



Finnish Institute of  
Occupational Health

# *Well-being through work*



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Occupational Health

# Occupational Health Cooperation between Small Enterprises and Occupational Health Services

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Työsuojelurahasto  
Arbetskyddsfonden  
The Finnish Work Environment Fund

# The Aim of Study

- Occupational Health Cooperation (OH-cooperation) practices between small enterprises (SE) employing less than 20 employees and occupational health services (OHS)
- Improve their effectiveness.

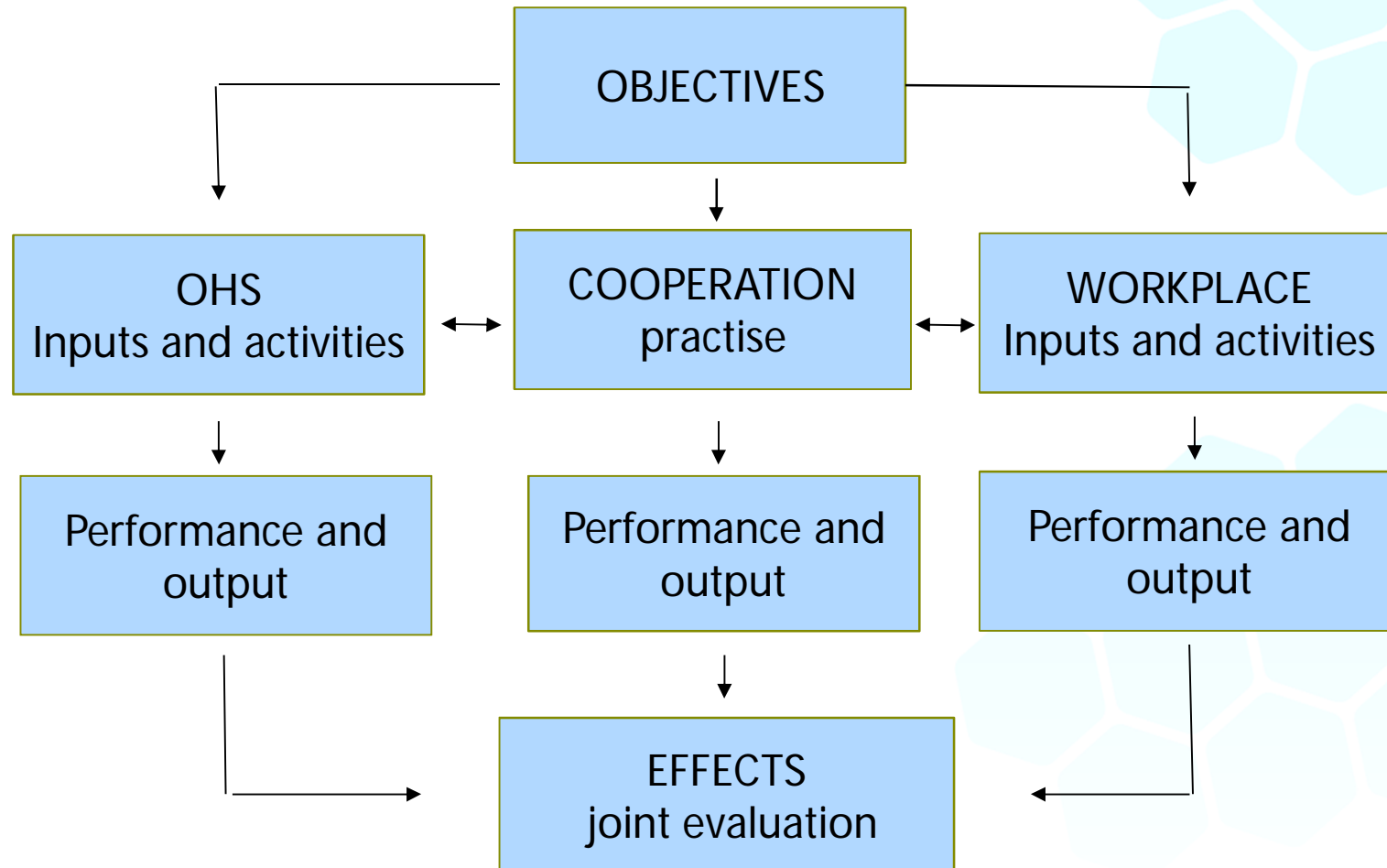
# Occupational Health Services (OHS) in Finland

