

Psykososialt arbeidsmiljø og fysisk helse

Jan Olav Christensen

Forsker

Gruppe for arbeidsrelatert fysiologi og -psykologi (APF)

Statens arbeidsmiljøinstitutt (STAMI)



Outline

"Psykososialt arbeidsmiljø"

Hva har det med fysisk helse å gjøre?

Hvilke faktorer vet vi noe om? (muskelskjelettplager)

"Psykososialt arbeidsmiljø"

What ER et psykososialt arbeidsmiljø?

Editorial

Scand J Work Environ Health. 2019;45(1):1–6. doi:10.5271/sjweh.3792

What is a psychosocial work environment?

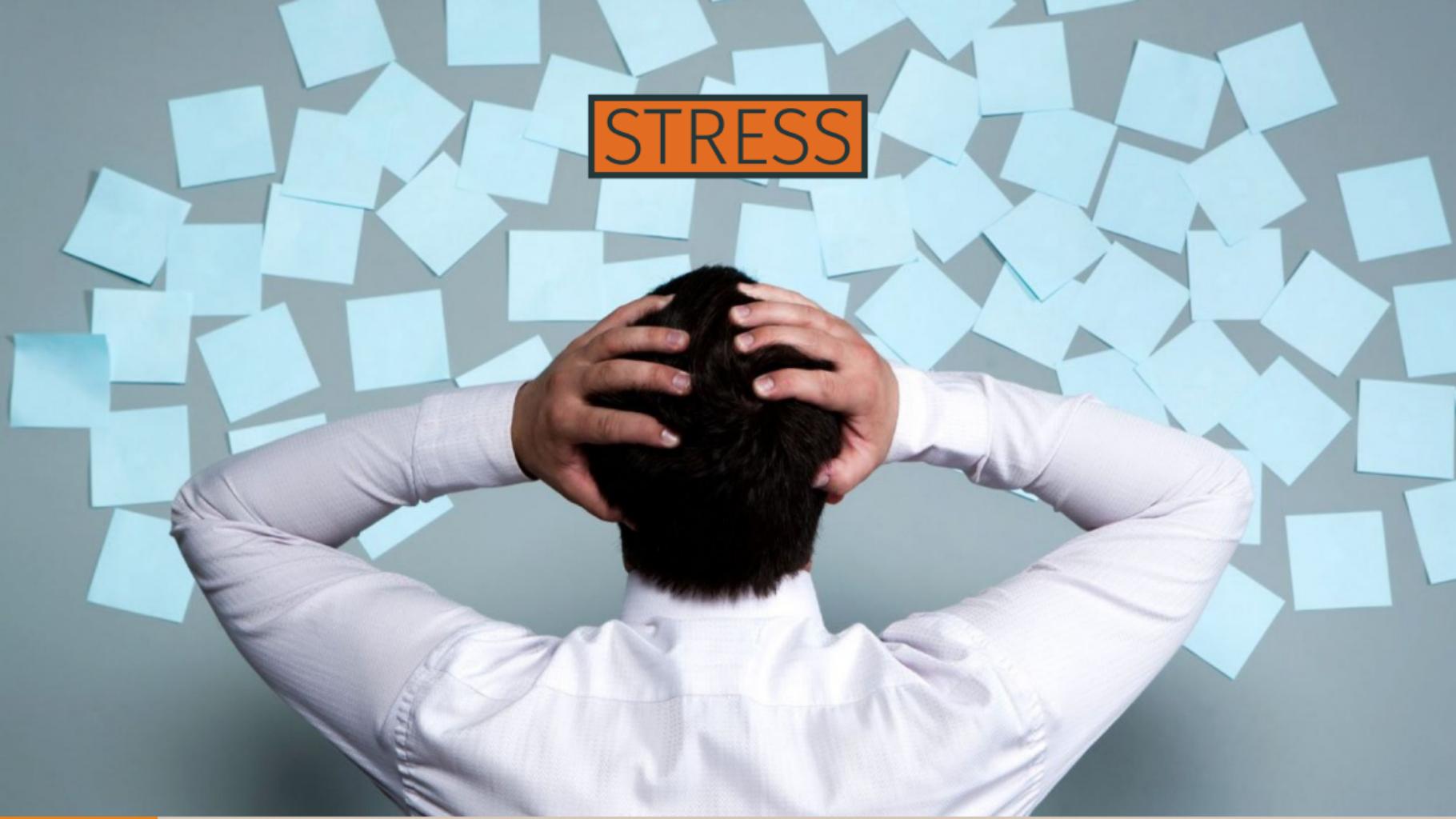
The term "psychosocial work environment" appears frequently in research articles, including those published in the *Scandinavian Journal of Work, Environment and Health* (1–8). Recently, the first international handbook on the emerging field of "psychosocial epidemiology" extensively addressed the contribution of psychosocial working conditions to health and illness (9).

