

The concept of work ability and the opportunities for employees with chronic complaints or diseases

- ▶ Prof. Juhani Ilmarinen
- ▶ Centrum Werk Gezondheid: Masterclass Work, Workability and Chronically Ill
- ▶ Utrecht, Dutch Federation of Cancer Patient Organizations, February 15, 2012

30 years of Work Ability 20 years of Age Management

Work Ability

1980 -1989 Evolution, longitudinal research

1990 - 1999 Conceptualisation and Implementation

2000 – 2009 Internationalisation

Age Management

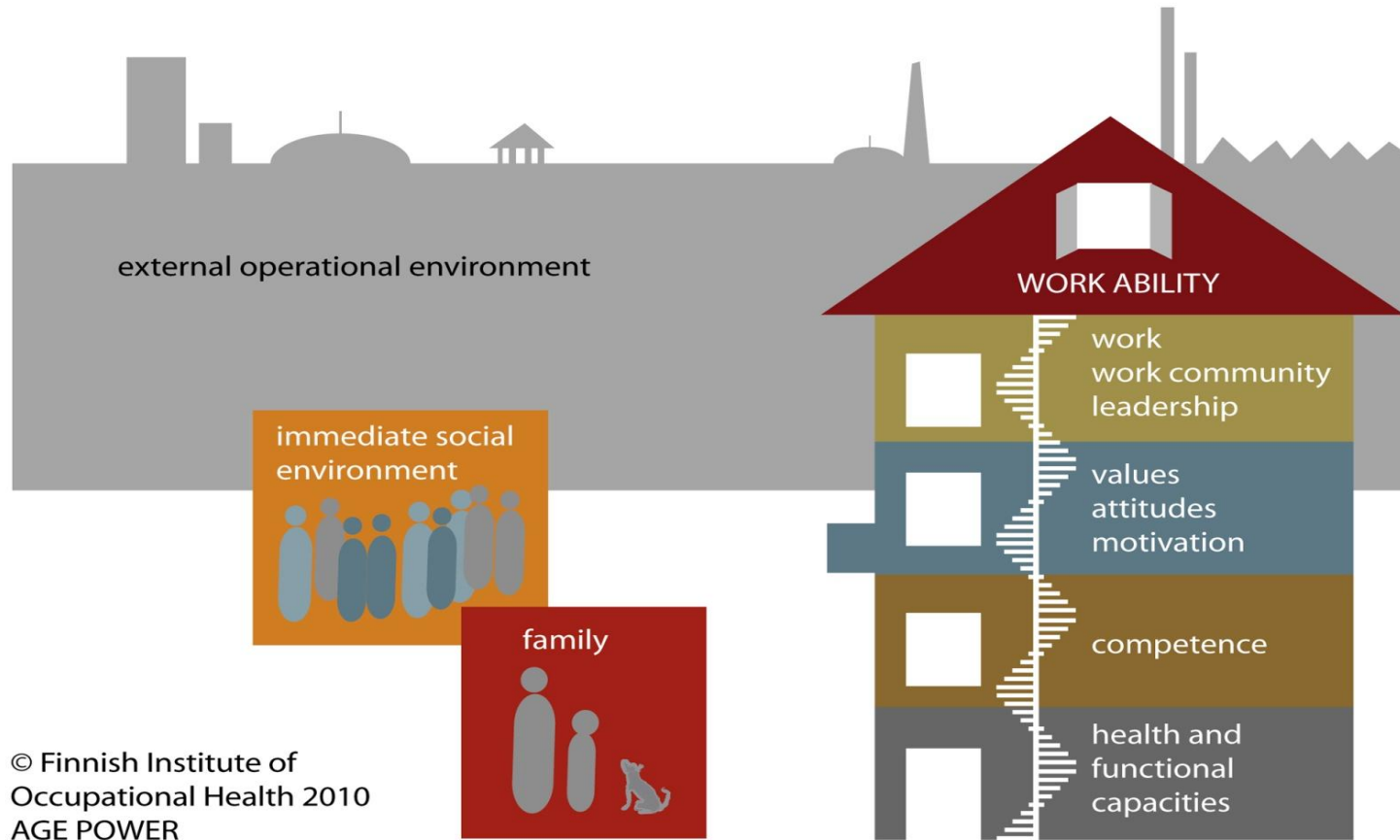
1990 - 1999 Responses to Research, Conceptualisation, Training

2000 – 2009 Case studies, Good practices, Typologies

History of Work Ability 1980s in Finland

- ▶ Demographic challenge of Finland 1980s
- ▶ High rates of work disability and early retirement
- ▶ **How long can people work? What is the right retirement age?**
- ▶ **How to measure the abilities to work during ageing?**
- ▶ FIOH: Positive approach - measuring work ability instead of disability for work
- ▶ New method : Work Ability Index (WAI)
- ▶ **Longitudinal study of municipal employees (1981 – 1985 – 1992 – 1997 and 2009)**
- ▶ Result: working alone does not prevent the work ability from declining
- ▶ **Management had strongest effect on Work Ability**
- ▶ Agreement of social partners in 1989: Maintaining of Work Ability

Work ability model

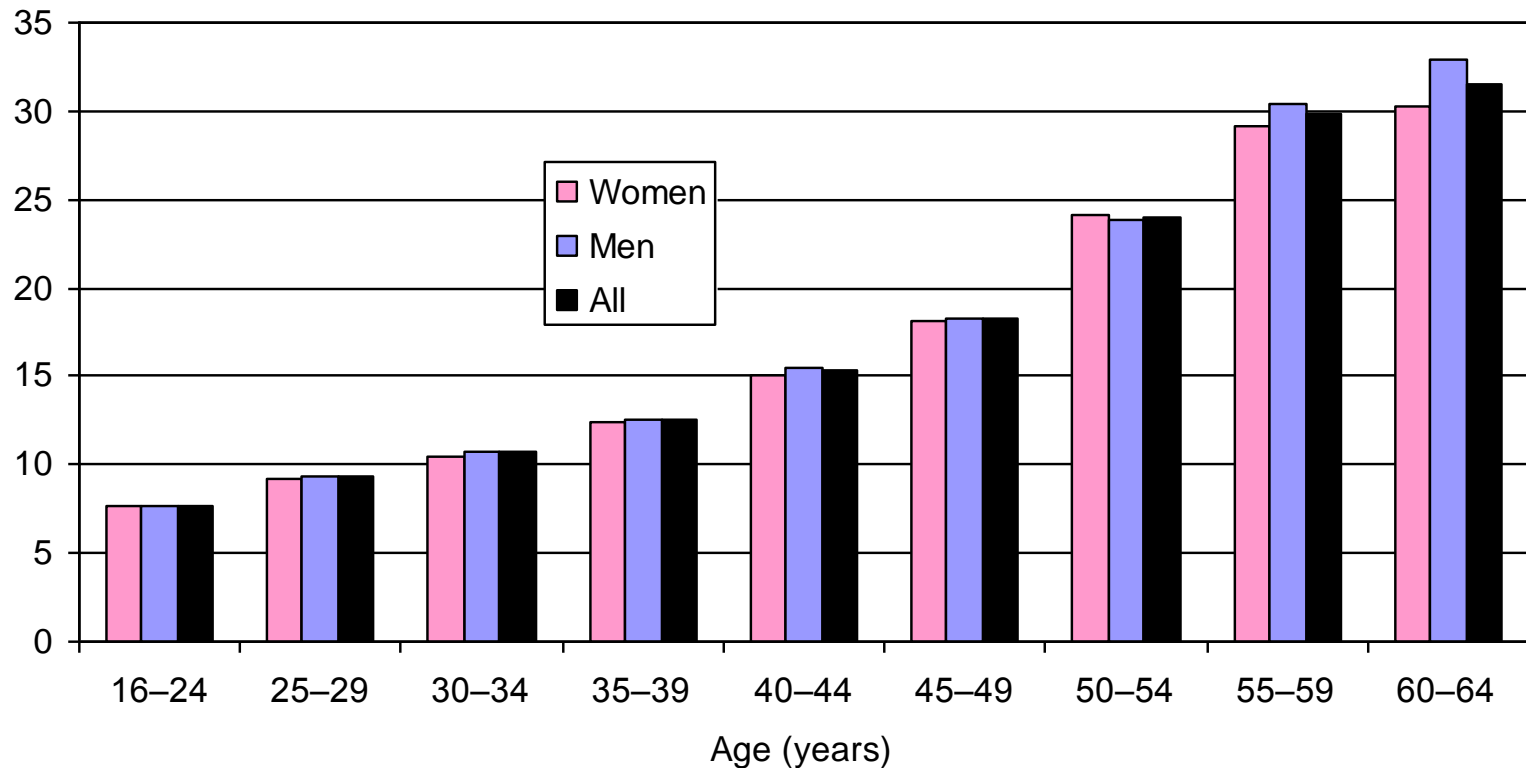


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Ageing and health

► EU15

Long term health problem or disability in EU15 by age group and gender



Source: Dupre ja Karjalainen 2003.

