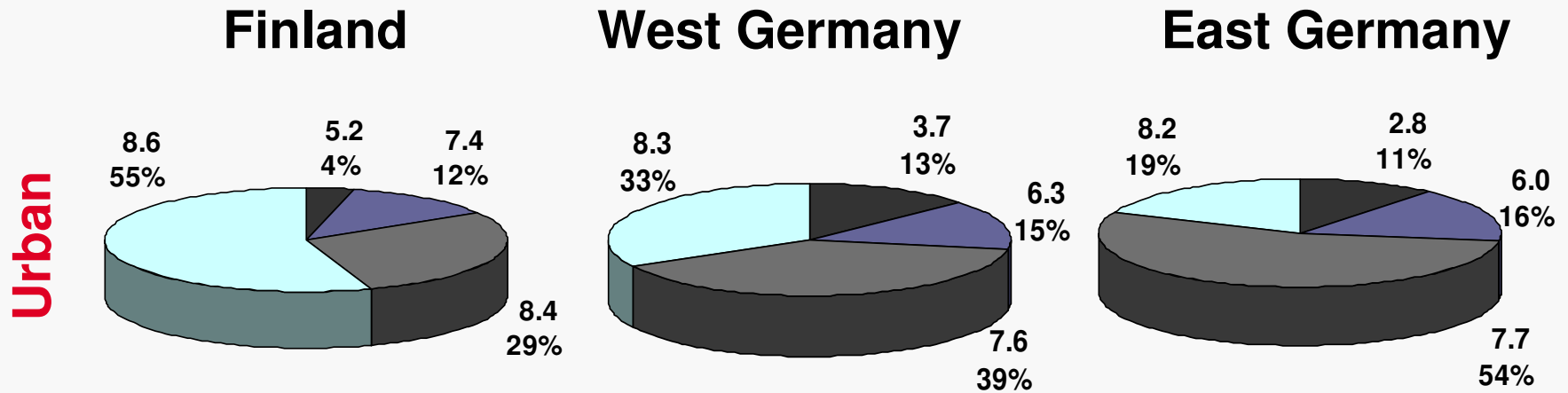


## Range of activities (Means)

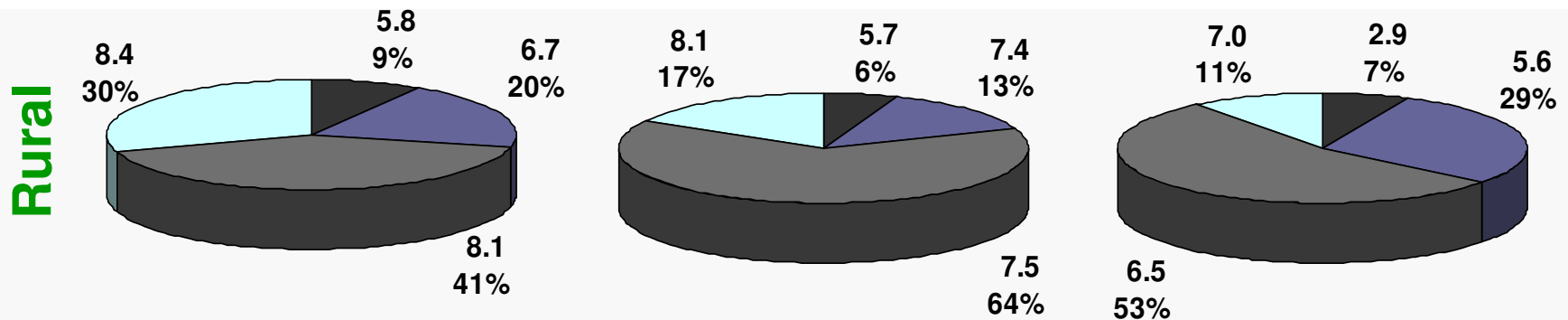
	Finland	West Germany	East Germany	Hungary	Italy
Social out-of-home activities (0-7)	2.1	2.2	1.3	1.3	1.6
Social indoor activities (0-2)	1.2	1.4	1.4	1.1	0.8
Other home activities (0-6)	2.6	2.4	2.5	2.7	2.3
Physical activities (0-7)	2.5	1.8	2.0	1.2	1.3
Cultural activities (0-4)	1.0	0.4	0.2	0.2	0.2
<b>Total activities performed (% of all activities asked for in the respective country)</b>	<b>32</b>	<b>30</b>	<b>24</b>	<b>17</b>	<b>18</b>



# Satisfaction with leisure possibilities by range of activities (1)



■ Home activities only   ■ Home + 1 further category   ■ Home + 2 further categories   □ Home + 3 further categories

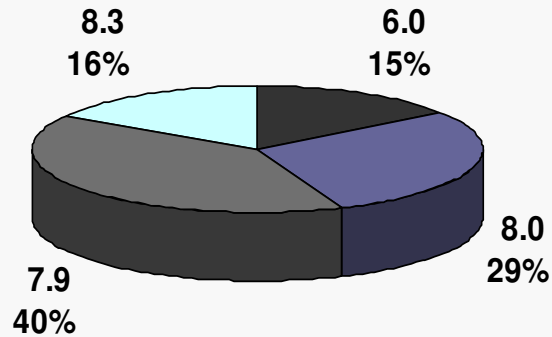


Subjective rating (0=not satisfied at all, 10=very satisfied).

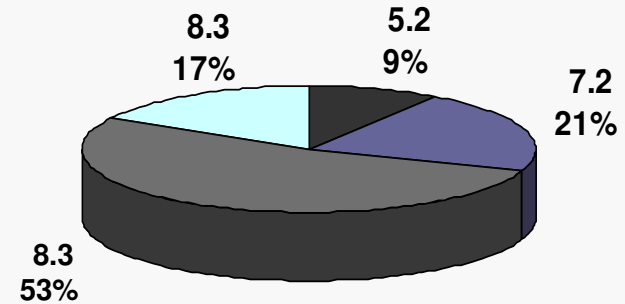
# Satisfaction with leisure possibilities by range of activities (2)