There is, however, also a controversial debate pertaining to the meaning of the word "psychosocial" and whether it might enhance a focus on psychological phenomena and draw attention away from the work environment (10). Such concerns recently motivated the Swedish Work Environment Authority to remove the term psychosocial work environment when they published their new provision on the organizational and social work environment:

Reiner Rugulies, 2019

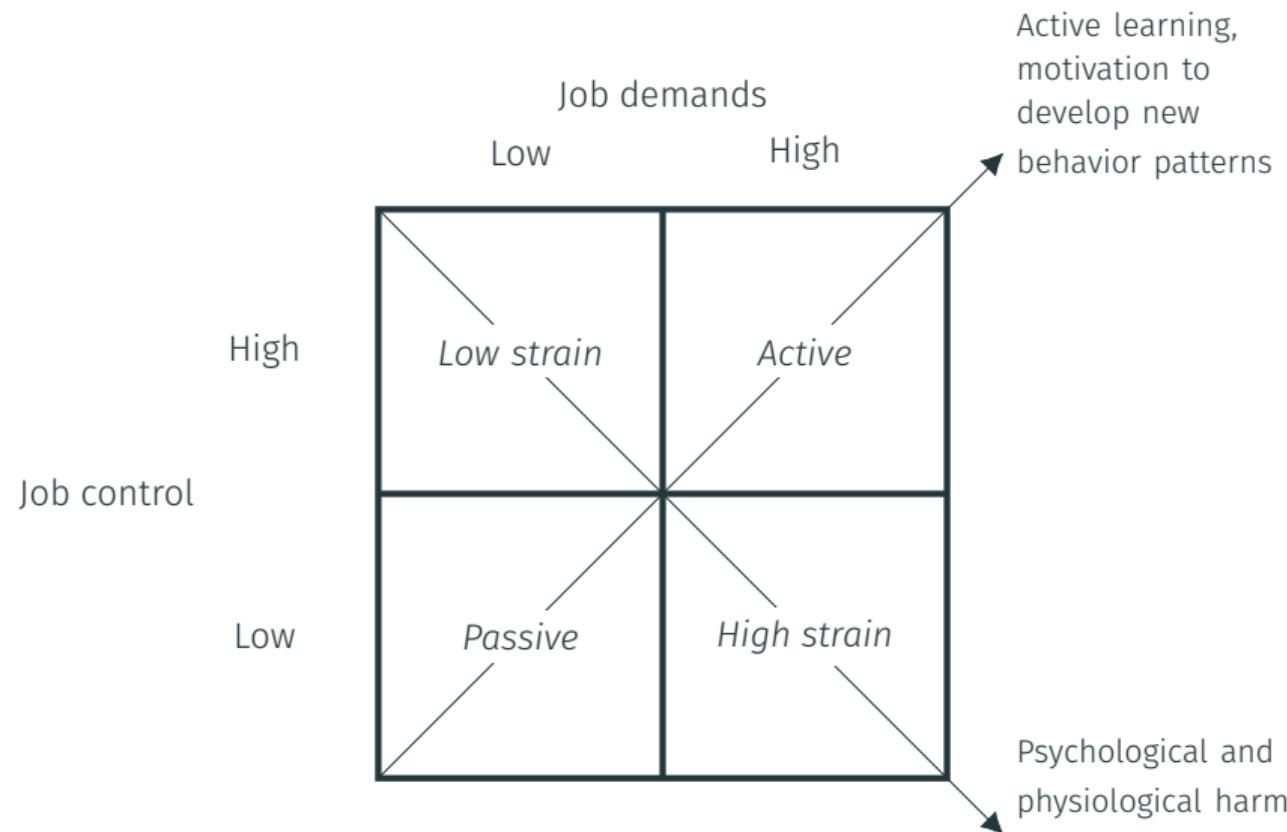
A woman with dark hair and a red earring is shown from the waist up, standing against a wall with a gold and white floral pattern. She is wearing a yellow tank top under a brown button-down shirt and a teal skirt. Her body is split vertically down the center. On the left side, she is holding a baby in a red armchair; the baby is holding a white bottle. On the right side, she is working at a desk with a laptop displaying a grid of numbers. The word "Rollekonflikt" is overlaid in a white box.