Research with WAI and health/disease

Work Ability Index

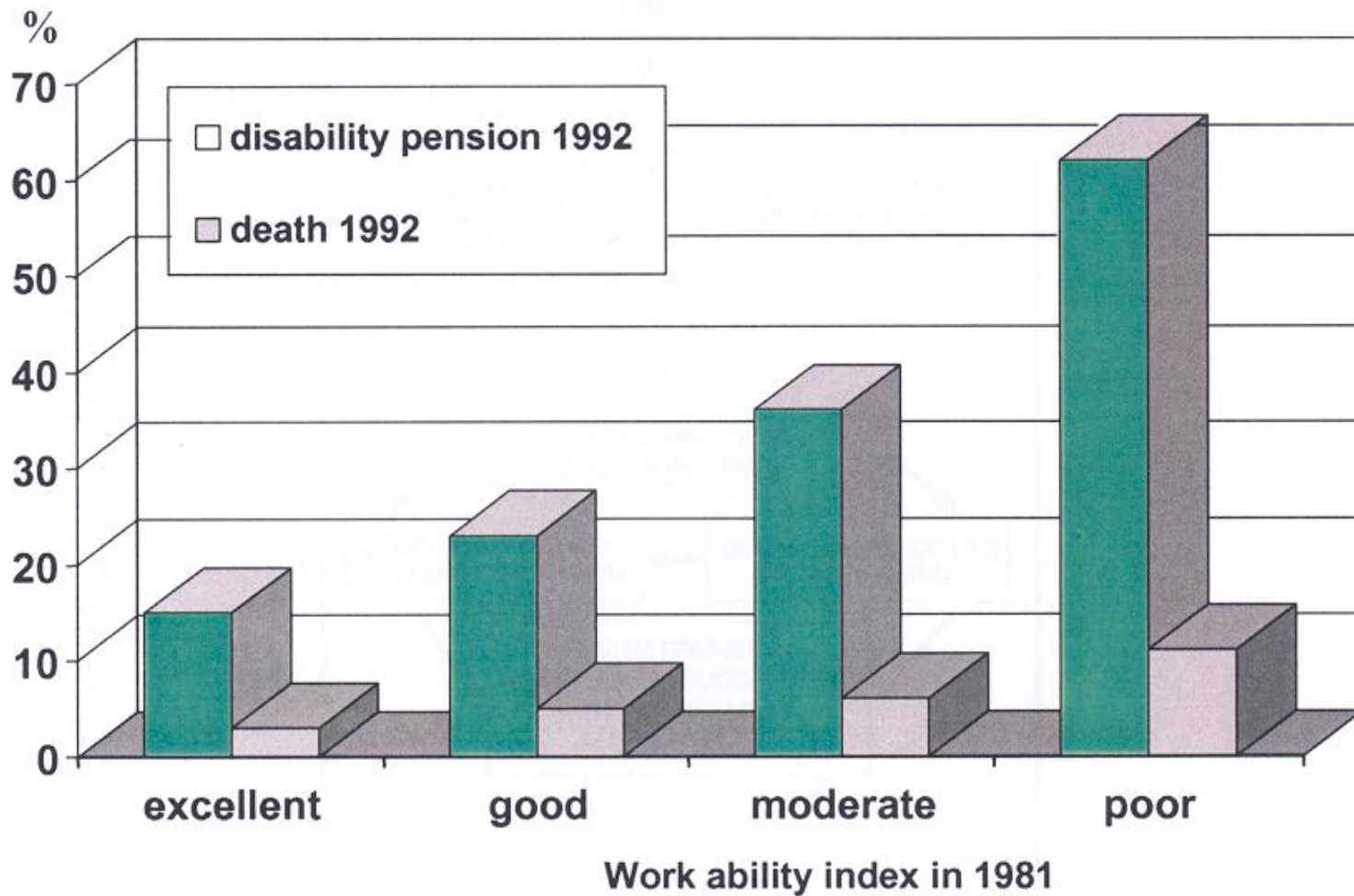
7 Items

- Current work ability compared with the lifetime best
- Work ability in relation to the demands of the job
- Number of current diseases diagnosed by physician
- Estimated workimpairment due to diseases
- Sick leave during the past year (12 months)
- Own prognosis of work ability two years from now
- Mental resources

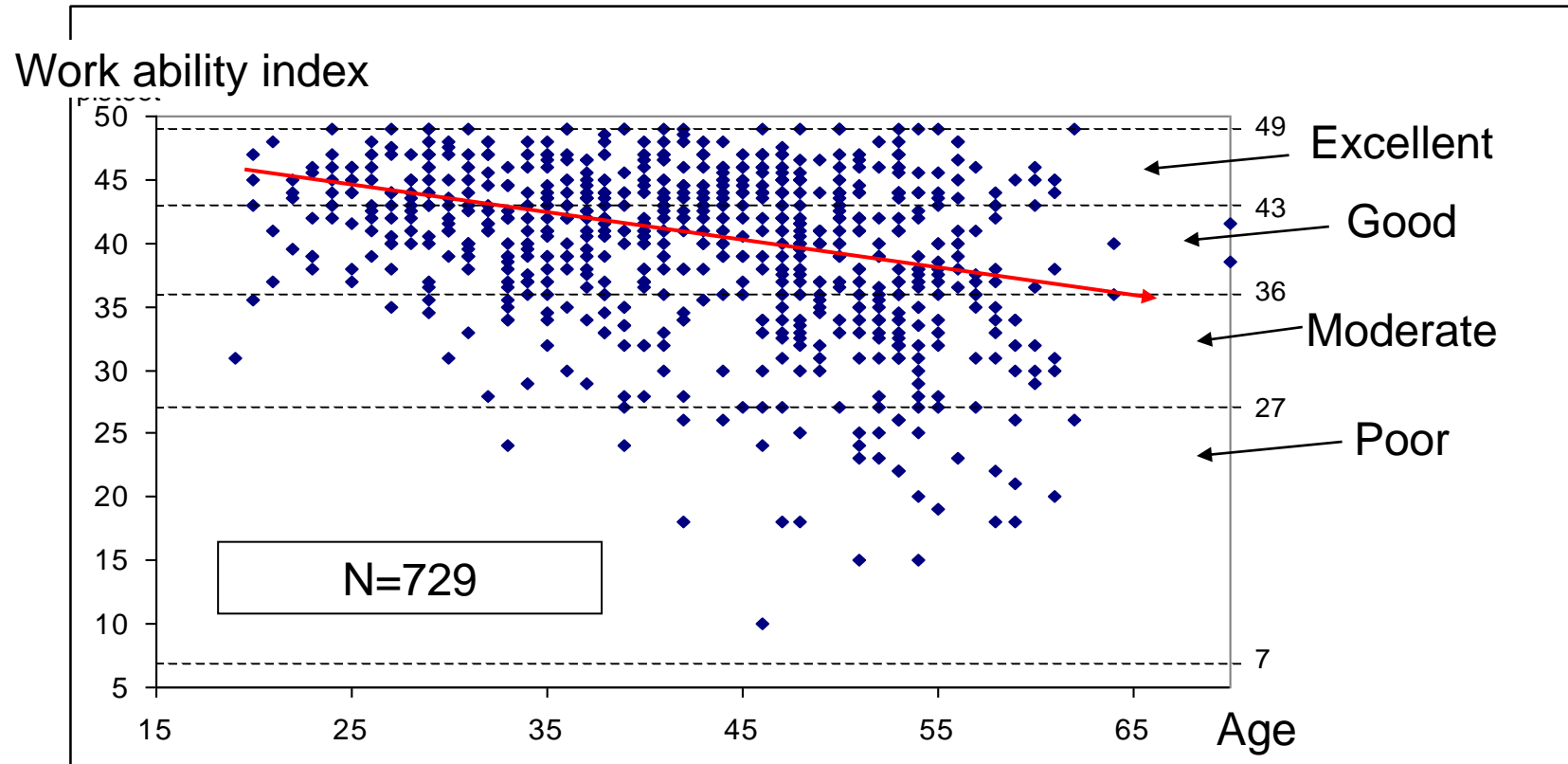
Work Ability Index

Scoring of the Questionnaire (range 7- 49 points)

