

Culture-specific differences in occupational risk-behaviour of rescue service staff

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Background:

The aim of this study was to analyse the risk exposure (physical and mental) along with the risk behaviour among rescue service staff. Of special interest were safety culture differences between the countries. Such differences may reveal a potential for preventive measures for improving health and safety at work.

Methods:

In a cross-sectional study 546 employees in Austria (AT), Germany (D) and Sweden (S) participated in this study (**Figure 1**) and completed a standardised questionnaire. The Questionnaire covered parts of the Copenhagen Psychosocial Questionnaire (COPSOQ; [1]) and additional items assessing occupational threats, risk perception and risk behaviour. The response-rate was 52% (AT 36%, D 56%, S 59%). ANOVA and Chi²-test have been used to describe the differences in the groups.

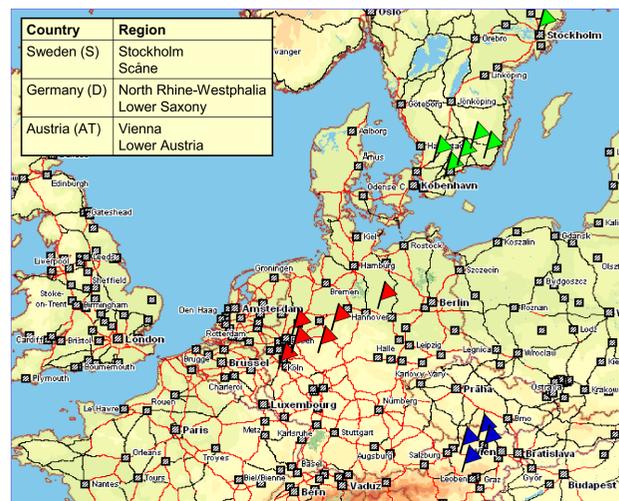


Figure 1: study participants.

Results:

Employees in D reported the highest rate of severe accidents at work during the previous 12 month (D 25%, AT 14%, S 8%). Risk preventive behaviour (e.g. fastening seatbelt) was significantly lower in AT than in D and S (AT 52% vs. D 97% and S 84%, $p < .001$; see **Figure 2, left**). Protection against infectious diseases (e.g. use of protective gloves or disinfecting hands) was calculated to a “Hygiene-Score”, see **Figure 2, right**. The use of protective measures was significantly more frequent in D and AT than in S (D 76% and AT 72% vs. S 66%, $p < .01$).