Rollekonflikt

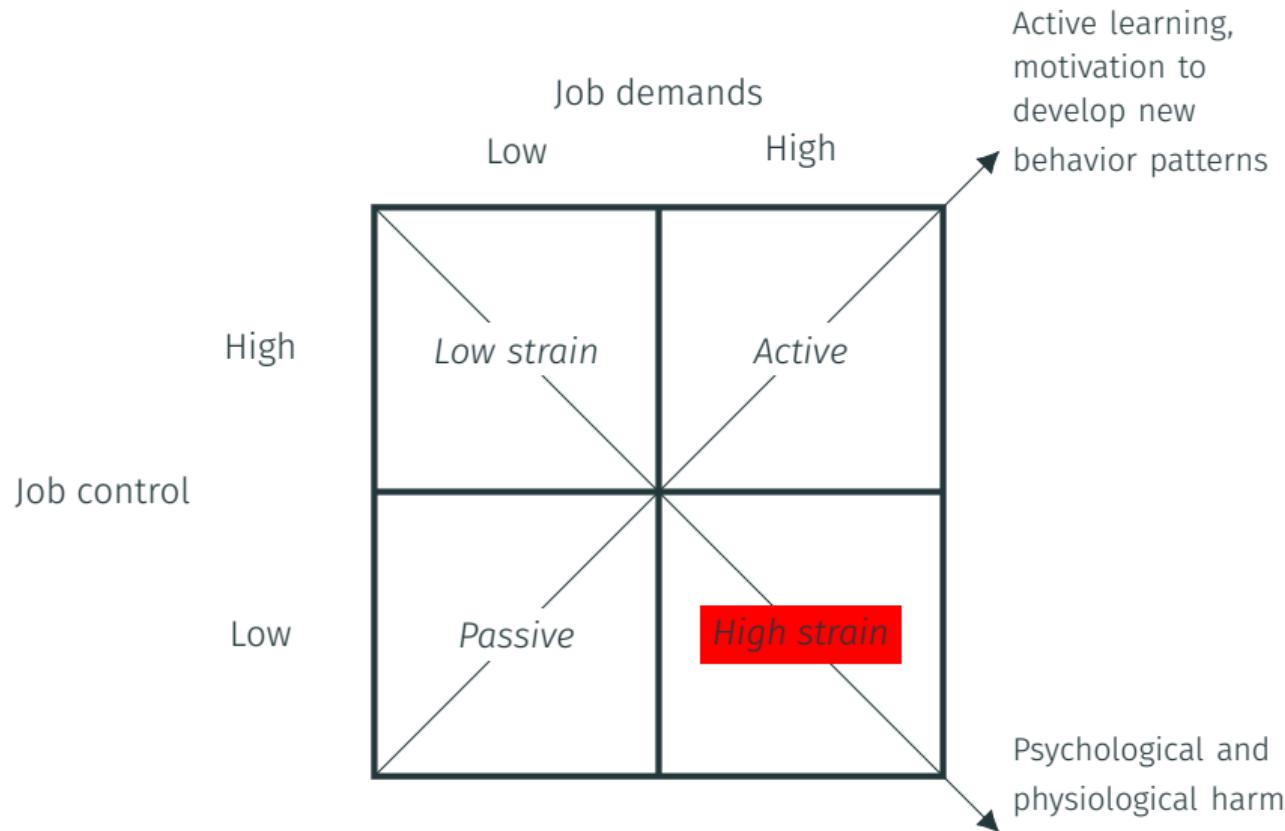
A photograph of a man from behind, wearing a white long-sleeved button-down shirt. He has his hands clasped behind his head, fingers interlaced. The background is a light gray surface covered with numerous small, light blue square shapes, resembling sticky notes or confetti. In the upper center, there is a solid orange rectangular box containing the word "STRESS" in large, bold, black capital letters.

