



Work and sleep – a prospective study of psychosocial work factors, physical work factors and work scheduling

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Study objectives

There is limited knowledge about the prospective relationship between major work characteristics (psychosocial, physical, scheduling) and disturbed sleep. The present study sought to provide such knowledge.

Design

Prospective cohort with two measurements (T1 and T2) across two years.

Setting

Naturalistic study.

Participants

4827 persons in a representative sample of the working population in Sweden.

Measurements and results

Questionnaire data on work factors obtained at two points in time was analyzed with structural equation modeling. Competing models were compared in order to investigate temporal relationships, and a reciprocal model fitted the data best.

Sleep disturbances at T2 were predicted by higher work demands at T1 and by lower perceived stress at T1. In addition, sleep disturbances at T1 predicted subsequent perceptions of higher stress, higher work demands, lack of control as well as lack of social support at T2. A cross-sectional mediation analysis showed that perceived stress mediated the relationship between work demands and sleep disturbances; but no such association was found longitudinally.

Conclusions

Work demands, but not physical work characteristics, shift work or overtime work, predicted disturbed sleep. In addition, disturbed sleep predicted subsequent higher work demands, perceived stress, lack of social support and lack of control. The results suggest that remedial intervention against sleep disturbances should focus on psychosocial factors and that sleep interventions may improve the psychosocial work situation in the long run.