- A part of the **primary health care system**, but also a part of the **workplace health and safety system**
- **The employer, the employee and the OHS provider in co-operation**
  - 1) Prevent work-related illnesses and accidents
  - 2) Improve the level of health and safety at work and the work environment
  - 3) Maintain and improve the health, work ability and functional capacity of employees at different stages of their working careers
  - 4) Promote the functioning of the work communities and organizations

# Subject of the study: Occupational Health Cooperation in SEs

- Occupational health cooperation is the backbone of effective OHS.
- A gap in scientific knowledge of occupational health cooperation in SEs
- This study explores occupational health cooperation practices between SEs and their occupational health teams.
  - 1.9.2015-31.12.2018
  - FIOH & The Finnish Work Environment Fund

# OCCUPATIONAL HEALTH OPERATIONS



# Research tasks

1. Produce scientific knowledge of OH-cooperation practices between SEs employing less than 20 people and OHS.
2. Develop cooperation practices that take into account characteristics and needs related to the company size and industry
3. Explore the effects of the practices. What kinds of effects they have on
  - working conditions and work environment,
  - work communities,
  - practices supporting work ability at the workplace?

# Study design and participants

## Design

- Field experiment with a before-and-after and a case-control design

## Industries

(Standard Industrial Classification TOL 2008, Statistic Finland 2008)

- health and social services,
- construction,
- accommodation and food services,
- professional scientific and technical activities