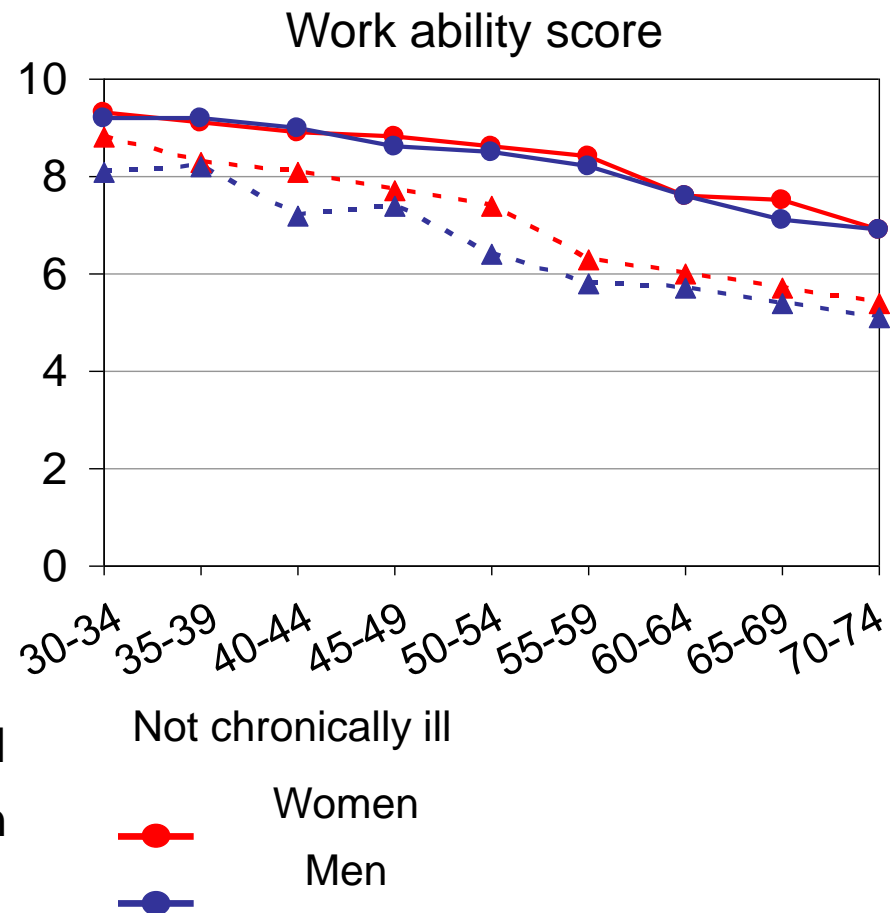
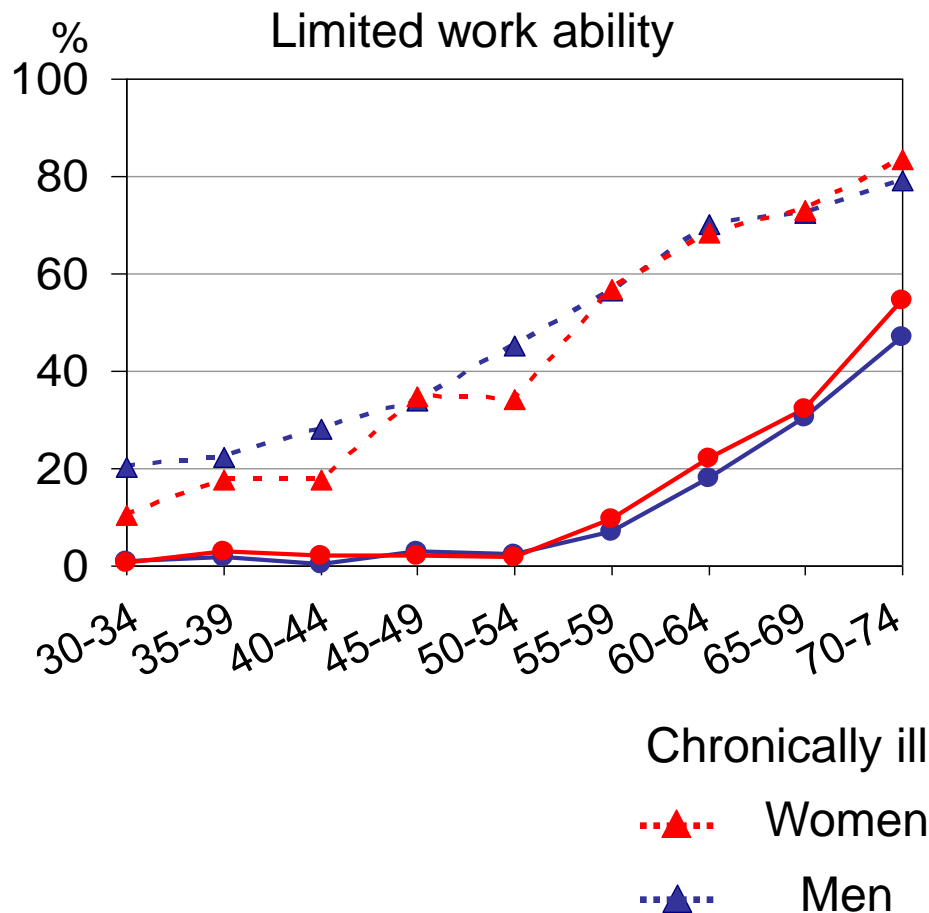
<u>Points</u>	<u>Work ability</u>	<u>Objective of measures</u>
7 - 27	POOR	RESTORE WORK ABILITY
28 - 36	MODERATE	IMPROVE WORK ABILITY
37 - 43	GOOD	SUPPORT WORK ABILITY
44 - 49	EXCELLENT	MAINTAIN WORK ABILITY



Individual differences in work ability



Proportion (%) of those with limited work ability and the mean work ability score for those chronically ill and those with no chronic illness, Gould et al. 2008



1. Current work ability compared with the life time best

Assume that your work ability at its best has a value of 10 points.
How many points would you give to your current work ability?
(0 means that you cannot currently work at all)

0 1 2 3 4 5 6 7 8 9 10

completely unable
to work

work ability
at its best

Work ability among 30–64-year-olds, according to self-rated health (age-adjusted)

Self-rated health	Mean work ability score	Persons with limited work ability		Distribution of self-rated health (%)
		Proportion (%)	Odds Ratio	
Women: Good	8.9	4	1.0	39
Rather good	8.4***	12	3.2***	32
Average	7.4***	31	12.6***	22
Rather poor	5.2***	73	107.8***	5
Poor	3.6***	95	1033.5***	1
Total	8.2	19		100
Men: Good	8.9	6	1.0	37
Rather good	8.4***	12	2.2***	30
Average	7.2***	27	7.0***	24
Rather poor	5.2***	64	47.7***	7
Poor	3.1***	87	224.4***	3
Total	8.0	20		100

Work ability among 30–64-year-olds without and with diseases of the circulatory system (age adjusted)

Disease	Mean work ability score	Persons with limited work ability		Prevalence of disease (%)
		Proportion (%)	Odds Ratio	
Coronary heart disease				
Women: Without disease	8.2	18	1.0	
With disease	6.3***	53	7.1***	2
Men: Without disease	8.0	19	1.0	
With disease	6.1***	45	4.5***	4
Hypertension				
Women: Without disease	8.2	17	1.0	
With disease	8.0**	24	1.7***	25
Men: Without disease	8.1	18	1.0	
With disease	7.5***	25	1.6***	28

