

The concept of work ability and the opportunities for companies and professionals to enhance changes for employees with chronic complaints or diseases

- ▶ Prof. Juhani Ilmarinen
- ► Centrum Werk Gezondheid: Masterclass Work, Workability and Chronically Ill
- ► Ede (GLD), Dutch Institute for Sport and Physical Activity, 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

Society: culture legislation education policy social and health policy external operational environment **WORK ABILITY** work **leadership** immediate social environment values attitudes motivation family competence health and © Finnish Institute of functional Occupational Health 2010 capacities **AGE POWER**

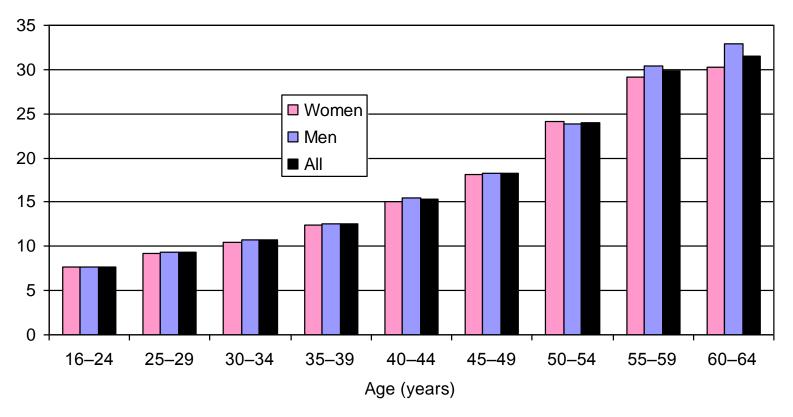




Ageing and health

►EU15

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



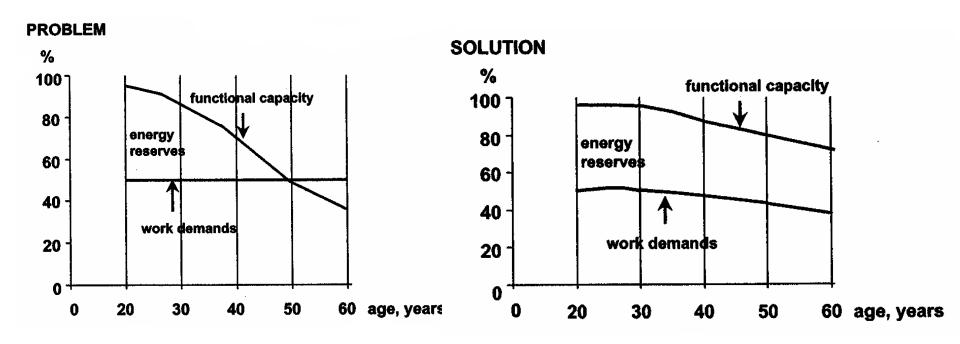
Source: Dupre ja Karjalainen 2003.





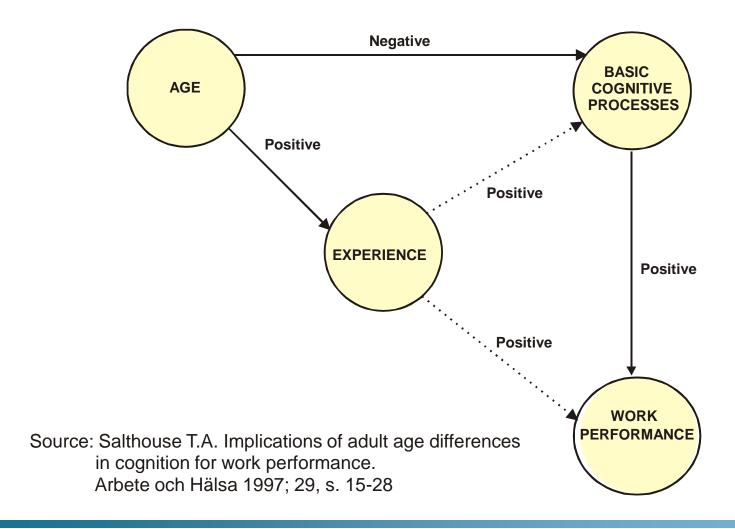
Functional capacities and age

Basic problem and basic solution: relationship between human resources and work demans