Urban

## Hungary

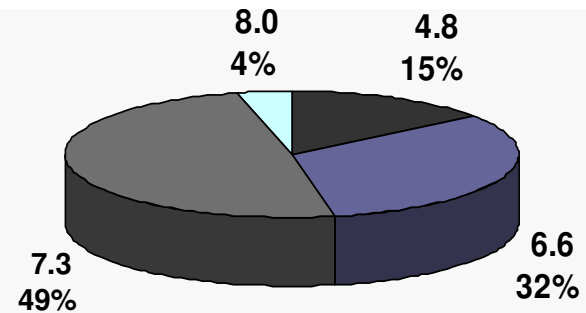
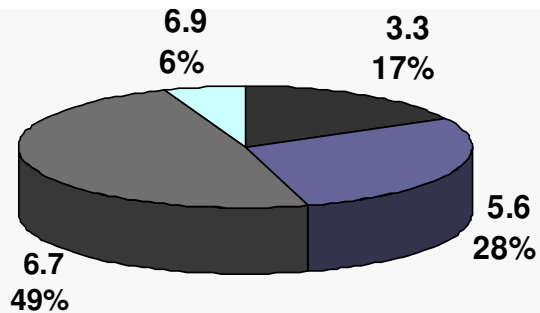


## Italy



Home activities only
  Home + 1 further category
  Home + 2 further categories
  Home + 3 further categories

Rural



Subjective rating (0=not satisfied at all, 10=very satisfied).

## Satisfaction with different ranges of activities

	Finland	Germany (West)	Germany (East)	Hungary	Italy
	Urban / rural	Urban / rural	Urban / rural	Urban / rural	Urban / rural
Home activities only	5.2 5.8	3.7 5.7	2.8 2.9	6.0 3.3	5.1 4.8
Home + 1 further category	7.4 6.7	6.3 7.3	6.0 5.6	8.0 5.6	7.2 6.6
Home + 2 further categories	8.4 8.0	7.6 7.5	7.7 6.5	7.9 6.7	8.3 7.3
Home + 3 further categories	8.6 8.4	8.3 8.0	8.2 7.0	8.3 7.0	8.3 8.0
Overall satisfaction	8.4 7.8	7.3 7.5	7.0 6.1	7.8 5.9	7.8 6.8
Wish for more activities (%)	41 28	20 14	24 17	26 9	42 22

Satisfaction with leisure time possibilities was assessed on an 11-point rating scale (0=not satisfied at all, 10=very satisfied).



# Satisfaction with possibilities to be mobile

## **Main predictors of satisfaction with participation in leisure activities**

**based on a multiple regression analysis,  
including both individual and environmental resources**  
(age, sex, household size, activities of daily living (ADL), income, availability and use of car, and satisfaction with public transport)

- **functional health (ADL)**
- **satisfaction with public transport.**



# Predicting satisfaction with leisure activities

Linear regression model Simultaneous inclusion SAS 9.1	Finland		West Germany		East Germany		Hungary		Italy	
	Stand. beta	Semi-partial r <sup>2</sup>	Stand. beta	Semi-partial r <sup>2</sup>	Stand. beta	Semi-partial r <sup>2</sup>	Stand. beta	Semi-partial r <sup>2</sup>	Stand. beta	Semi-partial r <sup>2</sup>
<b>Region (1=rural)</b>			<b>0.23</b>	<b>4.2***</b>	<b>- 0.14</b>	<b>1.6***</b>	<b>- 0.16</b>	<b>2.1***</b>	<b>- 0.08</b>	<b>0.6*</b>
<b>Age</b>					<b>0.13</b>	<b>1.4***</b>				
<b>Gender (1=female)</b>	<b>0.10</b>	<b>0.6*</b>	<b>0.09</b>	<b>0.6*</b>						
<b>Living alone</b>					<b>0.09</b>	<b>0.5*</b>			<b>- 0.12</b>	<b>1.0**</b>
<b>ADL <sup>1</sup></b>	<b>- 0.39</b>	<b>10.4***</b>	<b>- 0.29</b>	<b>5.3***</b>	<b>- 0.39</b>	<b>10.8***</b>	<b>- 0.33</b>	<b>9***</b>	<b>- 0.44</b>	<b>11.8***</b>
<b>Income (net p.p.)</b>									<b>0.11</b>	<b>1.1**</b>
<b>Car availability - as passenger</b>									<b>0.16</b>	<b>1.2**</b>
<b>- as driver</b>			<b>0.1</b>	<b>0.6*</b>	<b>0.19</b>	<b>2.2***</b>				
<b>Satisfaction with public transport <sup>2</sup></b>	<b>0.21</b>	<b>3.6***</b>	<b>0.36</b>	<b>10.6***</b>	<b>0.30</b>	<b>8.1***</b>	<b>0.19</b>	<b>3.1***</b>	<b>0.17</b>	<b>2.5***</b>
<b>Adjusted R<sup>2</sup></b>	<b>0.18</b>		<b>0.27</b>		<b>0.38</b>		<b>0.24</b>		<b>0.28</b>	



<sup>1</sup> Problems related to 10 selected activities of daily living (higher scores indicating higher impairment).

<sup>2</sup> Subjective rating (0=very unsatisfied ; 10=very satisfied; means).

## Reasons hindering out-of-home participation (%)

	Finland		Germany West		Germany East		Hungary		Italy	
	urban	rural	urban	rural	urban	rural	urban	rural	urban	rural
General health reasons	25	34	57	51	37	58	49	42	33	43
Relatives and friends live too far away No opportunities available	25	38	14	19	8	17	25	37	13	8
No one to go with Care for a family member	10	14	14	14	20	20	22	7	20	20
No time	26	12	13	16	17		10	18	40	30
Too expensive	9	14	6	12	23	11	33	32		6
No car Bad connections Difficulty using public transport		9		7		17	5	7		
Feels too old Difficulty sitting				7		10	10	4	5	10
							7			



Only persons who would like to take part in more outdoor activities (N=879).

