

# Psychosocial Work Conditions – Cardiovascular Disease, Perceptions and Reactive Behavior

**Mia Söderberg**

Occupational and Environmental Medicine, Institute of Medicine  
Sahlgrenska Academy at University of Gothenburg, Sweden

## Abstract

The overall aims of this thesis were to improve our understanding of (1) associations between adverse psychosocial work conditions and less explored cardiovascular outcomes, and (2) workers' perceptions and reactive behaviour when exposed to such conditions. Psychosocial job environment was evaluated with the job demand-control and effort-reward imbalance models. In the former construct, demand captures psychological work load, while control measures the employee's influence over work tasks. Conceptually, effort is similar to job demand in measuring work intensity, while reward measures salary, esteem from colleagues and management, and job security. Examined subjects were drawn from three cohorts: randomly selected residents from Greater Gothenburg, patients with new onset acute coronary syndrome from the West county of Sweden and Swedish male construction workers.

Results in paper I illustrated that a combination of high demands-low control, commonly referred to as high strain, and imbalance between effort and reward was related to adverse values in intermediate cardiovascular heart disease risk factors, foremost blood pressure and blood lipids. Surprisingly, findings in paper II showed that work conditions characterized by high demands-high control were more strongly associated to increased ischemic stroke, than high strain. Furthermore, high strained and effort-reward imbalanced jobs predicted job mobility in a general population sample (Paper III) and were related to delayed return to work and fear-avoidance perceptions towards the workplace, among patients with new onset acute coronary syndrome (Paper IV). Fear-avoidance attributions, in turn, mediated the relationship between poor psychosocial conditions and expected work resumption. The results partly concur with previous evidence on links between psychosocial job factors and cardiovascular outcomes. The results also indicate that workers are not passive receptors to impairing job conditions, but both react to and actively try to improve or avoid detrimental work environment, and consequently protect their health.

In the gender stratified analyses (paper I, III, IV) notable differences were detected, as psychosocial job dimensions were not related to blood pressure, job mobility, expected return to work or fear-avoidance attributions among women. These differences could be due to a gender segregated labour market or lack of precision in reflecting female dominated work cultures. Further explanations might be that for women, private life stressors, e.g. child care or household work, deflate relationships between the psychosocial factors and outcomes used in this thesis.

**Keywords:** Psychosocial job conditions, cardiovascular disease, gender segregation

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Mia Söderberg

Fakultetsopponent:  
Professor Per-Olof Östergren  
Socialmedicin och global hälsa,  
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- II. Schiöler, L., Söderberg, M., Rosengren, A., Järvholm, B., Torén, K. Psychosocial work environment and risk of ischemic stroke and coronary heart disease: a prospective longitudinal study of 75236 construction workers. *Submitted for publication*
- III. Söderberg, M., Härenstam, A., Rosengren, A., Schiöler, L., Olin, A-C., Lissner, L., Waern, M., Torén, K. Psychosocial work environment, job mobility and gender differences in turnover behaviour: a prospective study among the Swedish general population. *BMC Public Health* 2014, 14:605
- IV. Söderberg, M., Rosengren, A., Gustavsson, S., Schiöler, L., Härenstam, A., Torén, K. Fear-avoidance beliefs towards work among acute coronary syndrome survivors - relationships to adverse psychosocial job conditions and mediator effects in expected return to work. *Submitted for publication*

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