Work ability among 30–64-year-olds without and with **diabetes** (age adjusted)

Disease	Mean work ability score	Persons with limited work ability		Prevalence of disease (%)
		Proportion (%)	Odds Ratio	
Diabetes				
Women: Without disease	8.2	18	1.0	
With disease	7.2***	40	3.7***	3
Men: Without disease	8.0	19	1.0	
With disease	6.7***	39	3.3***	5

Work ability among 30–64-year-olds without and with **respiratory diseases** (age adjusted)

Disease	Mean work ability score	Persons with limited work ability		Prevalence of disease (%)
		Proportion (%)	Odds Ratio	
Asthma				
Women: Without disease	8.2	18	1.0	
With disease	7.7**	26	1.6**	9
Men: Without disease	8.0	19	1.0	
With disease	7.1***	36	2.9***	6
Bronchial obstruction and/or chronic bronchitis				
Women: Without disease	8.2	18	1.0	
With disease	7.2***	39	3.7***	4
Men: Without disease	8.0	19	1.0	
With disease	6.8***	36	2.8***	5

Work ability among 30–64-year-olds without and with osteoarthritis of the knee or hip (age adjusted)

Disease	Mean work ability score	Persons with limited work ability		Prevalence of disease (%)
		Proportion (%)	Odds Ratio	
Osteoarthritis of the knee				
Women: Without disease	8.2	18	1.0	
With disease	7.2***	36	3.1**	7
Men: Without disease	8.0	19	1.0	
With disease	7.1***	33	2.4***	7
Osteoarthritis of the hip				
Women: Without disease	8.2	19	1.0	
With disease	7.2**	38	3.4***	2
Men: Without disease	8.0	20	1.0	
With disease	6.4***	52	6.2***	2

Work ability among 30–64-year-olds without and with osteoarthritis of the hand (age adjusted)

Disease	Mean work ability score	Persons with limited work ability		Prevalence of disease (%)
		Proportion (%)	Odds Ratio	
Osteoarthritis of the hand				
Women: Without disease	8.2	17	1.0	
With disease	7.4***	36	3.2***	8
Men: Without disease	8.0	20	1.0	
With disease	6.8***	36	2.7***	3

Work ability among 30–64-year-olds without and with **back or neck disorder** (age adjusted)

Disease	Mean work ability score	Persons with limited work ability		Prevalence of disease (%)
		Proportion (%)	Odds Ratio	
Back disorder				
Women: Without disease	8.3	16	1.0	
With disease	7.8***	26	2.2**	28
Men: Without disease	8.1	17	1.0	
With disease	7.5***	26	1.8***	32
Neck disorder				
Women: Without disease	8.2	17	1.0	
With disease	7.8***	27	2.1***	20
Men: Without disease	8.0	18	1.0	
With disease	7.2***	33	2.6***	12

Work ability among 30–64-year-olds without and with **mental disorders** (age adjusted)

Disease	Mean work ability score	Persons with limited work ability		Prevalence of disease (%)
		Proportion (%)	Odds Ratio	
Depression				
Women: Without disease	8.4	16	1.0	
With disease	6.7***	43	5.7**	11
Men: Without disease	8.1	18	1.0	
With disease	6.2***	47	5.9***	7
Psychosis				
Women: Without disease	8.2	19	1.0	
With disease	6.5***	62	11.7***	1
Men: Without disease	7.9	20	1.0	
With disease	6.8***	74	21.4***	1

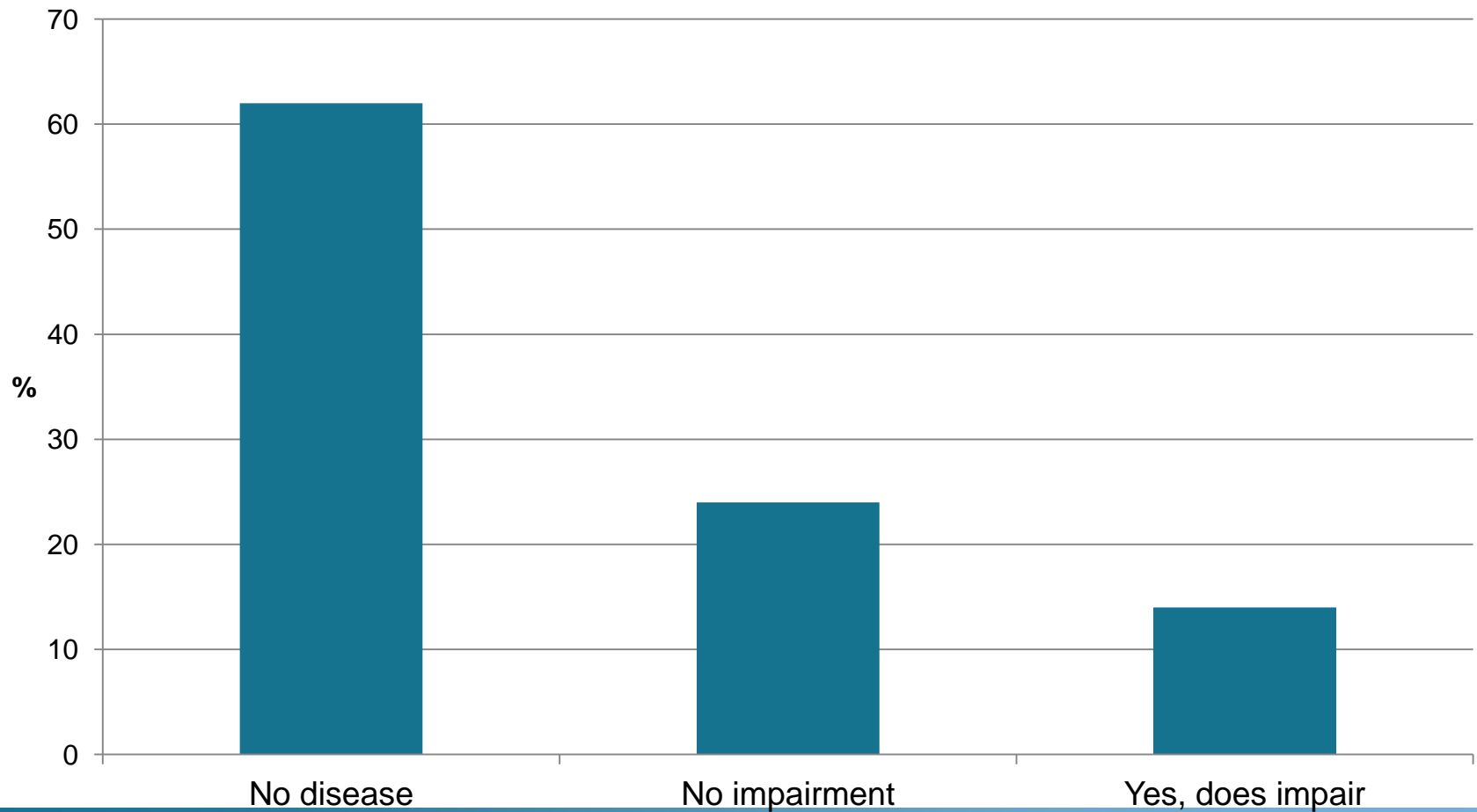
Work ability among 30–64-year-olds without and with **Anxiety** (age adjusted)

Disease	Mean work ability score	Persons with limited work ability		Prevalence of disease (%)
		Proportion (%)	Odds Ratio	
Anxiety				
Women: Without disease	8.2	18	1.0	
With disease	6.9***	42	4.4***	4
Men: Without disease	8.0	19	1.0	
With disease	6.1***	53	6.9***	2