# Predictors of Subjective Well-Being: Positive Affect

	Finland	Netherlands	Germany	Hungary	Italy
	Stand. β-weights	Stand. β-weights	Stand. β-weights	Stand. β-weights	Stand. β-weights
<b>Region</b> (1=urban; 2=rural)			-0.23***	0.12**	
East/West (1=East/2=West)					
<b>Age</b>	-0.30***		-0.09***		-.23***
<b>Gender</b> (1=male; 2=female)		0.10**		0.08*	
<b>Diversity of network</b>			0.15***	0.13**	
<b>Satisfaction with health</b> <sup>1</sup>	0.13**		0.11***	0.13**	0.11**
<b>Satisfaction with income</b> <sup>1</sup>		0.09*			
<b>Satisfaction with leisure activities</b> <sup>1</sup>	0.09*	0.09*		0.17***	0.28***
<b>Wish for more outdoor activities?</b> (0=no; 1=yes)					0.09*
<b>Importance of being out</b> <sup>2</sup>	0.09*		0.09***	0.18***	
<b>Options of transport modes</b> <sup>3</sup>	0.13**				
<b>Options of outdoor activities</b> <sup>4</sup>	0.19***	0.19**	0.32***	0.18***	0.19***
<b>Actual mobility</b> <sup>5</sup>			0.13***	0.12**	
<i>N</i>	565	535	1438	491	597
<b>Model r<sup>2</sup></b>	<b>0.4101</b>	<b>0.1569</b>	<b>0.3817</b>	<b>0.3077</b>	<b>0.4184</b>

MOBILATE Survey 2000; MOBILATE Diary 2000; \*= $p < 0.05$ , \*\*= $p < 0.01$ , \*\*\*= $p < 0.001$

<sup>1</sup> Self-evaluation rating on an 11-point rating scale, higher scores indicating higher satisfaction

<sup>2</sup> Self-evaluation rating on an 11-point rating scale, higher scores indicating higher importance

<sup>3</sup> Sumscore ranging from 0 (no transport mode used, respondent is immobile) to 13 (all transport modes are used)

<sup>4</sup> Standardized sumscore ranging from 0 (no outdoor activity pursued) to 1 (all asked outdoor activities pursued)

<sup>5</sup> Mean number of trips per person and day.

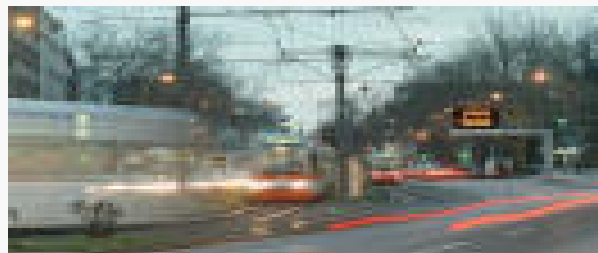


## Conclusions (1)

- Personal as well as environmental conditions play an important role in maintaining social participation in old age.
- Conditions differ substantially between European regions.
- Activities are more frequent in urban than in rural areas (except for the West German areas).
- Older adults who (can) pursue a broad range of activities are more satisfied than those who can only take part in a limited range.
- **Good public transportation and access to a car can, to a certain degree, compensate for declining abilities and help overcome barriers.**



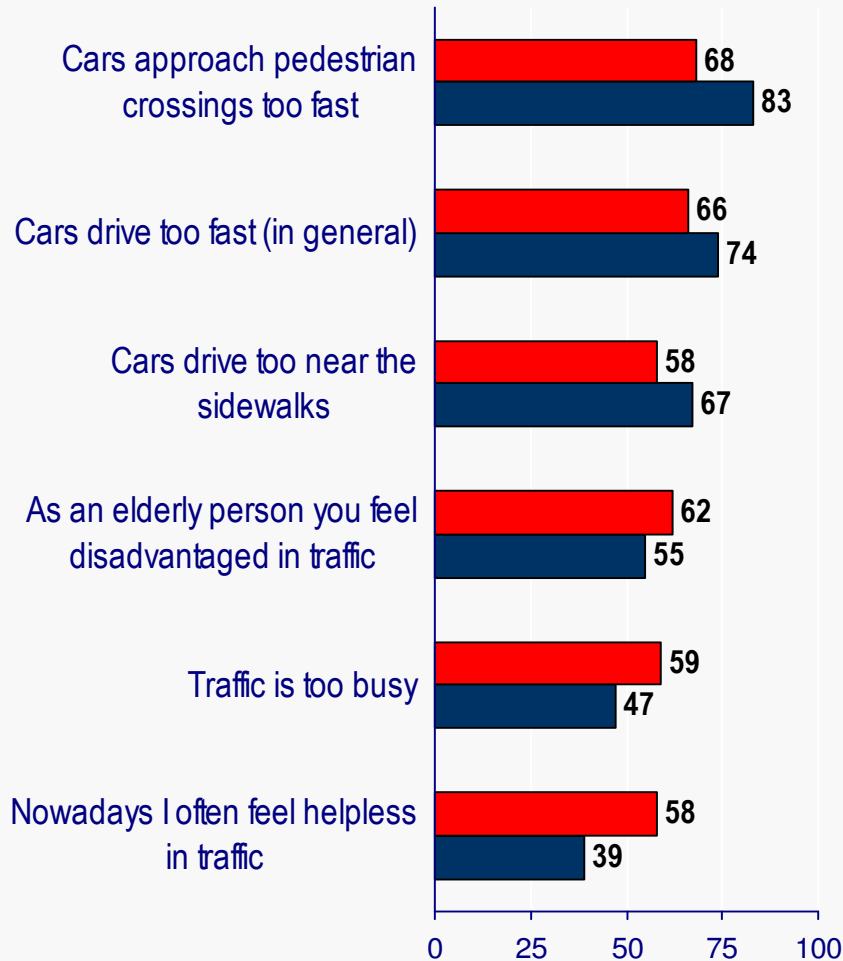
# The main obstacles for older people's out-of-home mobility



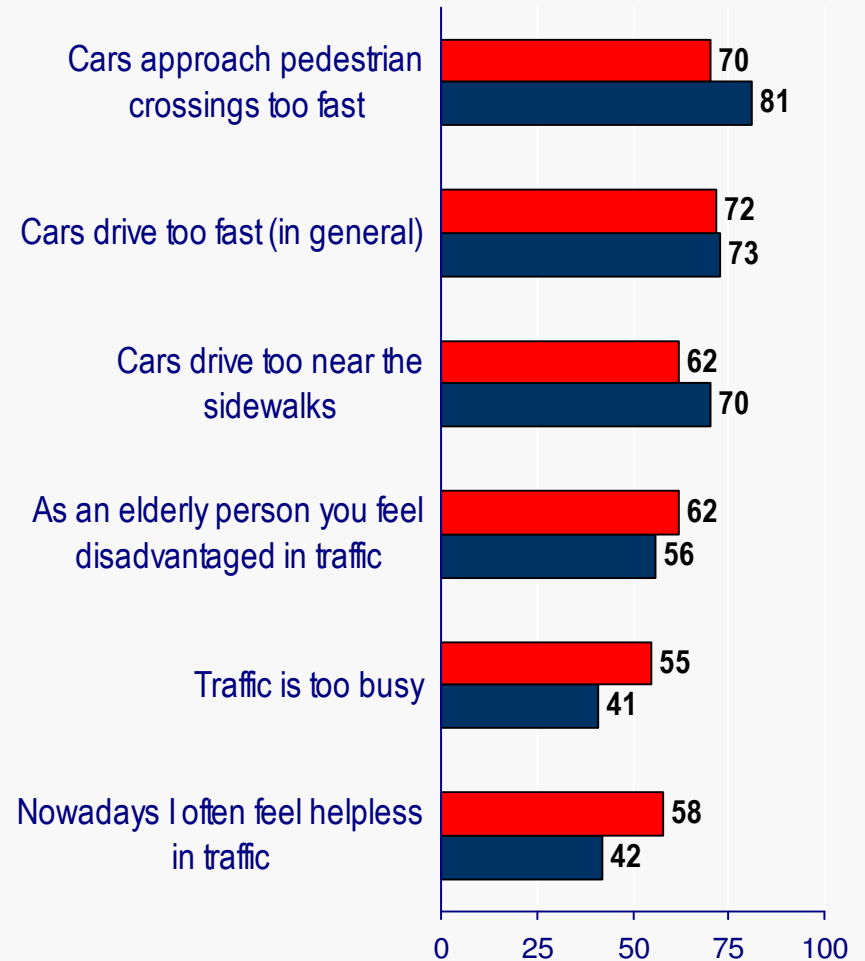
# Conditions that promote or hinder outdoor mobility (%)

