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# Exploring firefighters' health and well-being at work

**Ann Jacobsson**

## Akademisk avhandling

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**Author**  
Ann Jacobsson

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### **Abstract**

**Background** This thesis supports the assumption that firefighters' health and mental well-being is important, in order to cope with the stress that the profession implies. As health is an essential part of everyday life, it seems substantially to understand how an almost exclusively male workforce of firefighters construct their discourse in relation to health and well-being. The overall purpose of this thesis is to explore health and ill-health among firefighters in relation to their work environment, including coping strategies, critical incidents and 'ordinary' day-to-day work at the fire and rescue service station.

**Methods** In Study I, 180 firefighters (16 women, 164 men) answered an open-ended question. Qualitative content analysis was used based on free text answers and focused on critical incidents. Study II, was based on a cross-sectional survey measuring burnout, psychosocial work environment and coping strategies. Participants were randomly selected and the final sample consisted of 476 firefighters (58 women, 418 men) and analyzed with multiple linear regression. In Study III and Study IV, a total of 28 fire-fighters (4 women and 24 men) participated in the study. Regarding Study IV a strategic sample of policy documents was also included. For Study III and IV, the research questions was dealt with applying critical discourse analysis on the focus group discussions (FGD) and individual interviews. In Study IV the analysed material also included policy documents.

**Results** Findings from Study I were presented in four categories; 'overwhelming critical situations', 'risks of delay', 'risk of failure' and 'risks to oneself'. Women in Study I described their experiences in a more distanced account, while men described their experiences more vividly. Results from Study II showed overall low mean values in the burnout scales of emotional exhaustion (EE) and depersonalization (DP) among both women and men. Only 2 % of women and 1% of men scored high levels of EE, and only 2% of women and 3% of men scored high level of DP. A multiple linear regression showed that high demand and lack of social support contributed significantly to predicting EE among men. The coping strategies among firefighters influence the level of EE and DP, and these strategies were different between women and men. In Study III six dominant themes were identified. A strong sense of the firefighter community was articulated as health promoting. The physical exercise at work and the balance between emergency and station work were also two recurrent theme supporting firefighters' health. Another health-promoting theme concerns clarity of roles among firefighters. Peer support and tolerance in the work group was another common theme, alongside with expressions of the firefighter as hero or helper. Themes described as hindrances to health and well-being in firefighters' discourse were; diversity, preventive work and education. All hindrance themes were articulated as important struggles in the firefighter discourse against changes in work. In Study IV, we have identified two sides in the struggles, on the one hand we have the 'insiders', a majority of male firefighters working in the fire and rescue services representing a collective defending its autonomy and traditions. On the other hand we have the 'outsiders', represented by the government, the Swedish Civil Contingencies Agency, (MSB), municipalities, politicians at different levels and academic researchers.

**Conclusion** Firefighters described critical incidents at work as overwhelming situations, along with negative experiences of organizational and practical tasks. Despite these experiences firefighters were reported as healthy according to EE and DP (Study I and II). Results of Study II also showed a relationship between psychosocial work environment and burnout among men, but not among women. The coping strategies among firefighters influence the level of burnout, and these strategies differ between women and men. The well-being in firefighters' discourse, at least partly, is gained from a strong sense of belonging to a homosocial group characterized by closeness to each other and peers who take care of each other. The firefighters in our studies articulate this community-sense, and describe the importance of the similarity, rather than diversity (Studies III and IV). Findings from our studies regarding health and well-being, add knowledge to the current explanations relating to firefighters' resistance to change.

**Keywords** Firefighters, health, well-being, burnout, psychosocial work environment, coping strategies, critical incidents, experiences, discourse analysis, focus groups, focus group discussion

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