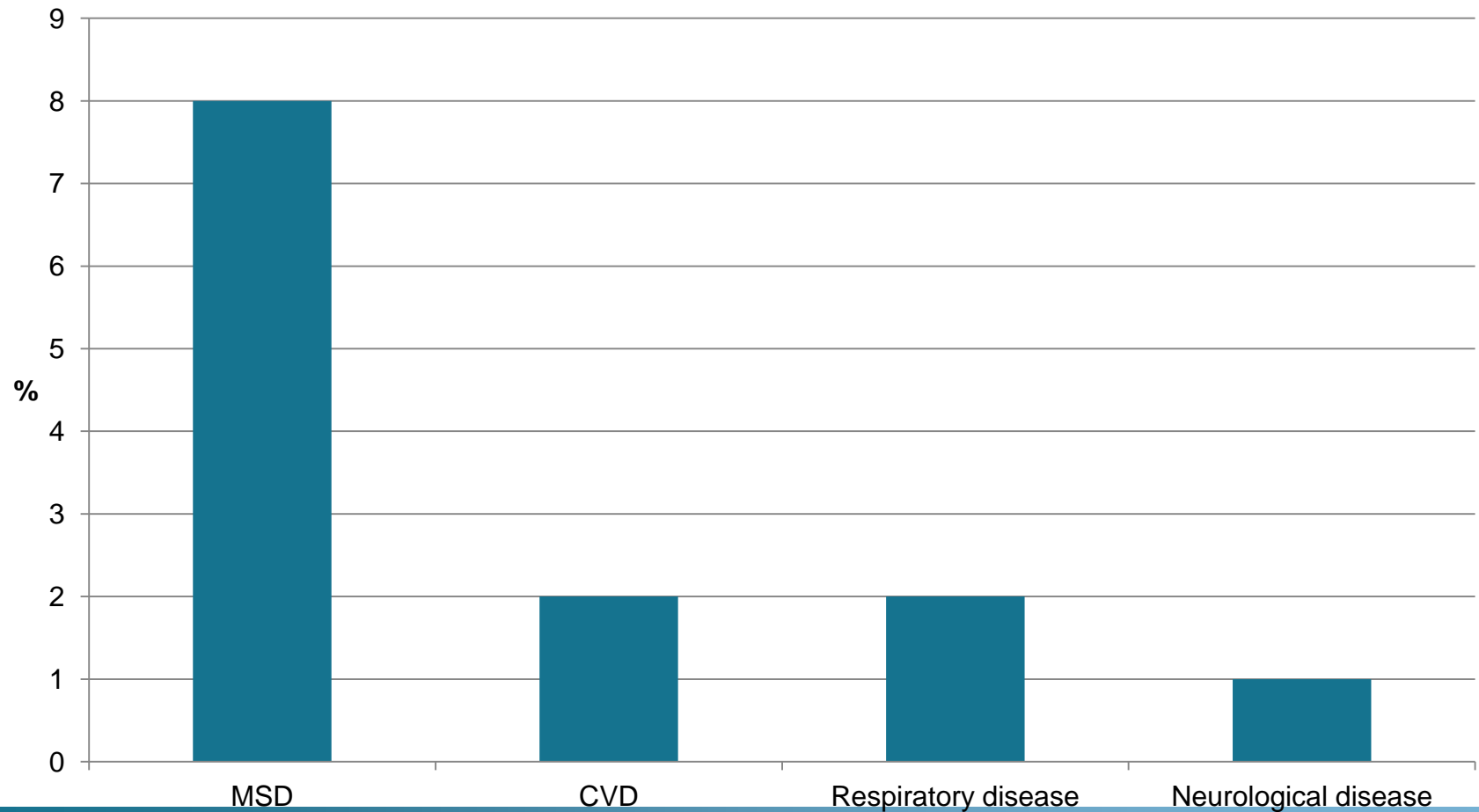
Role of chronic diseases and symptoms at work

► Work and Health Survey, FIOH 2009

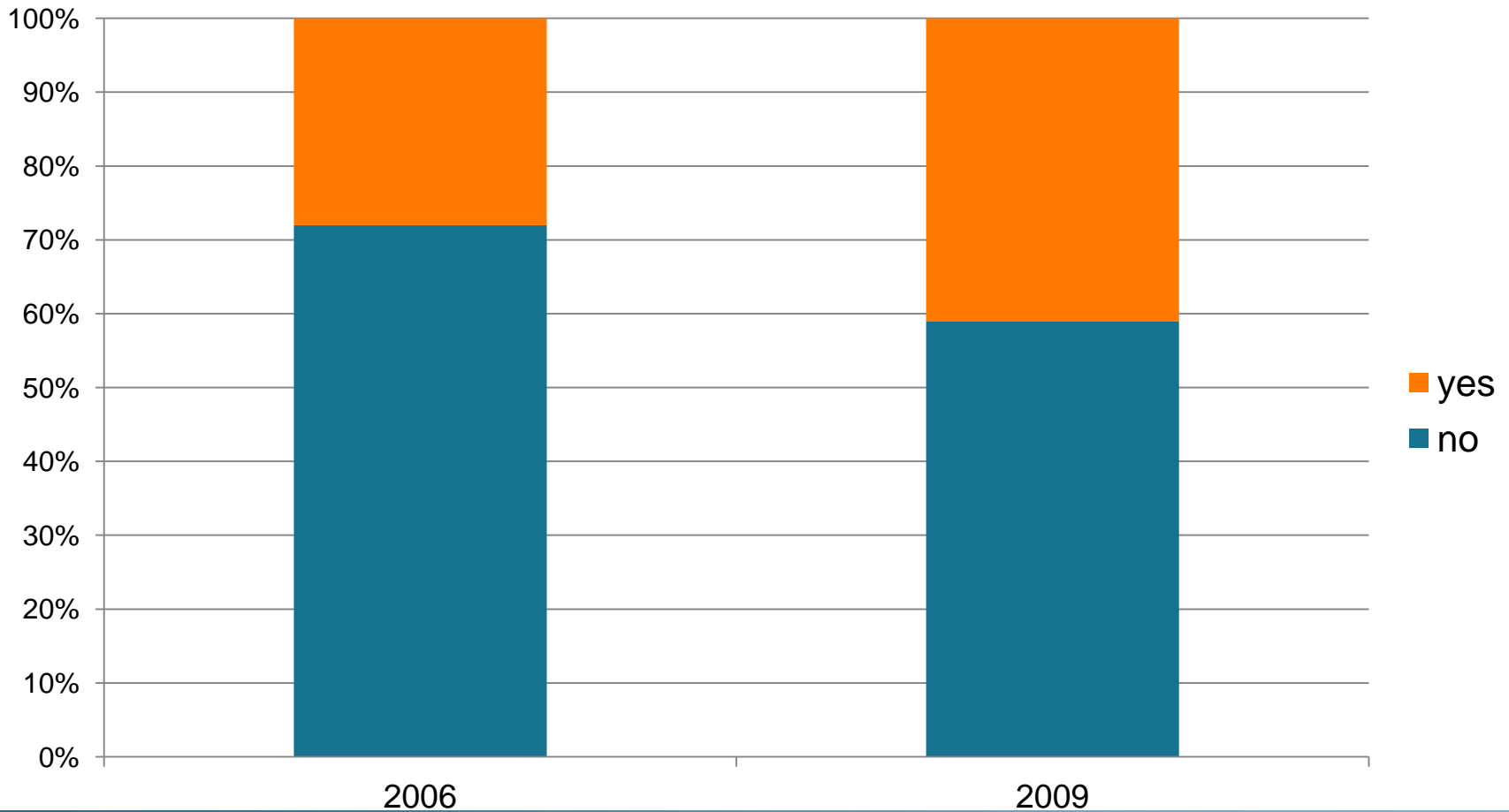
Impairment due to diagnosed chronic diseases or injuries at work



