Micro-tools to enhance Safe behaviour of vulnerable employees in low-skilled work.

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Example industrial cleaner

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Outline of this presentation

1. **Introduction of the second part of the study "Improving Safety for Low-skilled and High-risk work" in the Netherlands**
    - background
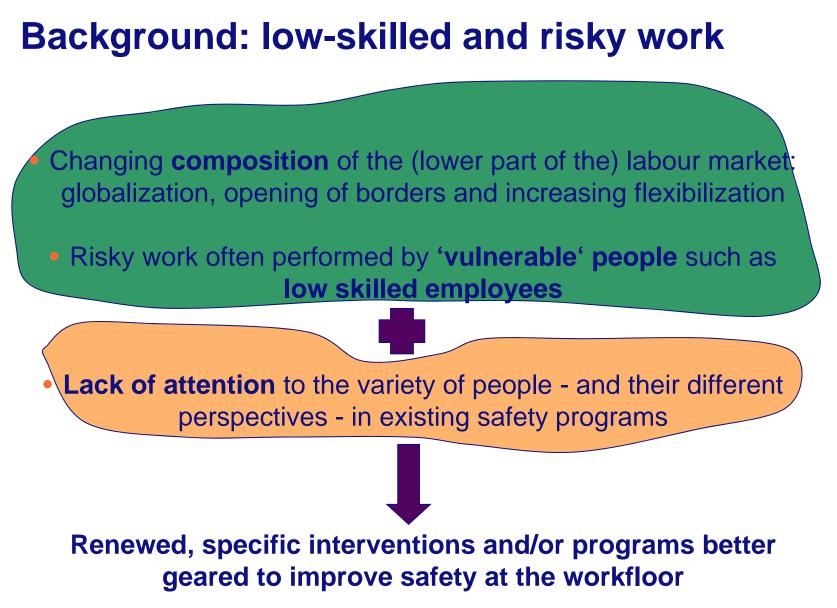   - target group
    - aim pof the study

2. **Methods**
    - the diagnosis tool based on our theoretical framework
    - the co- creation of interventions

3. **Result: the micro-tools**

4. **Conclusion**

5. **Discussion & further developments**

1. Introduction of the project:
Lowskilled & high-risk work: the micro-tools.

- 2nd part of the HEAR Research Program on human related aspects of safety at work;

- Sponsored by the Dutch Ministry of Social Affairs;

- Carried out by TNO Work & Employment in the Netherlands, specialized in research and consultancy of work-related issues (Participation, Productivity and Health&Safety);

- Co-development with companies in Construction, Transport, (Greenhouse) Agriculture, Industrial Cleaning;

Background: low-skilled and risky work

- Changing **composition** of the (lower part of the) labour market: globalization, opening of borders and increasing flexibilization

- Risky work often performed by '**vulnerable**' **people** such as **low skilled employees**

- **Lack of attention** to the variety of people - and their different perspectives - in existing safety programs

Renewed, specific interventions and/or programs better geared to improve safety at the workfloor

Target group: vulnerable workers in low-skilled and risky work

Low- skilled work (required education is low or none) is often:

- *risky*, dirty and strenious work

- executed by *vulnerable* employees, e.g.:
  - older employees without proper qualifications
  - (recent) migrants
  - employees with poor litteracy skills
  - younger 'drop outs'
  - flexworkers (via temporary agencies)

Statistics substantiating the problem (NEA)

- Total group, 27% is educated at a low level; in this group **17% are migrants**
- 46% of the **lower- skilled** are exposed to hazardous substances on an almost daily basis. Especially non-western, versus 30% of the more educated.
- **Non-western migrants** significantly more involved in an accident with physical /mental injury (10%). / Dutch employees have more access to PPE's
- People who work for **temporary employment agencie**s were affected sigificantly more by mental or physical injury caused by an accident (9,6%).

And…in the mentioned vulnerable groups:

- Measures are less often taken
- More desire for measures taken

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Aim of the 2nd part of the research (1st part was the dev. of a theoretical framework with do's en dont's)

To develop measures, the so-called "micro tools" , that fit the specific needs of the target group and so effectively enhance safe behaviour.

Deliverables:
- A diagnose tool to assess the need within companies for interventions/approaches for low-skilled work, based on the theoretical 'safety for al' framework (= result of the first part of the study).

- A set of micro-tools (developed in co-creation) as good practices.

- Evaluation of the effectiveness of the tools

2. Method

1. Recruitment of companies

2. Questionnaire, based on Fishbein & Ajzens "intention for safe behaviour" (t=0)

3. Assessment with diagnosis tool, based on our theoretical model (blind spots)

4. Decide on the type of intervention

5. Intervention

6. Questionnaires (t= 1)

7. (Qualitative) evaluation of the company cases

Safety for all-framework: do's en dont's

Key aspects: Influencing parties	Risk awareness	Motivation	Capa-bilities	Control options	Sustai-nability
employee					
Peer-group					
Management					
Company/branche/					

Safety for all-framework: do's en dont's

Key aspects: Influencing parties	Risk awareness	Motivation	Capabilities	Control options	Sustainability
employee	Combine the use of short and long term effects for young workers				
Peer-group					
Management					
Company/branche/					