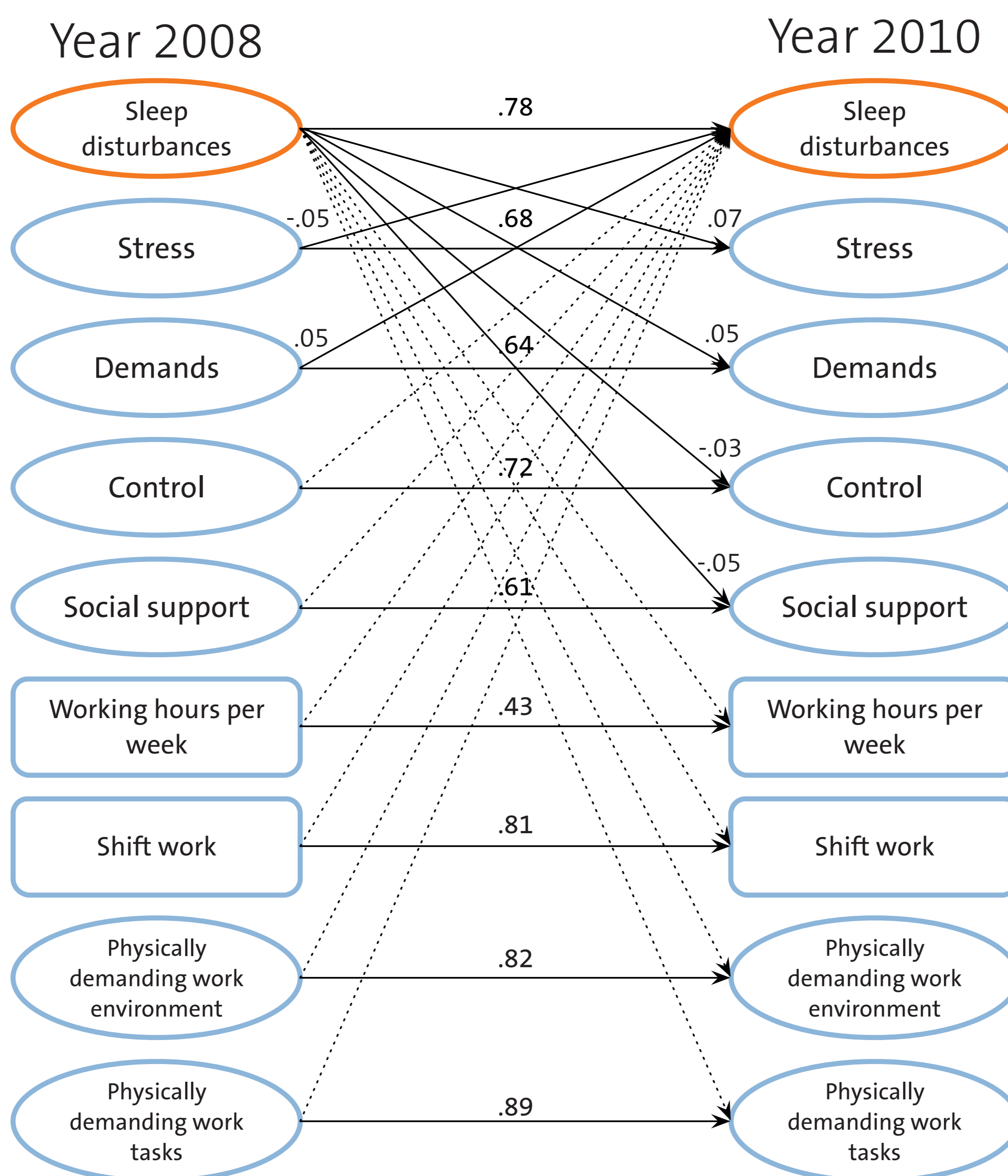
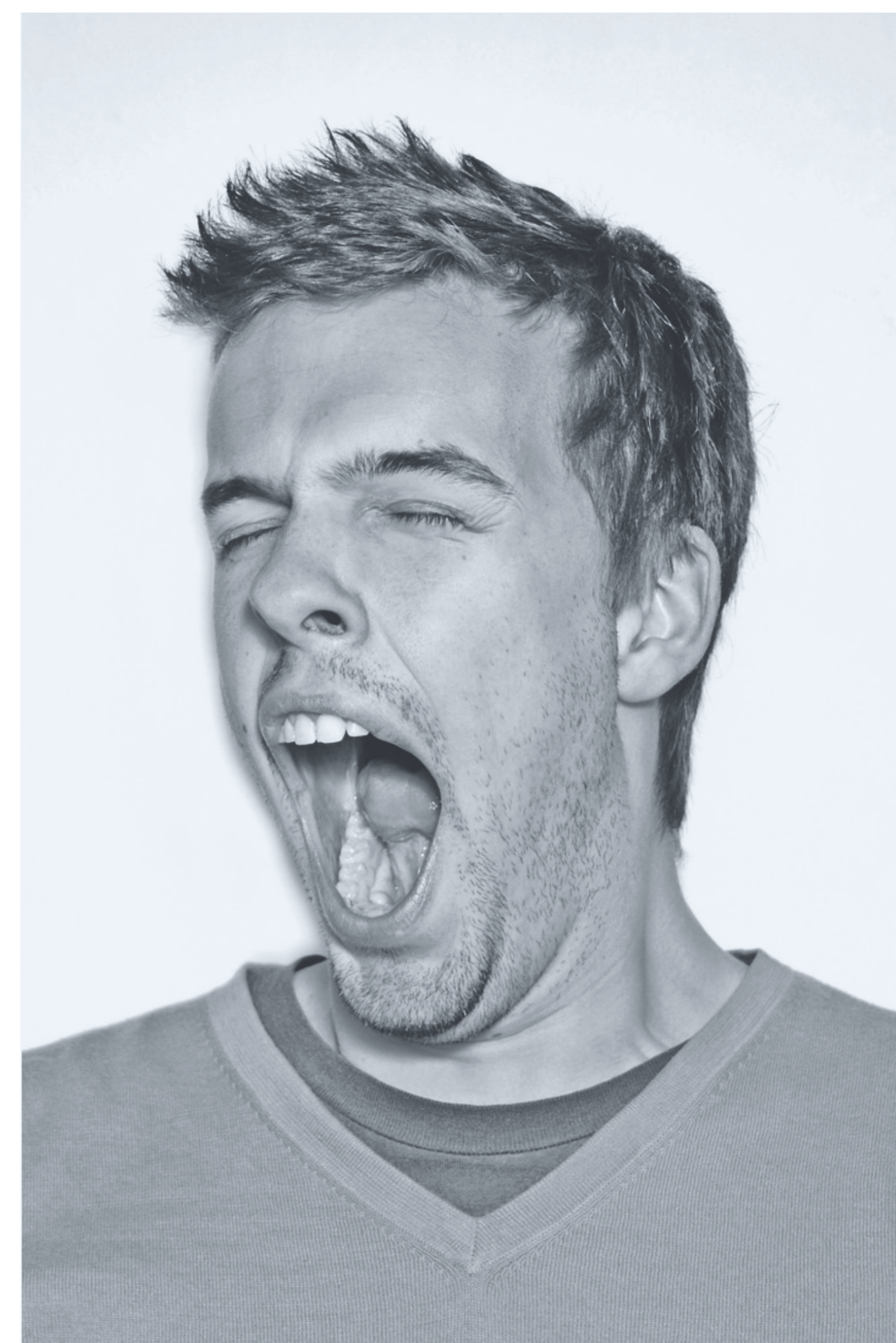


Figure 1. Structural equation modeling (SEM), Standardized coefficients

Note: * $p < .05$, non-significant relations are represented by dotted lines, all coefficients presented in the model are significant.