Strategies of behavioural change

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Introduction

- After a period of major progress in technical, mechanical and material safety, human behaviour as well as operational and organisational structures became more and more relevant for occupational safety and health protection during the last decades.

- Considering different campaigns and tools in that field various theories and beliefs about the effectiveness of measures and actions pushing and changing human behaviour can be encountered.
Introduction

- Distinction between three types of strategies:
  a) Technical strategies
  b) Mental strategies
  c) Systemic strategies

and combinations of a), b) and c).
Technical Strategies of behavioural change

- Technical strategies of behavioural change are mostly based on the idea of human behaviour as a machine.

- The machine model contains the assumption that misbehaviour is caused by an individual dysfunction which must be identified and eliminated or changed by appropriate means (tools, solutions, campaigns...)

- In the machine model these appropriate means are understood as input which is expected to turn dysfunctions into social desired behaviour as output.
### Technical Strategies of behavioural change

#### Defined individual deficit

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<th>Lack of Knowledge</th>
<th>Input</th>
<th>Output</th>
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<tbody>
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<td>Information, clarification</td>
<td>Training, exercises</td>
<td>Pressure, checkups, governance: fear of disadvantages</td>
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<th>Lack of Practice</th>
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<th>Lack of Willingness</th>
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<td>Pressure, checkups, governance: fear of disadvantages</td>
<td>Rewards, approval: hope for advantages</td>
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Technical Strategies of behavioural change

- In the machine model human behaviour is seen as a given object - depending on the right influence and successfully manipulated by the right tools.
- Behavioural change is understood as a technical question in a sense of „how-to...“
- Technical strategies are very popular by general practitioners who demand instruments of behavioural change which are simultaneously simple to use, cost-effective, reliable and which need only little attention as well as take no time.
Technical Strategies of behavioural change

- Advantages of technical strategies of behavioural change prevail, if
  - workflow is highly standardized
  - the workplace is of low complexity
  - risks at workplace are certainly predictable
  - the workplace has only a small number of risks where personnel might have to react to
  - desired behaviour (output) is defined in an exact and concrete way, highly standardized and simple
  - the desired behaviour can be easily assessed by observers and actors as right or wrong
Mental strategies of behavioural change are based on a cognitive model of behaviour. In that model the individual is not only an object of safety at work but controls its behaviour itself, perceiving risks, interpreting situations and making decisions – more or less functional.

These decisions depend on a combination of knowledge, awareness, experience, attention, attitude and motivation.

This model takes into account that behaviour is always related to mental, cognitive processes of meaning, assessing and reacting.
Mental strategies of behavioural change

- Successful mental strategies of behavioural change stimulate actors’ attitudes, interests and knowledge.
- Simulations, trial and error, negative learning (what I should never do), transferring experiences from one situation to another one which is similar etc. are possibilities to modify s.b.’s behaviour by changing his hypothesis, thoughts and judgements.
Mental strategies of behavioural change

- E.g. A car accident simulation that proofs the value of fastened seat belts shows how mental strategies of behavioural change work:

  1. Awareness of the actual hypothesis: „Fastened seat belts become necessary for a speed level of 25 km/h. Lower speed will not be a problem for me. I am strong enough to clasp."
  2. Trial of the sledge: At what speed-level will it become dangerous for me?
  3. Re-defining the necessity of fastened seat belt.
  4. Acting according to the new discernment.
Mental strategies of behavioural change

- Modern (computer-) simulations, models or parcours of e.g. tripping, stumbling, tumbling, plunging and overturning or simulations of the effects of dust and toxities etc. function on these mental strategies of instruction, by stimulating conflicts between personal theories on risks e.g. and practice.
Mental strategies of behavioural change

Advantages of mental strategies of behavioural change prevail, if

- workflow is of low standardization
- workplace provides high complexity
- risks at workplace are not certainly predictable
- workplace has quite a number of risks, personnel might have to react to
- effective behaviour is defined according to principle and general guidelines
- it is difficult to assess behaviour simply as right or wrong
Systemic strategies of behavioural change

- What about the role of motivation, persistent and organisational effects of behavioural change?
- Let’s put these variables into a systemic model, because humans at work do not behave on an isolated island without contact to others.
- Behaviour is not only an individual issue but depends substantively on ecological factors like expectations of colleagues or superiors, open and hidden norms of the working group, company or industrial branch, responsibilities and cultural standards s.b. meets and has to adjust to when he joins.
Systemic strategies of behavioural change

- Behavioural change in this meaning is embedded into a process of organisational or industrial development and not as a single unit.

- Behavioural change on a systemic view is combined with a systematic process of organisational improvement and development. It is based on partizipation of staff members and powerful members of the hierarchy.
Systemic strategies of behavioural change

- Advantages of systemic strategies of behavioural change prevail, if

- workflow needs a lot of cooperation and collaboration
- a lot of sub-systems are touched by desired behavioural change
- behavioural change will probably provoke resistance
- behavioural change needs structural support and a helpful environment to persist
- behavioural change shall become a new habit
Conclusions

- All strategies of behavioural change have advantages and disadvantages.
- No strategy is per se more or less effective. The strategies have different scopes.
- The right strategy of behavioural change depends on the workflow, the objectives of behavioural change, the risks, the requirements and the systemic norms and regulations.
Conclusions

- The three presented types of strategies of behavioural change make it easier to adjust tools, campaigns and programs to some basic cognitions.
- On the one hand that may prevent from wasting energy, time, money and ideas into ineffective strategies.
- On the other hand that may be useful justifying necessary campaigns or tools towards stakeholders or clients.