STRESS

"Krav-kontroll" (job strain)



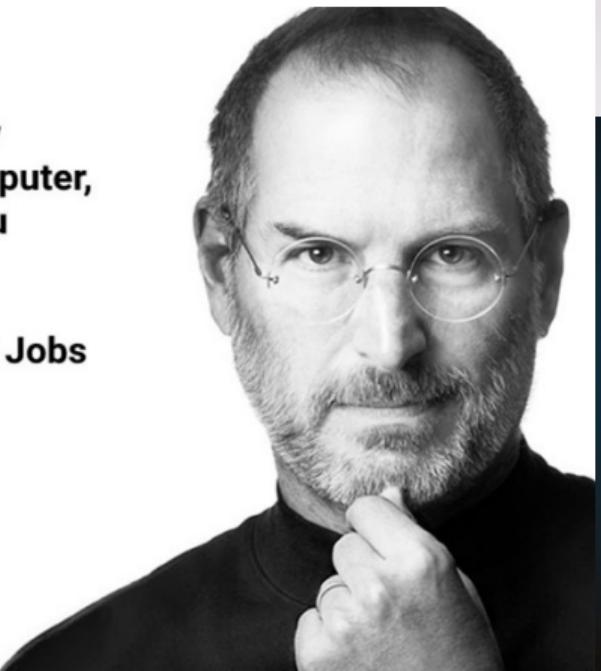
"Krav-kontroll" (job strain)



"Jobbkravene" blir
mer komplekse

**"Everyone should know
how to program a computer,
because it teaches you
how to think."**

Steve Jobs





Your PC ran into a problem and needs to restart. We're just collecting some error info, and then we'll restart for you.

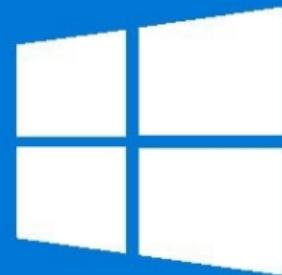
20% complete



For more information about this issue and possible fixes, visit <https://www.windows.com/stopcode>

If you call a support person, give them this info:

Stop code: CRITICAL_PROCESS_DIED



:(
:(

Your PC ran into
just collecting so
you.