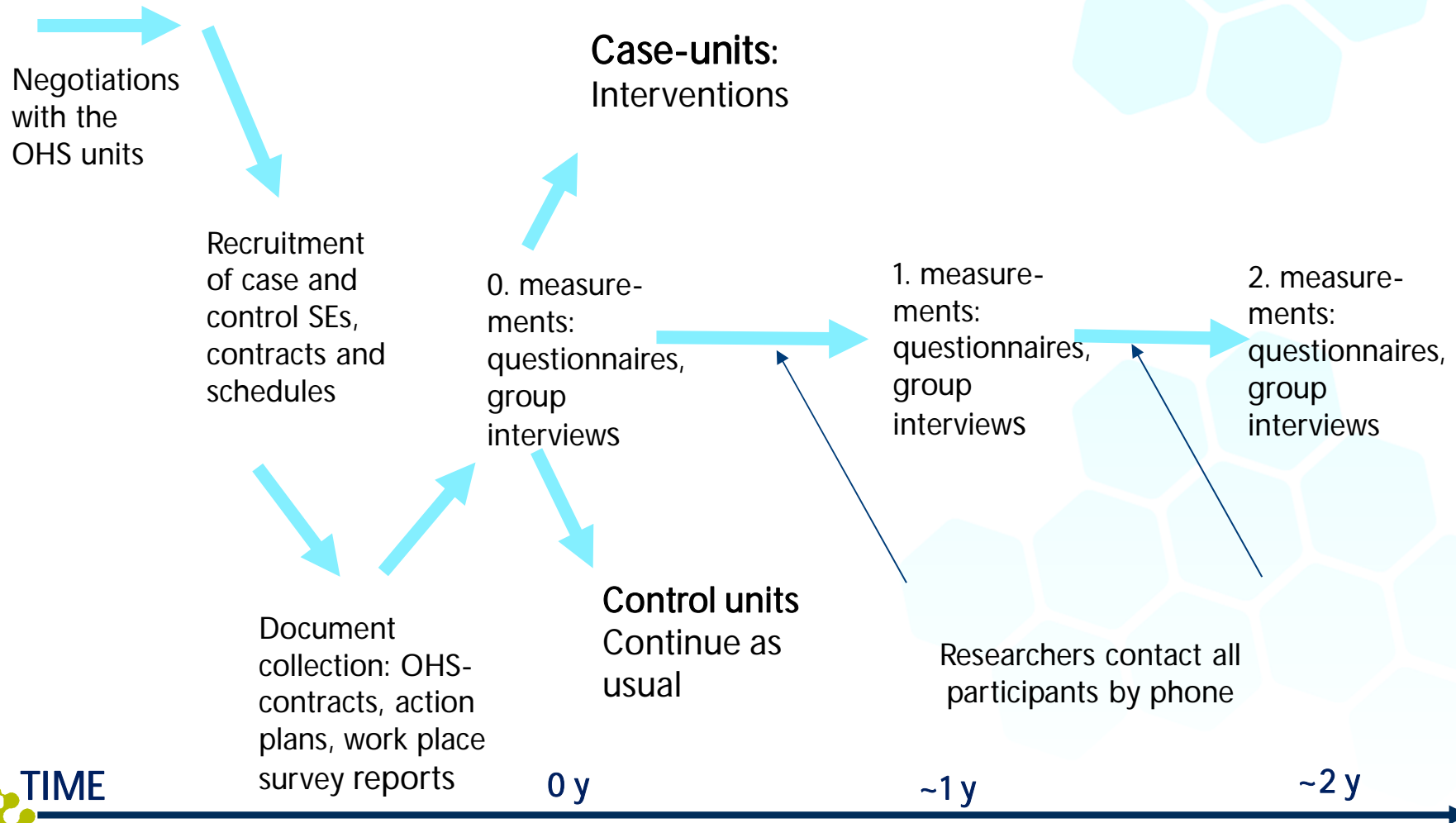
# Study design and participants

- 48 SEs with their OHS teams from 17 different OHS providers
- Half of the enterprises (24) with their OHS teams form **case-units**
  - Take part in an intervention developing OH-cooperation
- Every case-unit has a **control-unit** that is as similar as possible in terms of the company's business sector, size and OHS provider but the OHS team is different.
  - No interventions; continue their collaboration as usual.

# Material and methods

- Questionnaires (0., 1., 2. measurements):
  - Everyone working in the SEs, members of their OHS teams and the leaders of the OHS units
- Group interviews (0,1, 2. interviews)
  - Case/control unit specific interviews
  - Owner-managers of the SEs and at least one employee together with the OHS team (at least the OHN)
- OHS documents
  - OHS contracts
  - Workplace survey reports
  - OHS action plans
  - Risk assessment documents
  - Models of work ability promotion & support

# Study design and methods

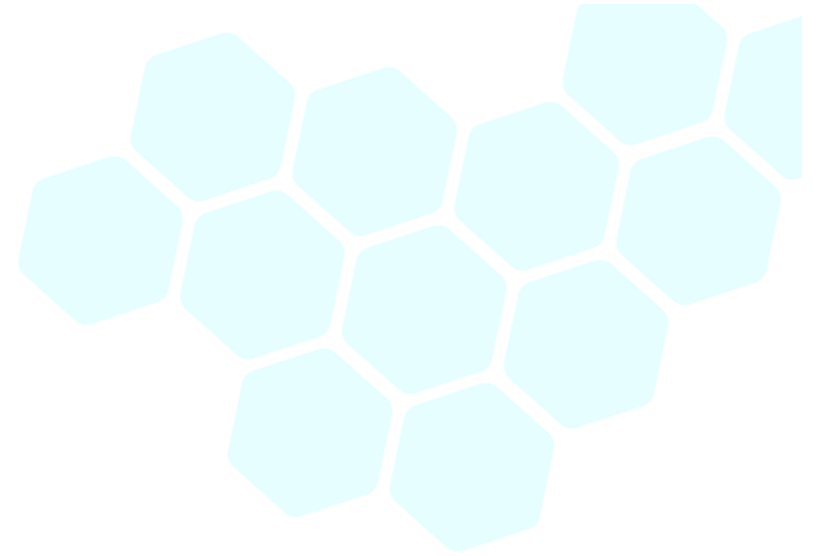




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# An example of a case-control pair