Safety for all-framework: do's en dont's

Key aspects: Influencing parties	Risk awareness	Motivation	Capabilit ies	Control options	Sustainabi lity
employee					
Peer-group		Be aware of the informal leader in the (social) group		Manage social issue like debt	
Management					
Company/branc he/					

The diagnosis tool: questions derived from the framework

Risk awareness:

- *Er wordt gebruik gemaakt van andere vormen van veiligheidsinstructies (zoals bijv. safety symbols, plaatjes en video's)*

  …

Motivation:

- *Uw bedrijf is zich bewust van de belemmeringen voor individuen om veilig te werken;*
- *Tips en ideeën voor veilig werken van werknemers zijn verzameld en gedeeld: binnen het eigen bedrijf, met andere bedrijven;*

  …

Capabilities/ Knowledge

- *De instructeur/trainer bevestigt de doelgroep in wat ze kunnen en niet in wat ze (nog) niet kunnen*
- *…*

Control options

- *Leidinggevenden bieden genoeg ruimte voor eigen initiatief, eigen inbreng en fouten worden niet meteen afgestrafd (maar als aangrijpingspunten om te leren).*

  …

3. Results: micro-tools designed in cooperation with companies.

- Interactive toolbox (challenge, interact, visual, repeat, repeat, repeat)

- Roleplaying game (RPG) with actor (adressing safe behavior, being assertive e.g. when having 2 bosses, " I see, I find, I want" , feedback from the group)

- Interactive gaming: 'situational leadership' (confrontation with consequences of own behaviour, competitive)

- Focusgroups on risk perception

- Workshops that enhance 'empowerment', for safe behaviour.

- Selection and coaching on personality traits.

Case 1: The interactive tool box (Industrial Cleaning Company)

- *… a lot of the material that was used here can be considered what we call `linguistic' (it consists mainly of written texts). This applies to the SOS-booklet, the news bulletins and the toolboxes. Moreover, it has a somewhat `police like' intonation.*

- *The first newly designed intervention consists of an interactive toolbox meeting. The experimental toolbox concerned the proper use of respiratory protection and contained more pictures, less text, was short (10 minutes), contained more interaction (group discussion. Also short term effects were connected to the long term effects. The workers were very positive…"*
- *Pictograms were action oriented.*

Case 2: Focus group session (maritime cleaning company)

- *The diagnosis tool revealed that employees up till now were not actively involved in the setup and implementation of safety programs/ measures. So they decided to implement focus group sessions.*

- *Importance in facilitating the focus group session is true dialogue, trust and openness when discussing perception of safety (no good or bad)*

- *it seems that within this organisation possibly a preselection takes place of problems. The employees told that problems were however discussed during the lunch and in the coffee house. But actually: 'nobody thinks about communicating this to the correct person'.*
  But there is more: *For instance the fear of losing ones job, not wanting to be seen as a trouble maker.*

- *The sessions were evaluated as useful. Now the prevention manager briefed that the sessions will be formalized in existing working routines in the future.*

Case 3: interactive leadership game to work safely: " Omni clean in troubled water" .

- *the diagnosis tool showed the need of improving leadership skills, especially in situational leadership (how to give work instruction to experienced personel, how to coach, how to reprimand). A special game 'Omni clean in troubled water' was developed.*

- *In each round managers are confronted with a daily situation, played out by training actors. Surprises are built in, employees can help eachother, competitive element helps to increase performance*

- *Improvement towards an open culture where supervisor/management styles improve through learning with and from each other.*

Case 4: interactive sessions to enhance the employees' empowerment (maritime se*rvices company)*

- *It is hard for this small and multi purpose company to survive is a harsh competitive sector (few control options).*

- *Crucial elements of the " empowerment workshop" is to create a sense of control, mastery and social support as a way to obtain personal wellbeing and mental health. Also there is a link to motivation and self efficacy.*

- *In the workshop the unsafe and unwanted situations in the workplace have been discussed and moreover the actions that are needed for improvement have been defined together. At last obstacles and the personal barriers to make to transition from plans to actions were discussed.*

- *The role of facilitators is to reinforce supportive behaviour and to create a positive learning environment in the group.*

4. Evaluation: aspects of succes

- Transfer from language to visually driven communication

- Change from negative to positive affirmation

- From one sided telling to interactive game like learning

- Dual ladder: strict on social issues, positive feedback only on skills and self image

- Active involvement of workers in safety related activities (toolbox)

- Tailor made on the job training next to general safety awareness training

- Adjust safety messages to what is seen attractive by the target group

- Supporting actions addressing the social situation (debts)

5. Discussion & further developments

- Practical:
  - development of a 'self help' kit
  - database with the assessment results of the diagnosis tool.
    - Per branch
    - Benchmarking for companies

- Research
  - Further research interesting for *2 different groups:*
    1) employees with lack of cognitive ability to perform complex work (learning difficulties, lack of knowledge, ..)
    2) employees with 'social issues'(family relations, gambling, money, etnocultural issues, lack of self confidence or better live perspective).

    The 2 groups ask for specific 'situational' safety approaches.

Questions, suggestions, more info?

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