## Urban areas

■ constraints  
■ no constraints

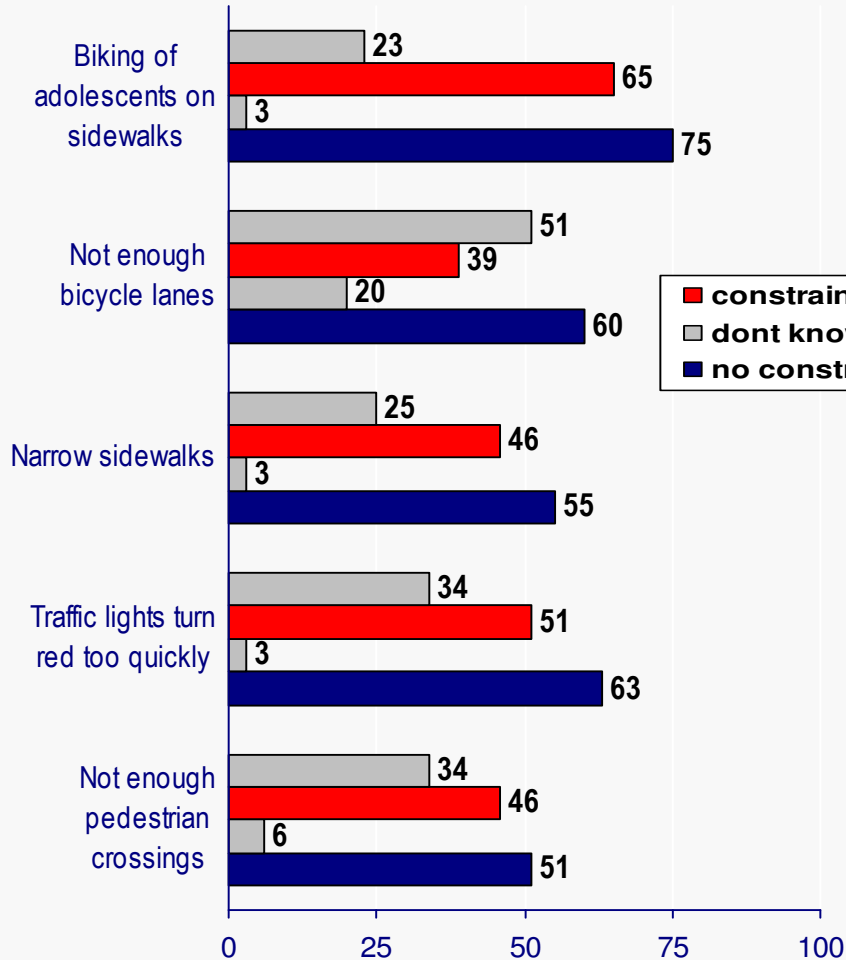


## Rural areas

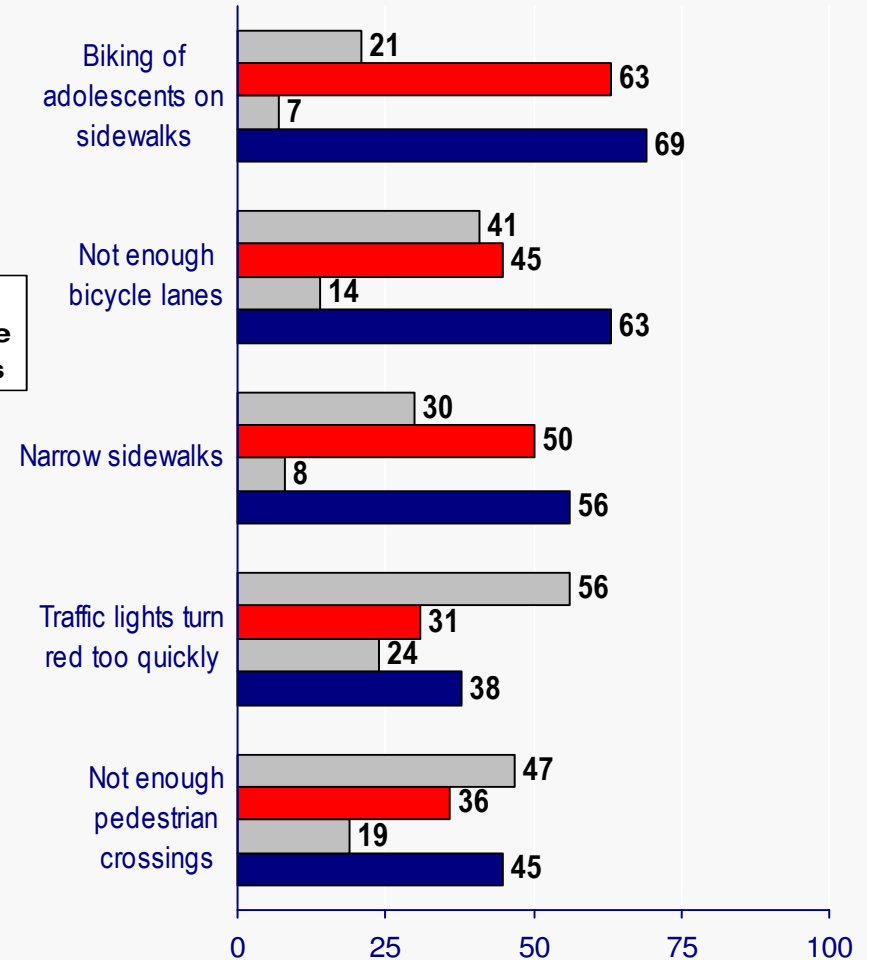


# Conditions that promote or hinder outdoor mobility (%)

## Urban areas

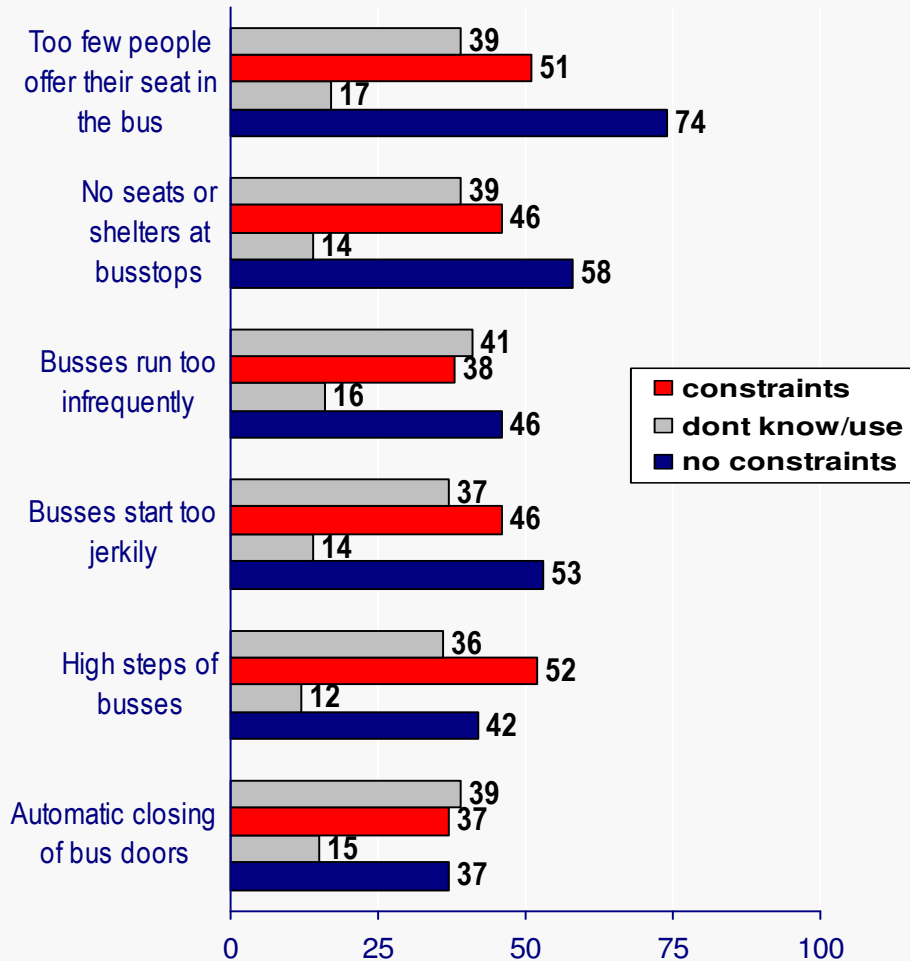