20% complete

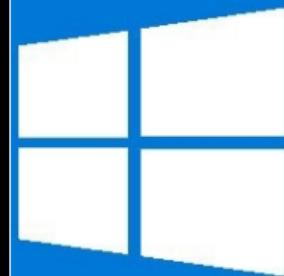


For more inform

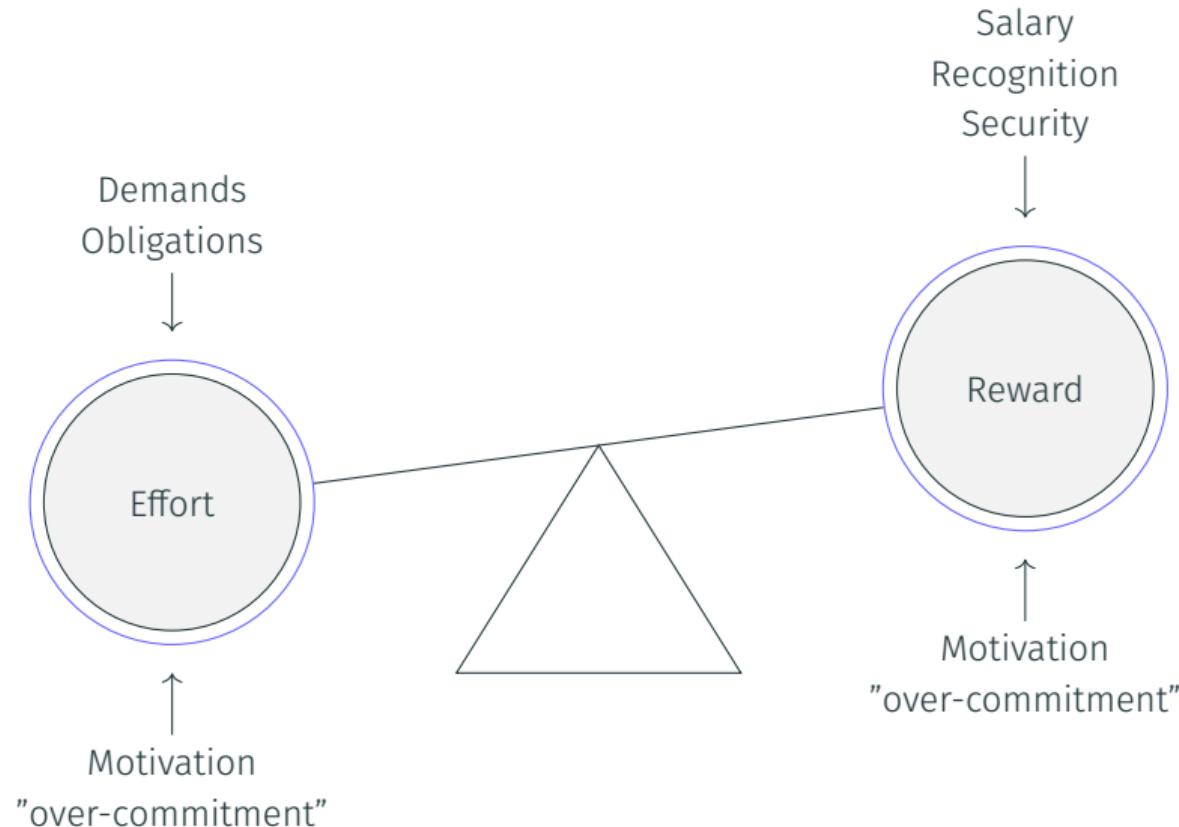
If you call a support

Stop code: CRITICAL_PROCESS_DIED

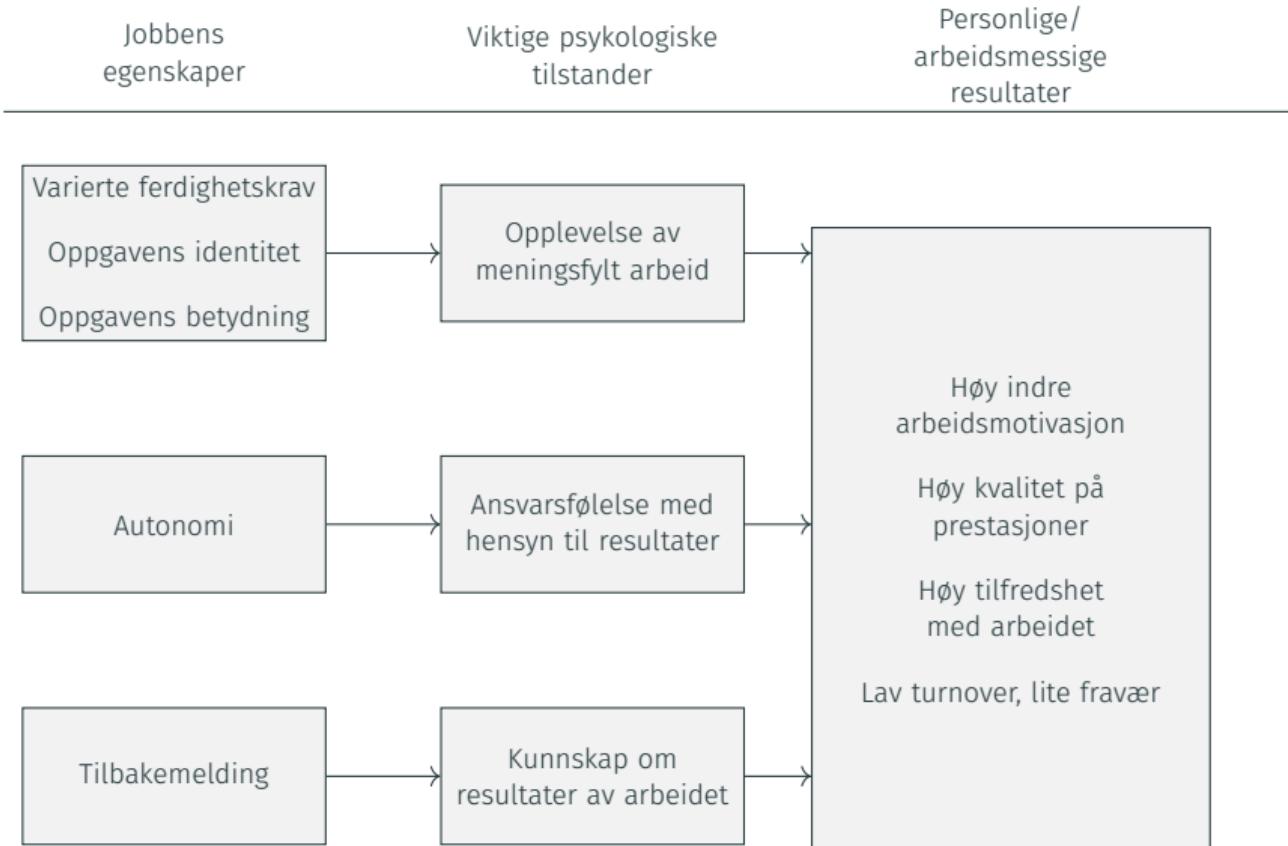
TECHNOSTRESS



Innsats-belønning



Hackman og oldham - jobbkarakteristika



Psychosocial work environment and sickness absence among British civil servants: the Whitehall II study.