Industry: Social Services



# Background information

## Case

## Control

### Industry

- Social services

- Social services

### Age of the enterprise

- 7 years

- 15 years

### Personnel

- Majority women

- Majority women

### Working practice

- Most often work alone

- Team work

# The intervention in the case-company

## Risk assessment and workplace survey

- Duties of
  - the employer: risk assessment
  - the OHS: workplace survey
  - carried out at the same time using PIRA-form
- Participants:
  - Owner-manager, 2 employees, OHN & researcher

# Identifying risks

Name and contact details of company

CASE COMPANY

Names of evaluators and date

All employers  
18.01.2016

Comments and additional information

Requires immediate correction = V  
Requires improvement = K  
In order = OK  
Requires follow-up = S  
No risks = E

## 1.2. MACHINES AND TOOLS

Personal protective equipment – use, condition, service	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Condition of machines, tools	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Control devices and emergency stop devices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fixed protectors and safety devices	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Inspections and services – cranes and lifting accessories – periodic inspections	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## 1.3. CHEMICALS USED AT WORK THAT ARE HARMFUL TO HEALTH

Exposure to harmful chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Safe usage information sheets	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chemical storage	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2. LOADING FACTORS AND WORKING METHODS

### 2.1. PHYSICAL LOADING

Lifting and moving by hand	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Working positions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Repetitive movements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Computer work	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.2. MENTAL LOADING

Workload	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Meaningfulness of work	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Supervisor-subordinate relationships	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Long working days	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Management of work	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Feedback and interaction	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Workplace atmosphere, colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Threat/control of violence	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Inappropriate behaviour, harassment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.3. WORKING METHODS

Induction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
First aid preparedness	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Changes at work	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## 3. OTHER RISKS/PROBLEMS

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 1. WORKING CONDITIONS

### 1.1. WORK ENVIRONMENT

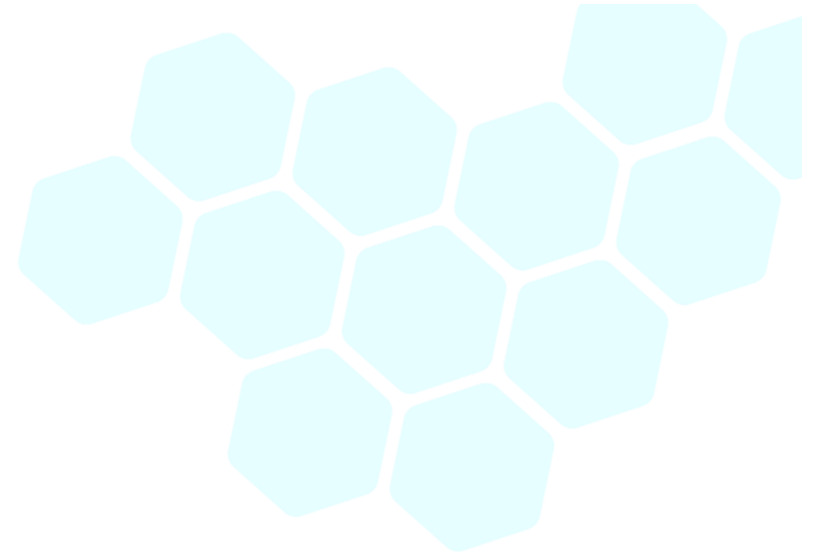
	Requires immediate correction = V	Requires improvement = K	In order = OK
Work air impurities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
– solvent fumes, vapours	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– dusts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– moulds, bacteria, viruses	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heating conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– temperature	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– draught	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– damp	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ventilation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– sufficiency	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– local extraction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Lighting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vibration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Fire safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– risks of ignition	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– extinguishers, emergency exits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electrical cables and devices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tidiness and order at work stations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Walking routes clear	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– falling, tripping, slipping	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Goods traffic, other traffic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Risks of falling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Risks of falling objects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sharp items (wounds)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Personnel facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Development needs:

- noise
- working positions
- First Aid preparedness



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# Results from the questionnaires (0.- >1.)