Relation between age, experience, basic cognitive processes and work performance (Salthouse)







Research with WAI

Work Ability Index 7 Items

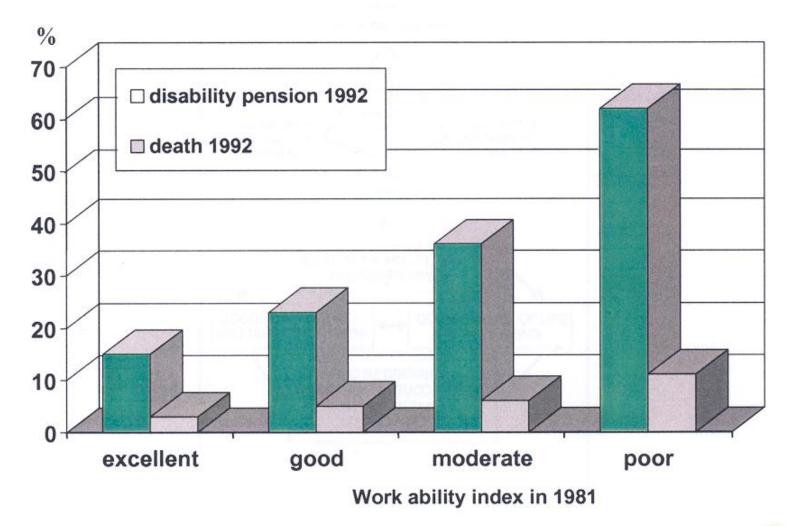
- Current work ability compared with the lifetime best
- Work ability in relation to the demands of the job
- Number of current diseases diagnosed by physician
- Estimated workimpairment due to diseases
- Sick leave during the past year (12 months)
- Own prognosis of work ability two years from now
-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

ICOH 2003

Work Ability Index

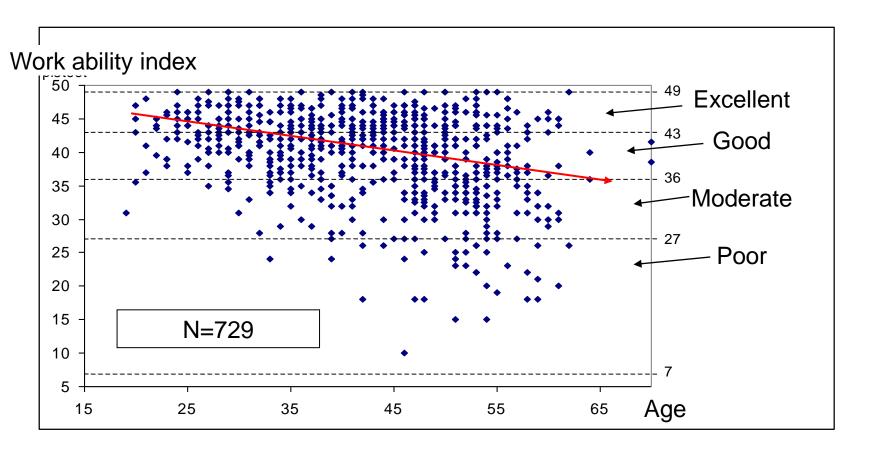
Scoring of the Questionnaire (range 7- 49 points)