## Rural areas

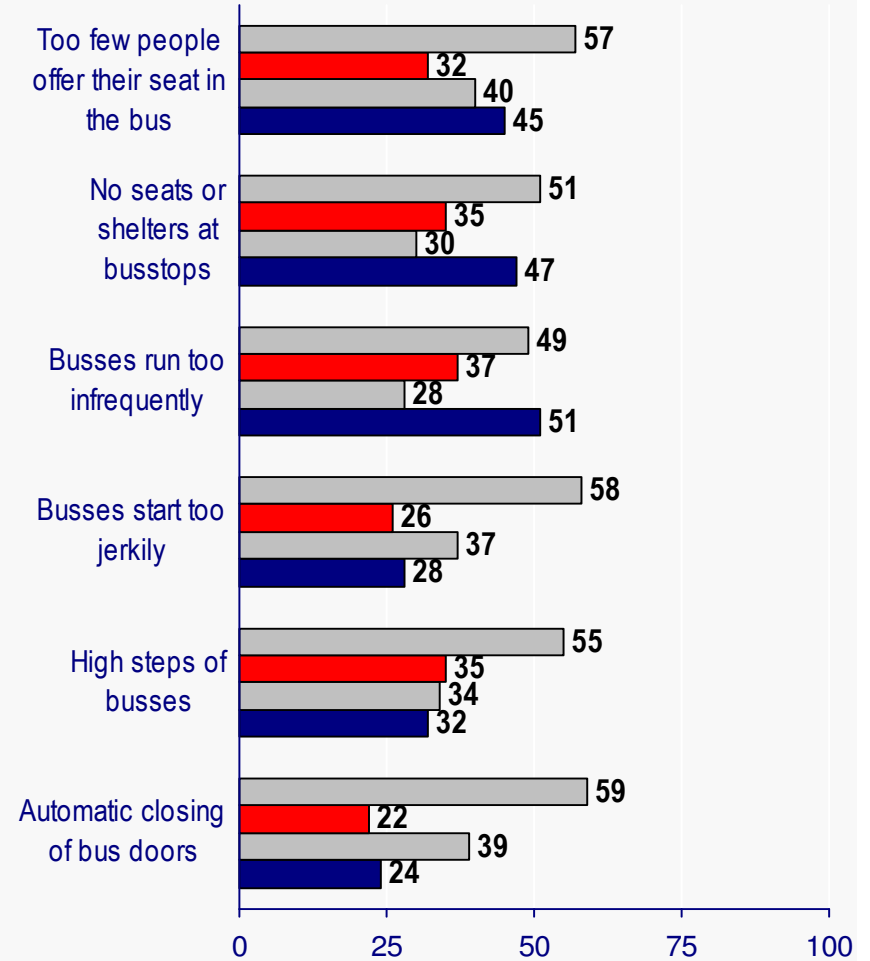


# Conditions that promote or hinder outdoor mobility (%)

## Urban areas



## Rural areas



# Hindrances related to Public transport

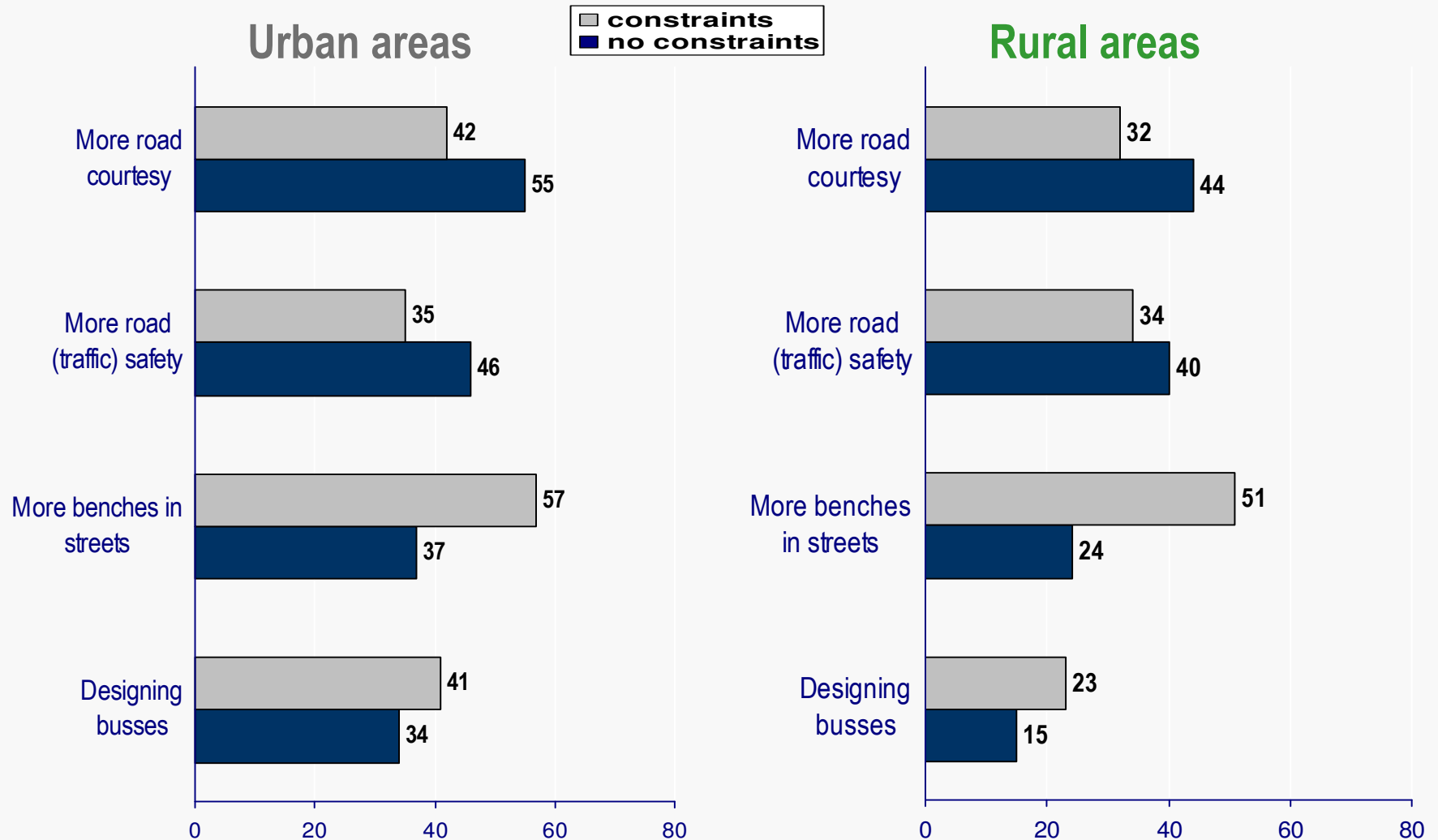
- Too few people offer their seat in the bus (74% / **51%** [39%])
- No seats or shelters at busstops (58% / **46%** [39%])
- Busses start and drive too jerkily (53% / **46%** [37%])
- Busses run too infrequently (46% / **38%** [41%])
- High steps of busses (42% / **52%** [36%])

[ ] = don't know / don't use (any more)

