

Robotization of Work

*What Are the Experiences among Employees
in Automotive Industry Company in the Czech Republic*

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Introduction

- Impact of robotization on occupational safety and health??
 - How employees perceive robotics in their work activities??
 - What impact the introduction of robots has on their mental health??
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- NEW AND EMERGING RISK AT WORK??

Research methodology

- Qualitative research
 - unstructured + semistructured interviews
 - open and axial coding - identification of themes
- August 2023
- Automotive company - collaborative robots (cobots)
- Robotization process started in 2017
 - reduction in the number of employees from 1,600 to 600
 - lowering the risks at work (chemical hazards and physical load)

Respondents

- Unstructured interviews - 3 managers
 - technical manager, health and safety manager, and HR manager
- Semi-structured interviews
 - 6 production operators, 1 shift leader, 1 technical worker
 - 7 women and 1 man
 - 35–60 years (average 45 years)
- Education
 - 2 - primary
 - 6 - high school

Results – unstructured interviews

- Introduction of robots affects the culture of the entire company.
- The company must get ready for the robotization proces in advance.
- Employee characterization:
 - committed, flexible, and technically educated employees
 - proactivity and responsibility

Results – semistructured interviews

- 9 resulting themes
 - General perception
 - Change
 - Fear
 - Problems
 - Support (training and current support)
 - Social relations and communication
 - Characteristics of the employee
 - Physical health
 - Mental health (stress, fatigue, cognitive functions, memory and attention, abuse)

Results — semistructured interviews

- **Characteristics of the Employee**

- no specific skills or education are needed
- should first of all want to work with robots
- should be willing to learn new things

- **Physical Health**

- reduction of physical demands
- less pain and strain on their arms and hands

- **Mental Health**

- generally do not consider their work stressful
- stress in situations where problems with robots occur
- no increased demands on memory processes
- no effect on memory, attention, sleep patterns, or addictive behavior

Conclusion and recommendation

Unique

employee characteristics in this research - not highly educated but very skilled/proactive

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Continuation

... of the research

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Important

adequate and easy-to-understand **training**
supportive **leadership**
company **culture**



Thank you for your attention

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