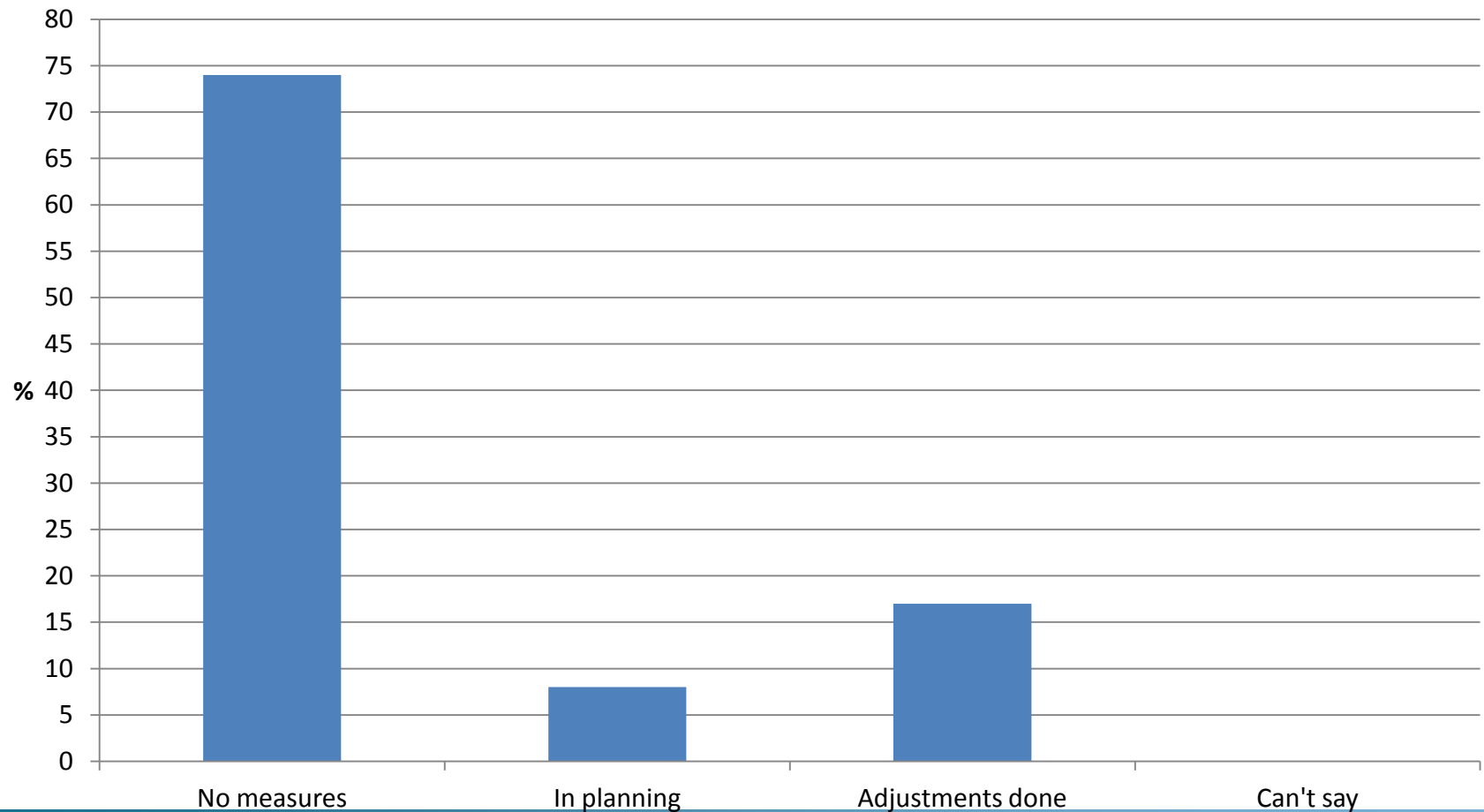
Diagnosed chronic diseases causing impairment at work, answer "yes"



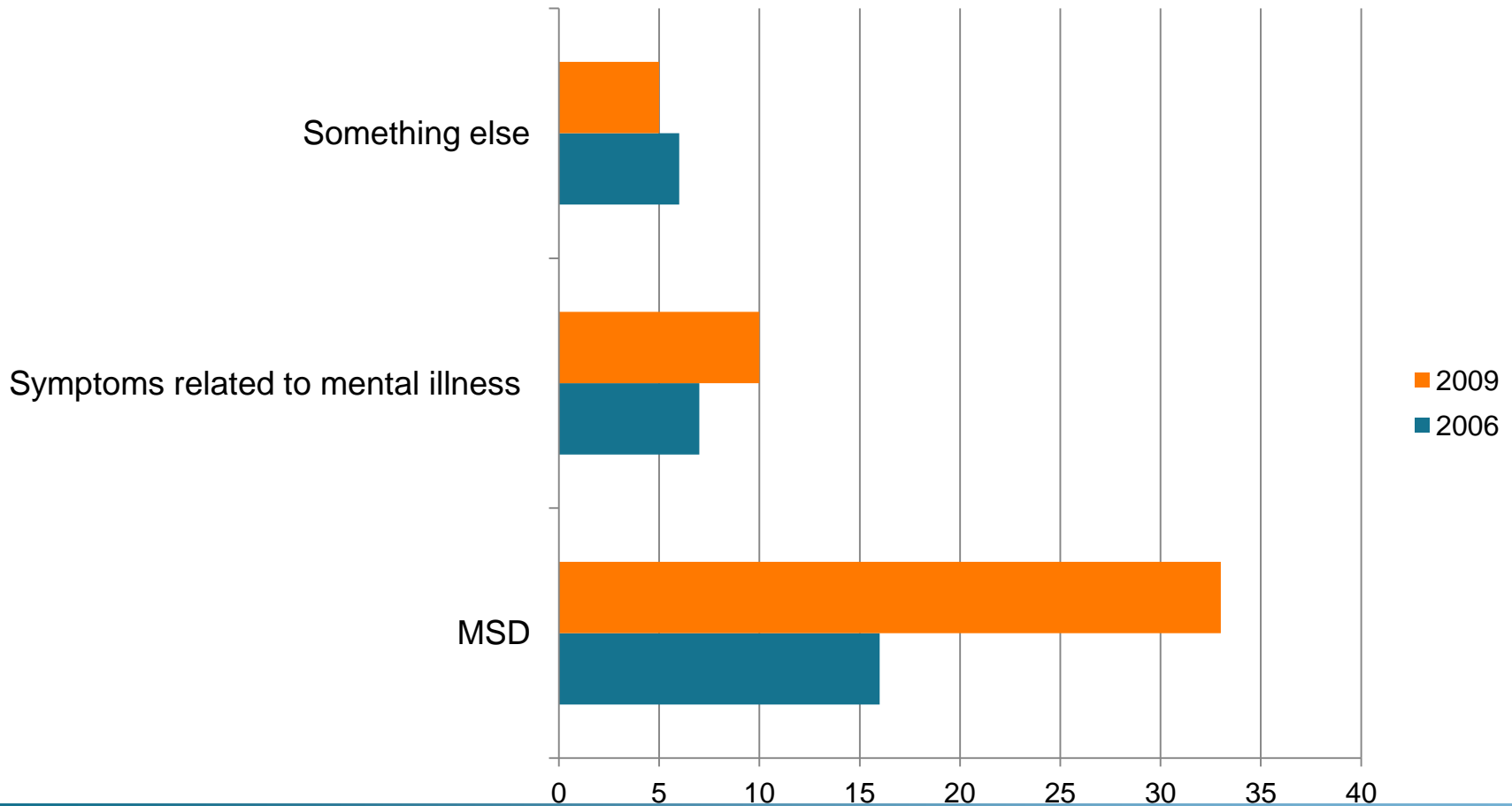
Chronic symptoms getting worse due to work