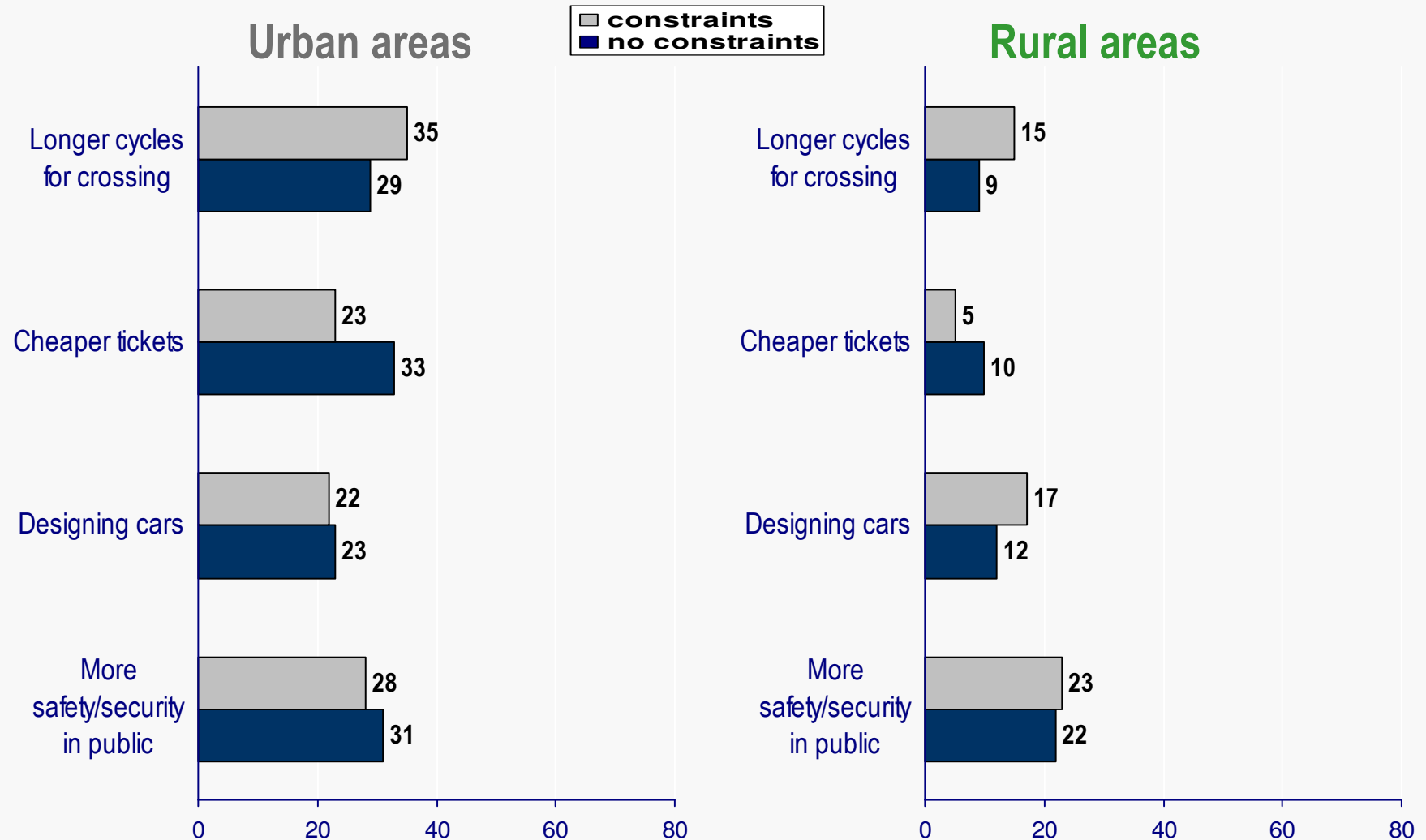
**Red: people with constraints**



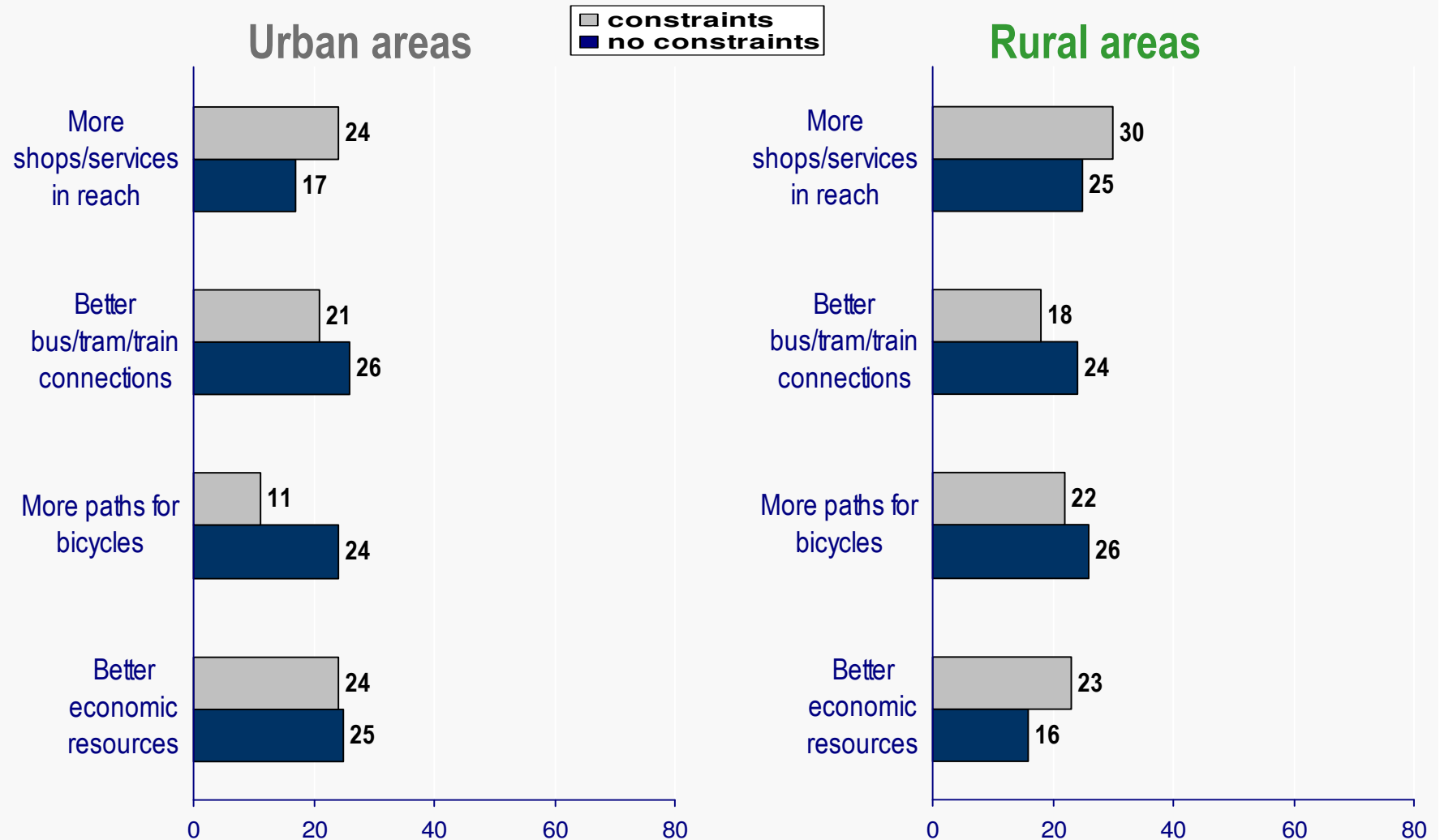
# Improvements felt personally important (%)



