

Work-related determinants of sickness absence among Danish Human Service Workers

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Objectives

- To investigate the effect of a wide range of psychosocial work characteristics on risk of sickness absence
- To investigate the effect of a combination of these factors into a Psychosocial Work Environment Index (PSW-index) on sickness absence
- To calculate the etiologic fraction, i.e., the percentage of sickness absence that could be prevented, if all participants would have favourable exposure levels

Study design and sample

- Database was the PUMA study, a longitudinal Danish study on work, burnout, health, and sickness absence among human service workers (e.g., nurses, social workers, correction officers)
- Baseline: Of the 2391 eligible employees 1914 responded (80%)
- 3-year follow-up:
 - 679 of the 1914 baseline responders had left the organizations under study
 - Of the remaining 1235 employees, 1024 responded (83%)
- We further excluded 134 employees because of missing values on a variable of interest, resulting into 890 employees

Measurements

- **Psychosocial work environment:** Measured at baseline with the Copenhagen Psychosocial Questionnaire (COPSOQ) and some additional variables, developed for the PUMA study
- **Sickness absence:** Self-reported number of sickness absence days during the last 12 months, measured at baseline and at follow-up
- **Covariates:** Gender, age, type of organization, married/cohabiting, having children, children below the age of seven, smoking, alcohol consumption, leisure time physical activity, body-mass index, and socio-economic status

Effect of psychosocial work characteristics on sickness absence in PUMA

Work characteristic	RR	95% CI
Client-specific demands		
High client contact	1.19	(0.82-1.71) ns
Violence and threats from clients	1.56	(1.29-1.90) ***
Job involves controlling clients	0.93	(0.71-1.23) ns
Emotional demands	1.07	(0.98-1.16) ns
Demands for hiding emotions	1.17	(1.08-1.27) ***
Demands at work		
Quantitative demands	1.01	(0.92-1.10) ns
High work pace	0.95	(0.79-1.13) ns
Work organization and job content		
Influence at work	0.88	(0.81-0.96) **
Meaning at work	0.91	(0.84-0.99) *
Possibilities for development	0.95	(0.88-1.04) ns
Interpersonal relations and leadership		
Quality of management	0.89	(0.82-0.97) *
Predictability	0.93	(0.86-1.01) ns
Role clarity	0.91	(0.84-0.98) *
Role conflict	1.15	(1.06-1.25) **
Support from colleagues	0.94	(0.80-1.10) ns
Support from supervisors	0.95	(0.79-1.14) ns

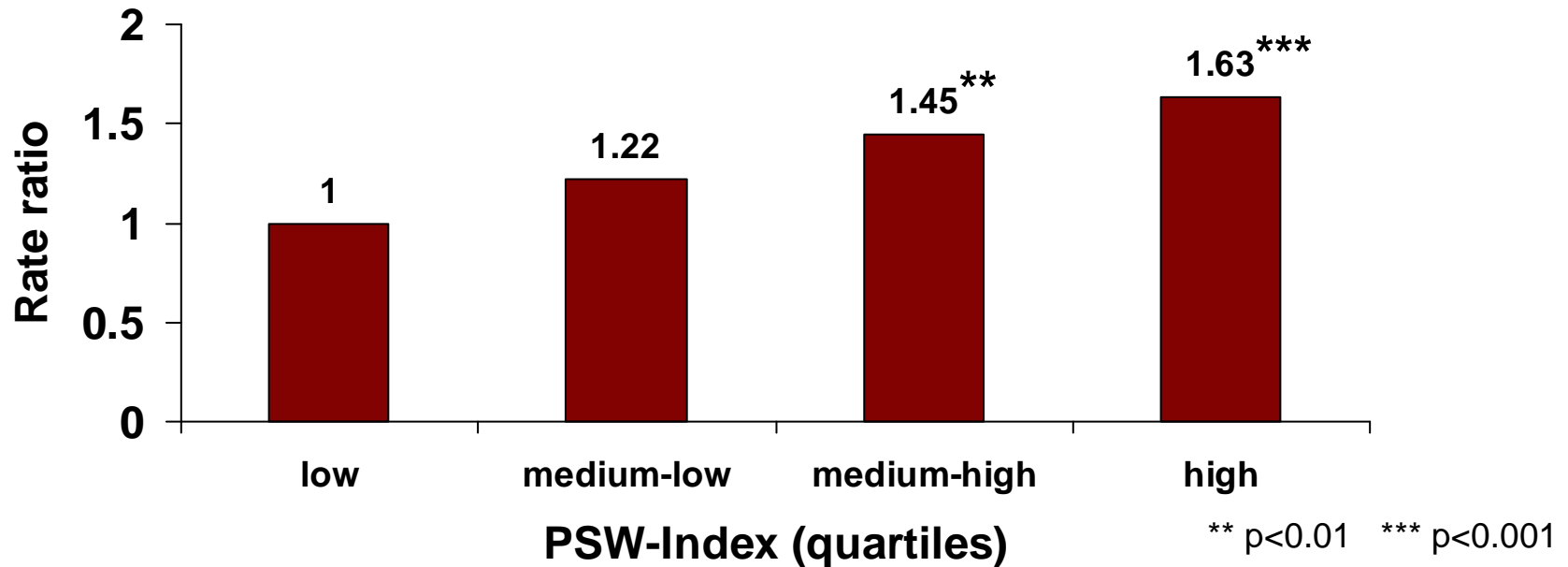
Rate Ratios are adjusted for all covariates and sickness absence at baseline * p<0.05 ** p<0.01 *** p<0.001

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Psychosocial Work Environment Index at baseline and sickness absence at follow-up



Adjusted for gender, age, type of organization, married/cohabiting, having children, children below the age of seven, smoking, alcohol consumption, leisure time physical activity, body-mass index, socio-economic status, sickness absence days at baseline, and **exposure to violence and threats**



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Etiologic Fraction

- Percentage of sickness absence that would be prevented, if all participants would be in the most favourable quartile of the PSW-index
24.5%
- Percentage of sickness absence that would be prevented, if no participant was to be exposed to violence and threats
9.9%
- Percentage of sickness absence that would be prevented, if all participants would be in the most favourable quartile of the PSW-index and no participant was to be exposed to violence and threats
32.0%



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Strengths of the study

- Comprehensive assessment of the psychosocial work environment
- We investigated both the effects of the single work characteristics and of a combined measure
- Analyses were adjusted for a wide range of covariates

Limitations of the study

- Sickness absence was assessed by self-report only. We are currently in the process of merging the cohort to the national registry that includes information on long-term sickness absence
- We lost a substantial number of participants during follow-up, because of job turnover
- Exposure was measured only at baseline and therefore does not reflect changes during the 3-year follow-up resulting into some misclassification

Thank you!

The results are published in:

Rugulies, R., Christensen, K.B., Borritz, M., Villadsen, E., Bültmann, U., & Kristensen, T.S. The contribution of the psychosocial work environment to sickness absence in human service workers: Results of a 3-year follow-up study. *Work & Stress*, 2007;21(4):293-311

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