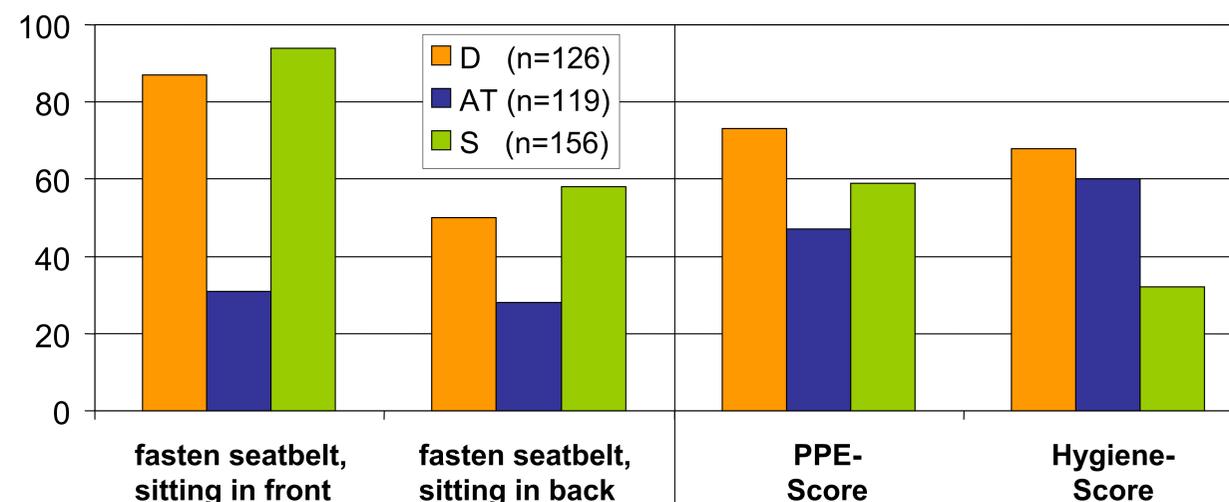


Figure 2: Risk behaviour of rescue service staff. Left site: percentage of using seat belt while sitting in the ambulance in front or in the back; right site: Scores describing the use of PPE (personal protective equipment) and the application of hygiene measures.

Burnout was assessed with the Copenhagen Burnout Inventory (CBI; [2]). In all countries the risk of burnout was low compared e.g. to nursing staff [3] but increased significantly with the frequency of “health threat situations” during work (e.g. threat by aggressive patients or relatives, $r = .28$, $p < .001$), see **Figure 3**. This was also associated with an intensive decreasing job satisfaction of the employees concerned.

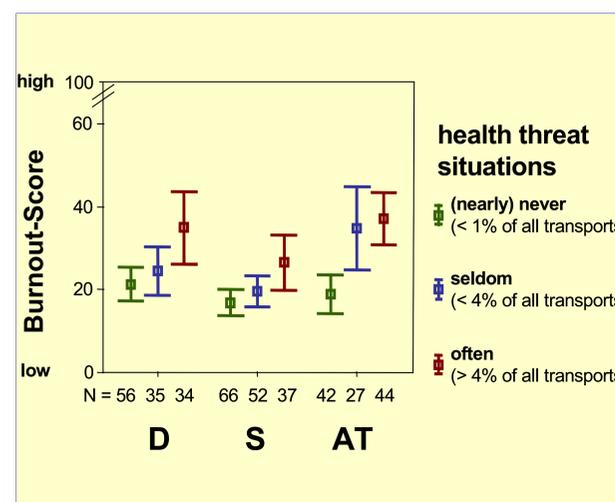


Figure 3: Frequency of experienced “health threat-situations” vs. burnout.

Conclusions:

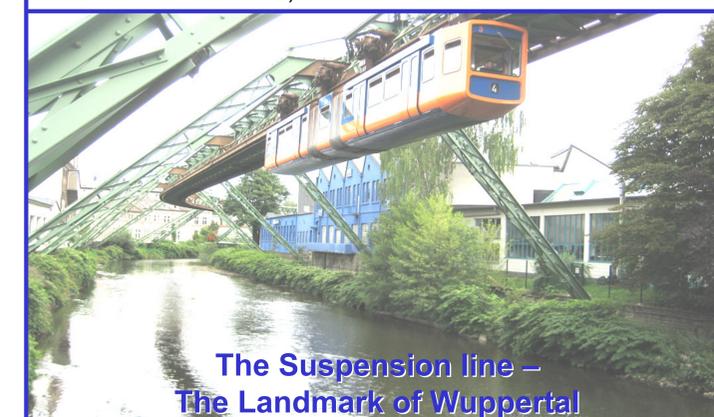
Cross cultural comparisons of occupational groups may exhibit meaningful differences in relevant aspects of occupational health and safety, which most likely would have remained undetected in national surveys. Although the work tasks of rescue service staff are similar in the countries investigated, there are differences in relation to risk exposure and risk behaviour at work. Results and findings might lead to more specific prevention strategies e.g. through adaptation and extension of (further) education.

References:

- [1] Kristensen TS (2002): A new tool for assessing psychosocial factors at work: The Copenhagen Psychosocial Questionnaire. TUTB Newsletter 19-20, 45-47.
- [2] Kristensen TS & Borritz M (2001) Copenhagen Burnout Inventory. National Institute of Occupational Health, Copenhagen, Denmark.
- [3] Hasselhorn HM, Tackenberg P, Mueller BH (ed) (2003): Working conditions and intent to leave the profession among nursing staff in Europe. National Institute for Working Life, Stockholm, 2003.

This study was published:

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