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Psychosocial work environment and health: new evidence

Johannes Siegrist

"New" occupational health research for science and policy

Despite profound changes in modern working life occupational health research has maintained a rather narrow view of its topic, dealing almost exclusively with physical, chemical, or otherwise material conditions.^{1,2} In view of a substantial body of scientific evidence of adverse effects on health produced by a stressful psychosocial work environment this restriction is no longer justified.^{3,4} The term "psychosocial work environment" has been introduced to delineate the range of sociostructural work related opportunities that is available to an individual person to meet his or her needs of wellbeing, productivity, and positive self experience.⁵ Two aspects of positive self experience are of particular importance for wellbeing and health at work: self efficacy and self esteem.

The demand-control model of work related stress posits that job tasks characterised by high psychological demands in combination with a low level of decision latitude or task control evoke recurrent stress reactions by suppressing positive experiences of self efficacy.⁶ A complementary model of an adverse psychosocial work environment, effort-reward imbalance, is based on the notion of reciprocity of work contracts where effort at work is reciprocated by socially defined rewards that include money, esteem, and status in terms of promotion prospects and job security.⁷ Failed contractual reciprocity (an imbalance between high efforts and low rewards at work) adversely affects self esteem and elicits longlasting stress reactions. Both models were shown to predict a range of stress related diseases in employed people.³⁻⁸

New results from the Whitehall II study of British civil servants published in this issue suggest that health adverse

effects of low self esteem at work are not restricted to contractual unfairness but may extend to less specific experiences of relational injustice at work.⁹ The main findings of this study show that employees who suffer from inappropriate behaviour of their superiors (relational injustice) are at increased risk of poor self rated health at two subsequent time intervals (after three and six years on average). Moreover, declining organisational justice over time increases the risk of poor health whereas an improvement in justice increases their perceived health. These results give further support to the notion of a health adverse or health promoting psychosocial work environment. In policy terms, they broaden the focus of workplace health intervention to include justice in managerial treatment.

Despite these merits the conclusions of the paper by Kivimäki *et al*⁹ deserve some caution. The obvious limitations of this study are mainly attributable to a lack of externally assessed health measures, the use of a proxy measure of organisational justice, and somewhat inconsistent gender specific results. Moreover, the odds ratios of poor self rated health are comparatively modest, ranging from 1.12 to 1.53 in the fully adjusted models. A further unresolved question concerns the role of socioeconomic status in this analysis. Organisational injustice and poor self rated health were both found to be more prevalent in lower status civil servants. Rather than adjusting for rank an analytical strategy seems promising that explores the mediating or modifying role of organisational justice in this context. Similarly, authors adjusted the effects of relational justice on health for the two work stress models,

demand-control and effort-reward imbalance. While this is an instructive approach an analysis of combined effects of the models under study is equally important.

On conceptual and methodological grounds, the analysis of change of exposure over time and its association with change of health must be considered a special strength of this study. It is now evident that occupational stress research needs to move beyond a single (mostly baseline) assessment of occupational exposure to study its dynamics over time. Recent findings from both work stress models mentioned above support this conclusion.^{4,5} In summary, it is hoped that innovative contributions such as this paper from the Whitehall II research team strengthen the impact of "new" occupational health research for science and policy.

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