Same respondents in both measurements:  
case-company n=6  
control-company=7





# Results: Working conditions and work environment (Questionnaires, Case n=6, Control n=6)

	CASE	CONTROL		
EXPOSURE AGENTS	0.	1.	0.	1.
	%	%	%	%
cigarette smoke	++	++	0	0
stooped, twisted or awkward positions	+++	+++	+	+
physical work load	++	+	+	+
psychosocial work load	+++	+++	++	++
time pressure	0	0	+	+
noise	0	+	+	+
injury risk*	0	0	0	0
threat of physical violence*	0	0	0	+
threat of mental violence*	0	0	+	+
bullying**	0	0	+	0
First Aid preparedness ***	+	+	0	0
*quite or very big				
** quite or very much				
** *quite or very poor				

**symbols**  
 +=1-2/6  
 ++=3-4/6  
 +++=5-6/6

# Results: Work community

(Questionnaire, Case n=6, Control n=6) (1=very bad...5=very good)

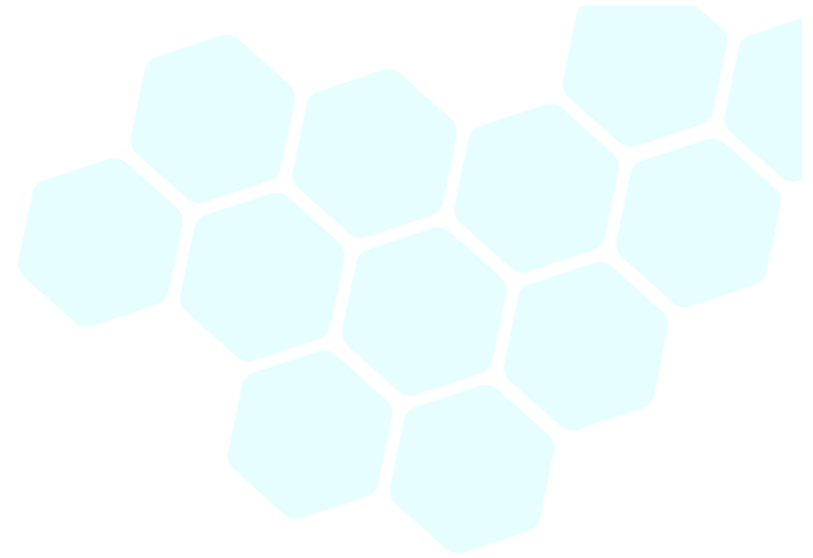
		CASE	CONTROL		
		0.	1.	0.	1.
		Mean	Mean	Mean	Mean
Work community					
atmosphere		4,3	4,3	3,6	3,6
collaboration		4,2	4	4	4
fairness		3,3	3,7	3,8	3,3
support from colleagues		4,2	4	4,2	4

# Changes in the knowledge about OH-cooperation (0.->1.)

- Knowledge about OH-cooperation and its content among the companies' personnel:
  - increased in the case-company
  - decreased in the control- company

# Changes in the satisfaction with OHS (0.->1.)

- Satisfaction with the work ability support by OHS and the usefulness of OHS
  - improved in the case-company
  - no changes in the control- company



# Results from the group interviews (0.- >1.)

**Case:**  
0. interview: Owner-manager, 2 employees and OHN  
1. interview: the same plus one new employee

**Control:**  
0. interview: Owner-manager, 4 employees and OHN  
1. interview: Owner-manager, 2 employees and OHN

# Development of OH-cooperation: case-company

## 0. group interview

- *No risk assessment; occupational safety was seen to in need of developing.*
- *No practice of Work Ability Support*
- *Owner-manager wants OHS to inform the employees about its services (ergonomics, health checks, work well-being),*
- *Owner-manager wants more discussions and participation in planning of services..*
- *Owner-manager did not trust OHS.*