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



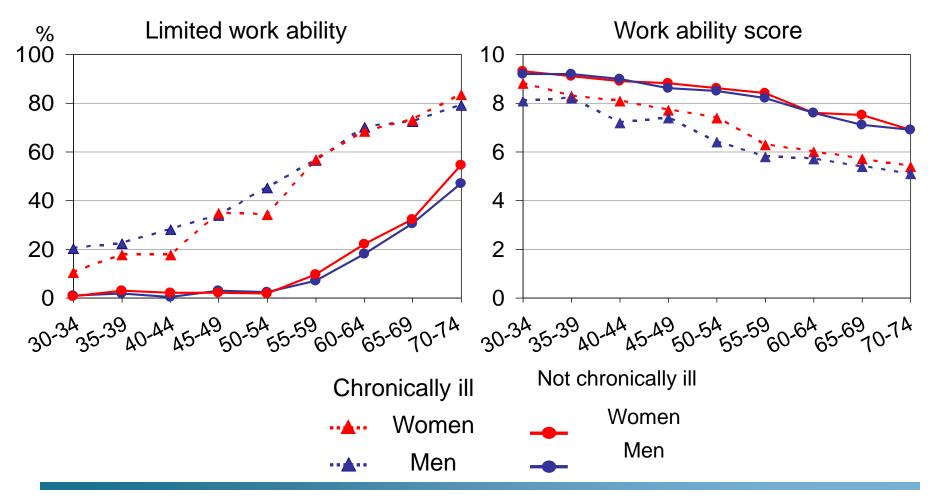


Individual differences in work ability





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 without and with diseases of the circulatory system (age adjusted)

Disease	Mean work ability	Persons with limited work ability		Prevalence of disease (%)
	score	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 _{JIC2012}

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

Disease		Mean work ability	Persons with limited work ability		Prevalence of disease (%)
		score	Proportion (%)	Odds Ratio	
Back disorder					
Womer	n: 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



JIC2012

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

Disease		Mean work ability	Persons with limited work ability		Prevalence of disease (%)
		score	Proportion (%)	Odds Ratio	
Depression					
Womer	n: 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