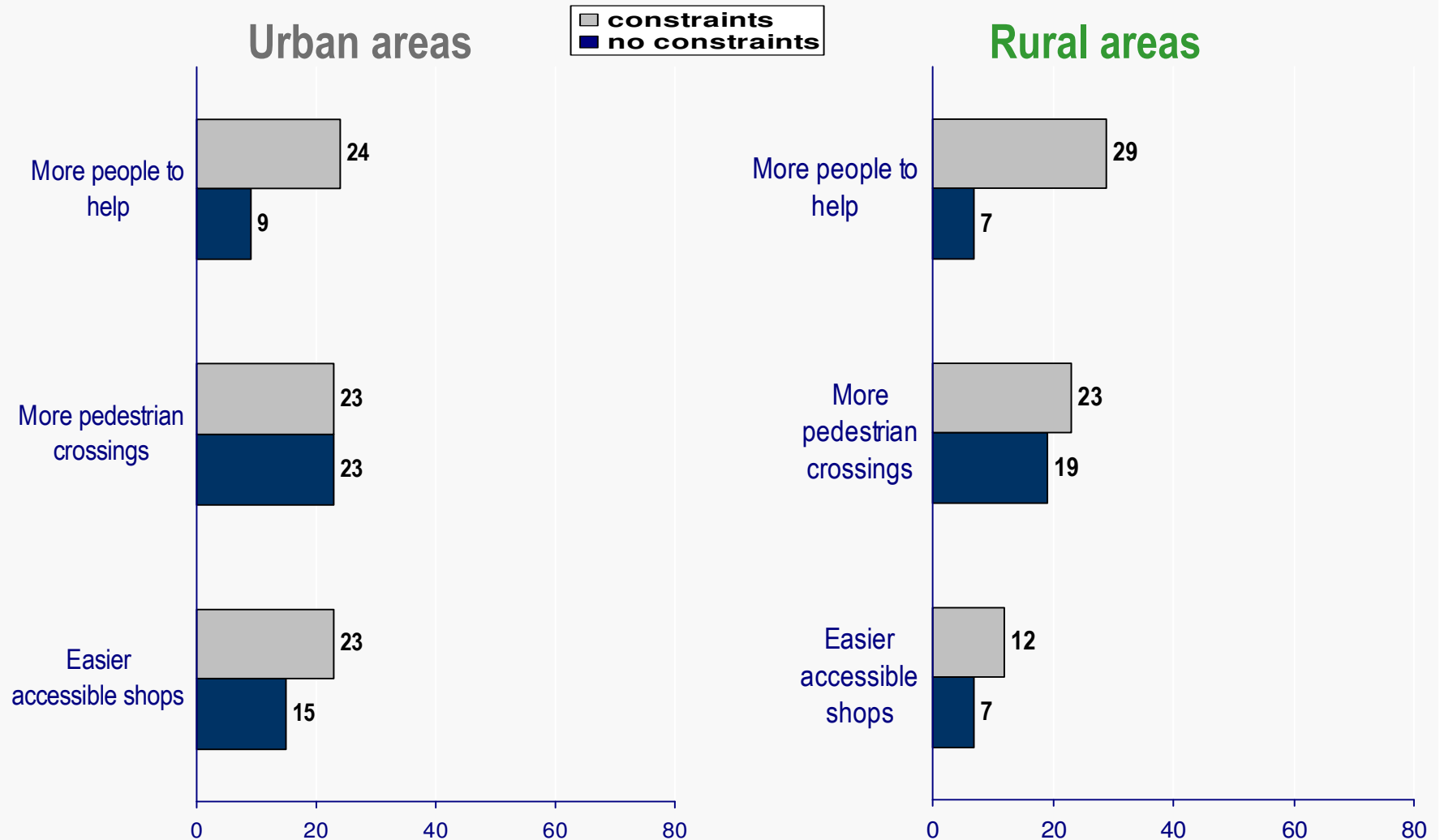
# Improvements felt personally important (%)



# Improvements felt personally important (%)

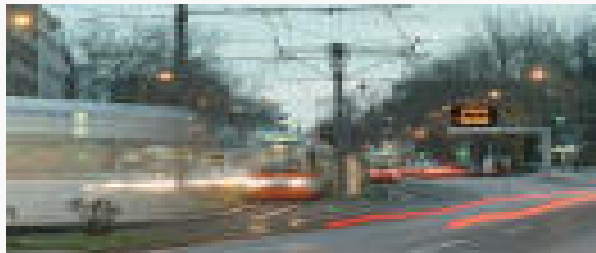


# Improvements felt personally important (%)



## Conclusions (2)

- There are 2 types of environmental obstacles to outdoor mobility:
  - spatial and technological barriers
  - impediments caused by a lack of mutual consideration, the hectic pace of traffic, and feared hazards in public spaces.



**Need of integrating  
transport policy and urban and social planning.**



# The Meaning of Outdoor Mobility in Old Age

## Mobility as a basic emotional experience

Examples: **"Joy!"** (Germany) -

**"It's everything, it's life!"** (Italy)

## Mobility as movement per se, as a basic human need

**"It is absolutely that a person walks and hikes!"** (Finland)

**"A person has to move and I feel good when I do!"** (Germany)

## Mobility as movement in and observation of nature

**"I am walking with my dog in the forest ... However, slowly it goes, but I support me by grasping the branches of trees and enjoying the peaceful nature."** (Finland)

**"I have to get out, have to know what is going on in nature."** (Germany)

# The Meaning of Outdoor Mobility in Old Age

## Moving around as a social need

*"It's nourishing being with others, it gives me an added boost." (Italy)*

*"Still being able to take part in social life." (Germany)*

*"So that I don't get lonely." (Germany)*

## Mobility as an expression of personal autonomy

*"To be mobile means to me contact to the outer world ... And that I can manage by myself all the things needed." (Finland)*

*"You feel free to get around as you like." (Italy)*

*"Being able to go out any time I want." (Germany)*

# The Meaning of Outdoor Mobility in Old Age

## Mobility as a source of stimulation and diversion

*"I am afraid nothing as much as that I have to look out of the window. Preferably, I would go up to the clouds, if things should take such a turn." (Finland)*

*"I like going out, you can pass your time away now that there's more of it."  
(Italy)*

*"Experiencing something else, not going to seed." (Germany)*

## Mobility as a reflective expression of the life force one still has

*"Proof that I'm still a human being like anyone else." (Germany)*

*"The last bit of freedom." (Germany)*

## Conclusions (3)

- **High significance of out-of-home mobility and leisure activities in modern society** (besides basic health and economic aspects)

- **The decline of outdoor mobility in old age is not an entirely voluntary retreat from the world.**

⇒ **Ensuring them opportunities for participation in their social, built-up, and natural environments**

- despite physical handicaps,
- despite possible financial constraints,
- despite social barriers, and
- despite technological and spatial barriers

**would thus greatly contribute to their social participation and, by this, quality of life and well-being.**



# Conclusions

**Need of integrating  
transport policy and urban and social planning  
means among other things:**

- ➔ **providing fully accessible public transport options**
- ➔ **readily accessible shops and services  
within easy reach,**
- ➔ **reducing traffic volume, speed and density**
- ➔ **applying differentiated interventions**  
(stimulation, training, social services, accompanying measures)
- ➔ **and mutual consideration among all traffic participants.**



**Thank you for your attention!**

**For further information please contact**

[heidrun.mollenkopf@web.de](mailto:heidrun.mollenkopf@web.de)

<http://www.psychologie.uni-heidelberg.de>

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