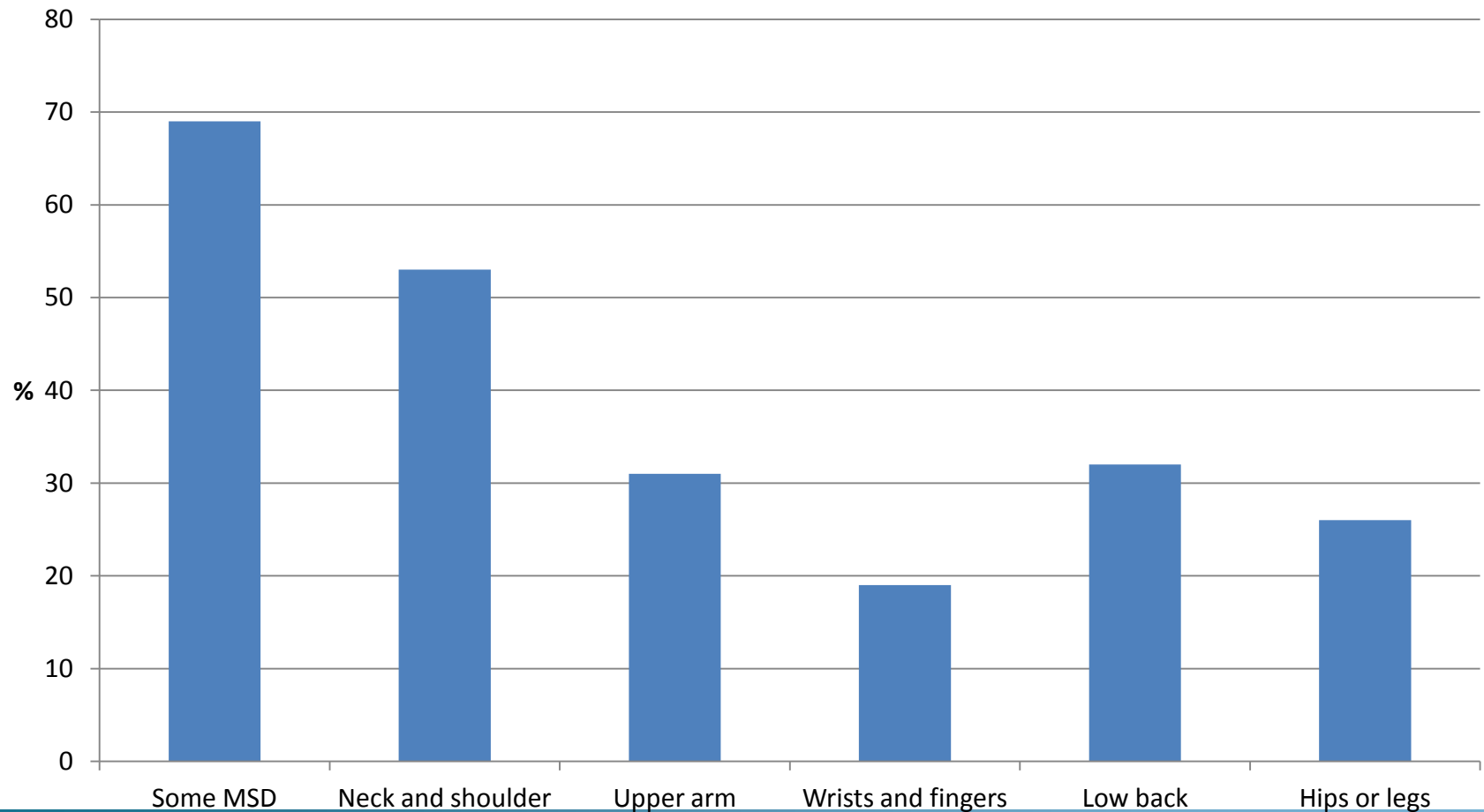
Adjustments done at work due to chronic symptoms, which are work-related



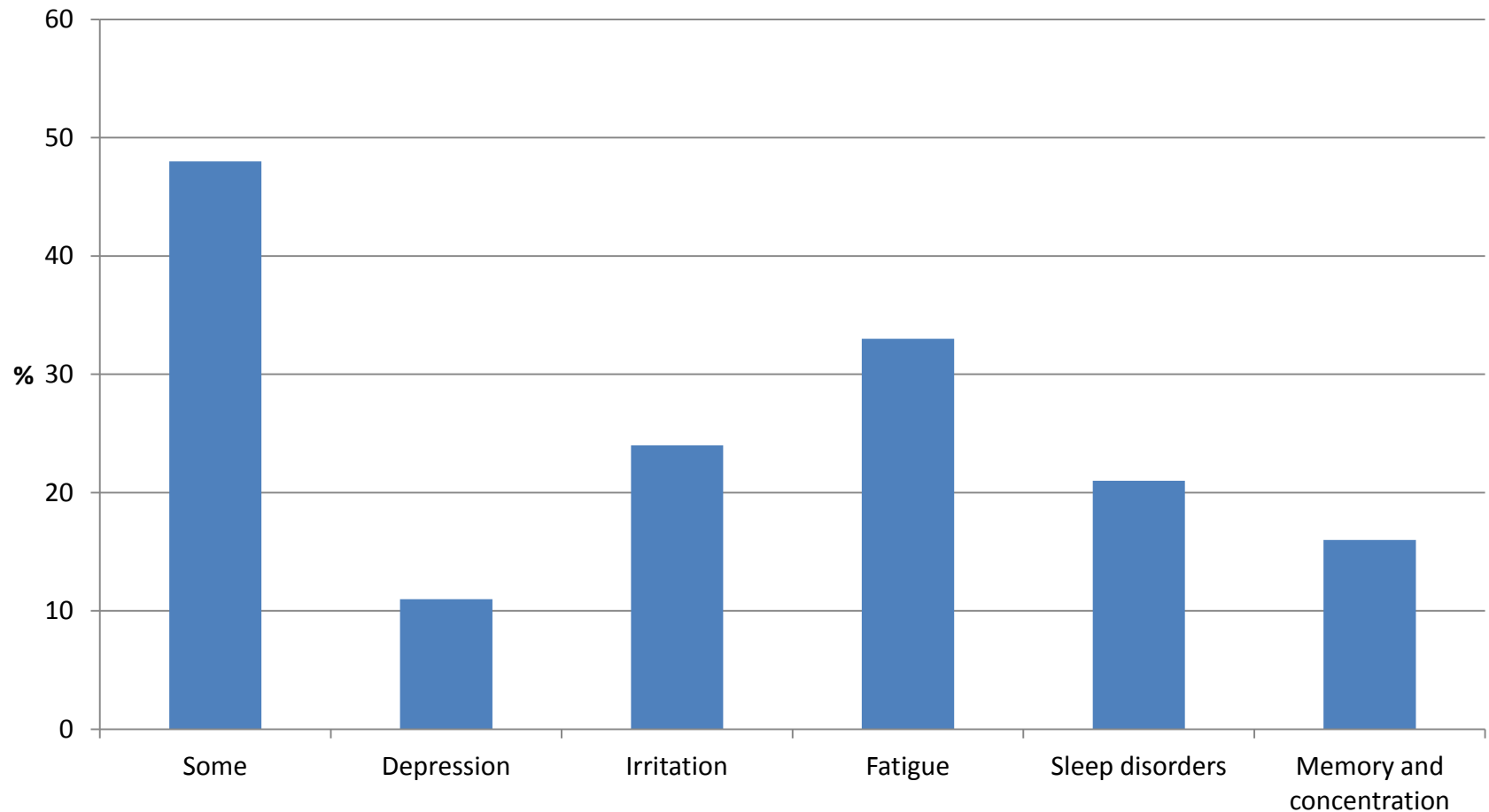
Work induced symptoms during the last 6 months, answer "yes"



Long-term or repeated MSD's during the last month, answer "yes"