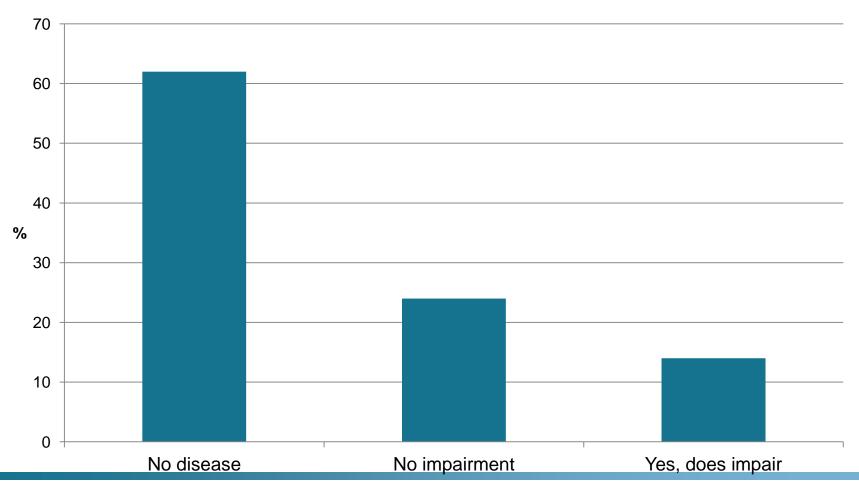
JIC2012



Role of chronic diseases and symptoms at work

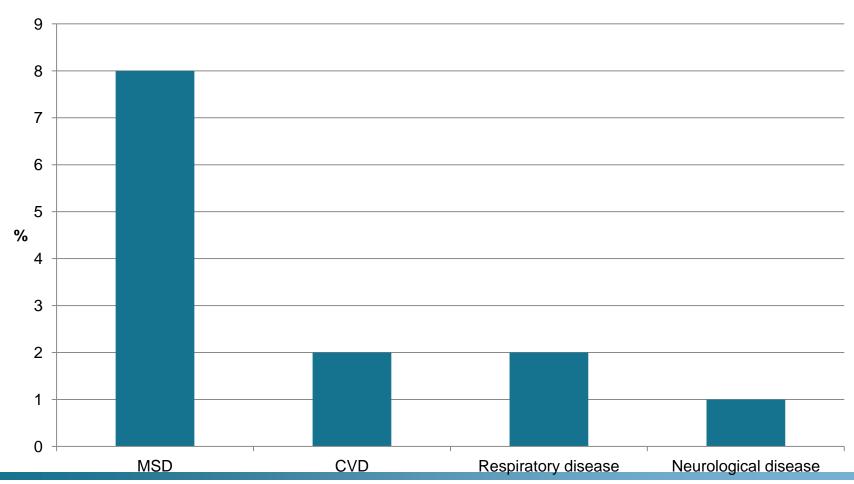
► Work and Health Survey, FIOH 2009

Impairment due to diagnosed chronic diseases or injuries at work



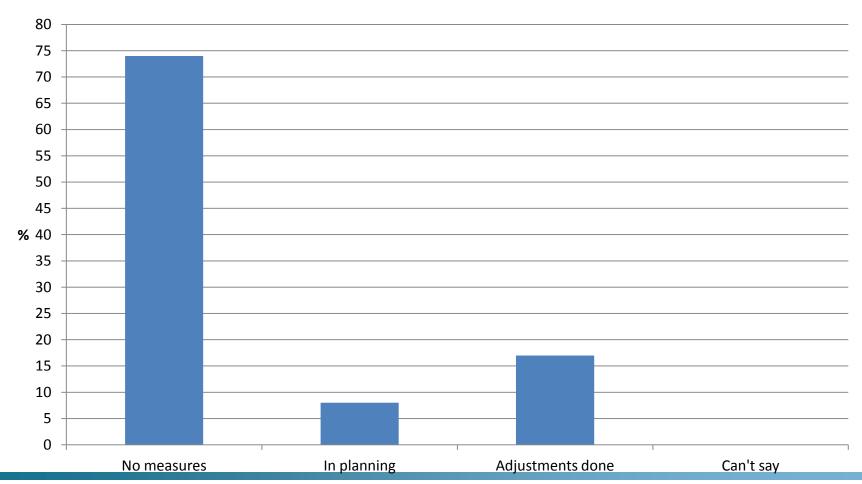


Diagnosed chronic diseases causing impairment at work, answer "yes"





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







Promotion of Work Ability

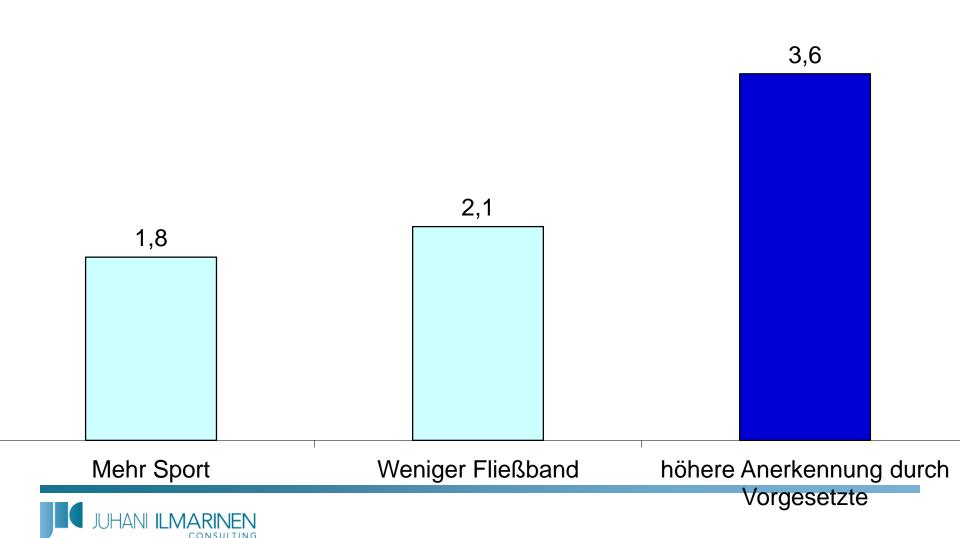
Wahrscheinlichkeit schlechterer Arbeitsfähigkeit

(11 Jahre follow-up, Ilmarinen/Tempel, 2002. S. 249)