## 1. group interview

- *Occupational safety is still in need of developing, but the risk assessment has been done. Risk assessment report has been shared with OHS.*
- *First Aid training bought from private provider.*
- *Work Ability Support Practice is attached in the SE's OHS action plan.*
- *OHN has visited the work place and informed the employees (services, counselled about ergonomics and personal safety equipment.*
- *The SE and OHS discuss and cooperates often with each other. Health checks are carried out in cooperation between the owner-manager and the OHS.*
- *Owner-manager trusts OHS.*

# Development of OH-cooperation: control-company

## 0. group interview

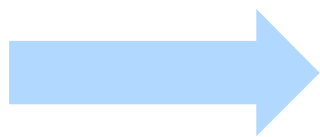
- *Risk assessment done. Report not sent to OHS.*
- *Model for Work Ability Support attached to the company's OHS action plan, but it is not remembered. When found, it was considered important.*
- *Difficulties in the work community. Don't want to use occupational health psychologist, but a work community consultant*
- *For the company OH-cooperation is OK.*

## 1. group interview

- *Risk assessment done again. Still no report to OHS.*
- *A couple of work ability cases taken care of in cooperation with OHS. Company would like to have more systematic interaction with the OHS*
- *Work community still in need of support. Occupational health psychologist is now considered.*
- *OH-cooperation is OK.*

# Summary

- OHS and occupational safety activities were not coordinated in either of the companies in the beginning of the study.
  - When the risk assessment and work place survey were carried out simultaneously and together **in the case company**, and the activities were discussed together, the roles of both parties became clear.



Employees learned about OH-cooperation  
Employees became more satisfied with OHS.  
Owner-manager's trust in OHS increased.

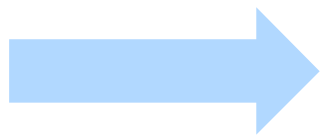
- The documents (risk assessment form and the work place survey) of the case company and OHS were shared. They are needed in OH-cooperation in the future.
- **In the control company no positive changes**



# Summary

Models of Work Ability Support are important methods of OH-cooperation. They were not in use in either of the companies in the beginning of the study.

The discussion about work ability support practices was part of the intervention (based on the riskassessment ja work place survey results) and the model was attached into the case company's OHS action plan.



In both cases discussions about the practices started to advance.

# Conclusions

- OH-cooperation developed in the case-unit.
  - Still, developing cooperation requires time.
- The study improved consciousness of OHS and occupational health and safety issues.
  - Support to the earlier knowledge that SEs are short of knowledge and many need help in risk assessment.
- Models of Work Ability Support function better if they are made in cooperation between companies and their OHS.
  - At the moment they are the models 'owned' by OHS.

# Discussion

- There are tools for OH-cooperation, but how widely are they are utilized? (eg. Models of Work Ability Support; PIRA-risk management).
  - If they are utilized by OHS, they might not discuss with the companies' own practices.
- OHS support for work communities seems to be unclear:
  - What has OHS to offer; what the SEs need and want?
- The role of employees in the OH-cooperation is unclear: How can they participate if OHS or employers don't ask them.

# Suggestions

- Employees should be engaged in the OH-cooperation in practice.
- OH-cooperation needs to be developed further – in practice and conceptually.

The starting point should be the needs of the customers.

More joint evaluation is needed.

In developing model(s), participation of several SEs might be worth trying.

# Thank you!

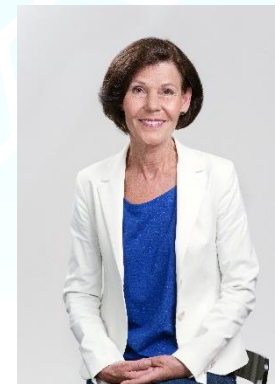
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