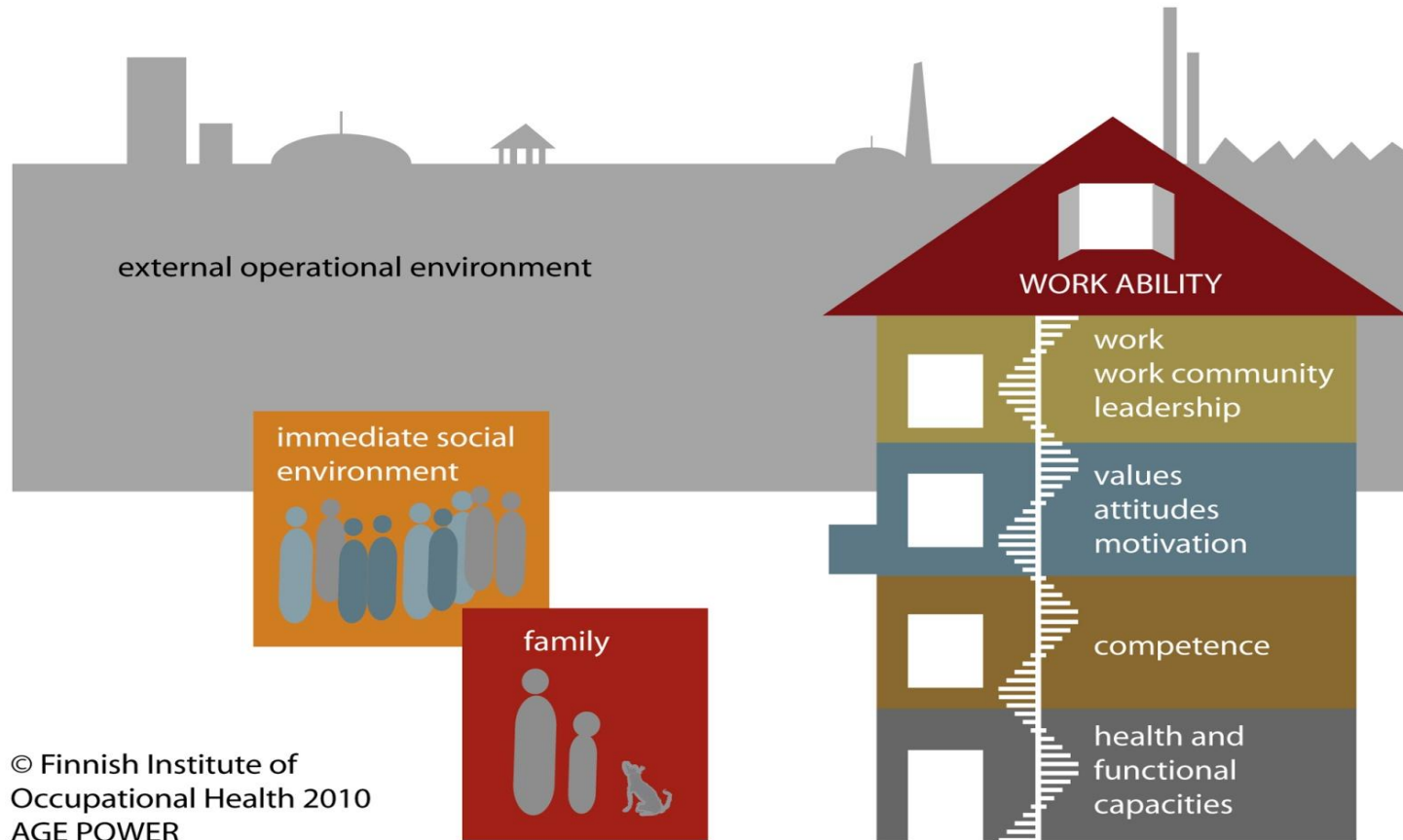


Long-term or repeated symptoms of mental illness during the last month



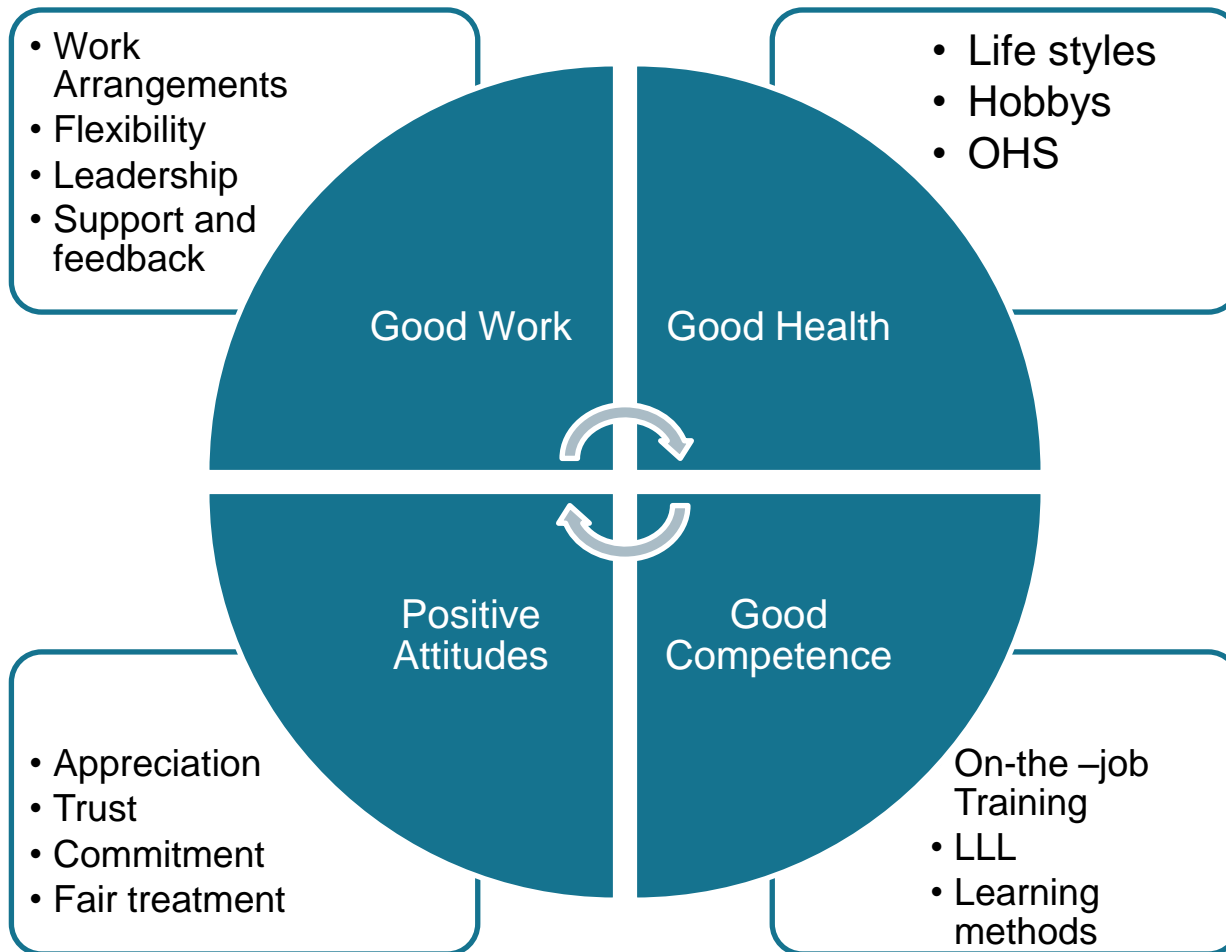
Promotion of Work Ability

Work ability model



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Promotion of Work Ability: Targets and Means



Work Ability Index as a dialogue instrument

The WAI – questionnaire has seven items:

Item Nr. 1:

Work ability compared with lifetime best

0 – 10 pts.

Possible percentage of maximal index: 20

**Chances: This is a door-opener. Start an employee - centered dialogue;
participation of workers!**

Item Nr. 2:

Work ability in relation to the demands of the job

2 – 10 pts.

Possible percentage of maximal index: 20

Chances: Differentiation between physical and mental work demands!

Item Nr. 3:

**Number of current diseases diagnosed by
a physician**

1 – 7 pts.

Possible percentage of maximal index: 14

**And: symptoms and illnesses as “own
diagnosis” to record and count.**

**Chances: How does the person cope with diseases, illnesses and
suffering?**

Item Nr. 4:

Estimated work impairment due to diseases

1 – 6 pts.

Possible percentage of maximal index: 12

Chances: 40% of diseases and sufferings are supposed to be work related (German results). What is the workers view?

Item Nr. 5:

Sick leave during the past year (12 month)

1 – 5 pts.

Possible percentage of maximal index: 10

Chances: Watch on the difference between number of diseases and the sick leave rate. Mostly you can describe a potential!

Item Nr. 6:

Own prognosis of work ability for the next two years

1 – 7 pts.

Possible percentage of maximal index: 14

Chances: Sometimes disability begins in the mind of the supervisor or the worker - or it is the work demand!

Item Nr. 7:

General mental resources

1 – 4 pts.

Possible percentage of maximal index: 8

Chances: Work is more than earning money, life is more than working life and a negative view of my own future is a health risk.

Opportunities for employees with chronic complains or diseases

1. Update your values, attitudes and mindset related to your health-illhealth
2. Update your opinion about your work ability – how much work ability is still left?
3. Have a dialoge with your occupational health experts about the items of your Work Ability Index – identify the reasons for WAI decline and evaluate the measures to promote your WAI
4. Use the Work Ability House-model: Make a concrete plan over the floors: what can I do – what can the company do (= what can we do together)
5. Pay attention to force the adjustments needed at work
6. Follow and evaluate the effects of changes and update them when necessary
7. Don´t give up too easy- you have always work ability left !