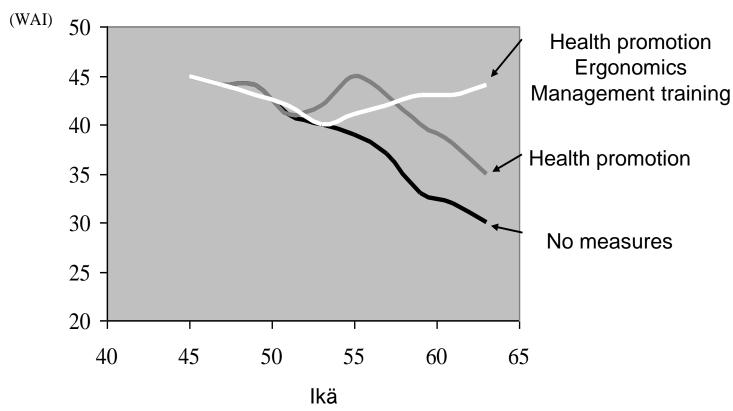
Wahrscheinlichkeit besserer Arbeitsbewältigungs-Fähigkeit

(11 Jahre follow-up, Ilmarinen/Tempel, 2002. S. 249)



Influencing work ability

Ability index



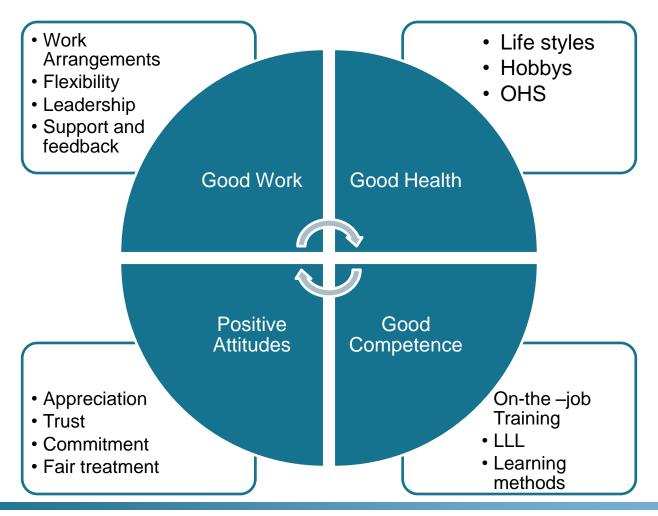


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Promotion of Work Ability: Targets and Means







Work Ability Index as a dialoge instrument-Work Ability Coaching (ABI-coaching)

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.



Wirtschaftliche Ergebnisse

- Über 200 Firmen verschiedener Größe und Branchen
- Methode: Tervus Economic Appraisal
- Nutzen/Kosten-Verhältnis zwischen 3 und 10
- Nutzen: Reduktion von Abwesenheit und Arbeitsunfähigkeit 50 % und Erhöhung der Produktivität 50 %

Aus: Bergström and Ahonen 2000



Towards a better and longer worklife

Role of Work Ability Model and Work Ability Index

WAI as a resource for the organisation

Two overarching and strategic benefits.

- Brand reputation in the employment market (and in the community)
- 2. Cost benefits of improved productivity



WAI as a resource for the organisation

More discreet benefits include:

- Indicate the status of work ability and need for promotion
- Early indicator of risks of work disability and early exit
- ► Initiate preventive actions
- Evaluate the effects of actions
- Validated method for Occupational Health Services and for health promotion
- Initiate the discussion about ageing and work
- Improve the awareness of human work ability
- Improve the collaboration between employers and employees due to win-win possibilities
- Can be used as base for cost-benefit analysis



Role and responsibilities of different actors with chronically ill employees

1. Managers

- Awareness of Work Ability, positive attitudes towards promotion of WAI, resources and time

2. Supervisors

- Awareness of Work Ability, competence and willingness for adjustments in work arrangements, trust and respect

3. Professionals

- Awareness of Work Ability, dialoge with WAI/ Work Ability House (WA-coaching), co-operation with supervisors and employees

4. Employees

- Awareness of Work Ability, positive attitudes and motivation for changes in lifestyle and work, active participation in better fitting between work and ill-health



Opportunities for employees with chronic complains or diseases

- Update your values, attitudes and mindset related to your healthillhealth
- 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 concreate 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!