F M North, S L Syme, A Feeney, M Shipley, and M Marmot
(show fewer authors)

Published Online: October 07, 2011

Abstract [PDF](#) [PDF Plus](#) [Related](#)

OBJECTIVES. This study sought to examine the association between the psychosocial work environment and subsequent rates of sickness absence. **METHODS.** The analyses were based on a cohort of male and female British civil servants ($n=9072$). Rates of short spells (<or=7 days) and long spells (>7 days) of sickness absence were calculated for different aspects of the psychosocial work environment, as measured by self-reports and personnel managers' ratings (external assessments).

RESULTS. Low levels of work demands, control, and support were associated with higher rates of short and long spells of absence in men and, to a lesser extent, in women. The differences were similar for the self-reports and external assessments. After adjustment for grade of employment, the differences were diminished but generally remained significant for short spells. The combination of high demands and low control was only associated with higher rates of short spells in the lower grades.

CONCLUSIONS. The psychosocial work environment predicts rates of sickness absence. Increased levels of control and support at work could have beneficial effects in terms of both improving the health and well-being of employees and increasing productivity.

Psychosocial work environment and sickness absence among British civil servants: the Whitehall II study.

F M North, S L Syme, A Feeney, M Shipley, and M Marmot
(show fewer authors)

Published Online: October 07, 2011

Abstract [PDF](#) [PDF Plus](#) [Related](#)

OBJECTIVES. This study sought to examine the association between the psychosocial work environment and subsequent rates of sickness absence. **METHODS.** The analyses were based on a cohort of male and female British civil servants (n=9072). Rates of short spells (<or=7 days) and long spells (>7 days) of sickness absence were calculated for different aspects of the psychosocial work environment, as measured by self-reports and personnel managers' ratings (external assessments).

RESULTS. Low levels of work demands, control, and support were associated with higher rates of short and long spells of absence in men and, to a lesser extent, in women. The differences were similar for the self-reports and external assessments. After adjustment for grade of employment, the differences were diminished but generally remained significant for short spells. The combination of high demands and low control was only associated with higher rates of short spells in the lower grades.

CONCLUSIONS. The psychosocial work environment predicts rates of sickness absence. Increased levels of control and support at work could have beneficial effects in terms of both improving the health and well-being of employees and increasing productivity.

Psychosocial work environment and sickness absence among British civil servants: the Whitehall II study.

F M North, S L Syme, A Feeney, M Shipley, and M Marmot
(show fewer authors)

Published Online: October 07, 2011

Abstract [PDF](#) [PDF Plus](#) [Related](#)

OBJECTIVES. This study sought to examine the association between the psychosocial work environment and subsequent rates of sickness absence. **METHODS.** The analyses were based on a cohort of male and female British civil servants (n=9072). Rates of short spells (<or=7 days) and long spells (>7 days) of sickness absence were calculated for different aspects of the psychosocial work environment, as measured by self-reports and personnel managers' ratings (external assessments).

RESULTS. Low levels of work demands, control, and support were associated with higher rates of short and long spells of absence in men and, to a lesser extent, in women. The differences were similar for the self-reports and external assessments. After adjustment for grade of employment, the differences were diminished but generally remained significant for short spells. The combination of high demands and low control was only associated with higher rates of short spells in the lower grades.

CONCLUSIONS. The psychosocial work environment predicts rates of sickness absence. Increased levels of control and support at work could have beneficial effects in terms of both improving the health and well-being of employees and increasing productivity.

Hva har det med fysisk helse å
gjøre?



HJERTETRØBBEL: Stressnivået ditt er en bedre måte å forutse hjerteinfarkt på enn alle andre kjente risikofaktorer. Illustrasjonsfoto: Scanpix

Stress er verre for hjertet enn røyking og overvekt

Er du i faresonen for å få hjerteinfarkt? Stress for all del ned.

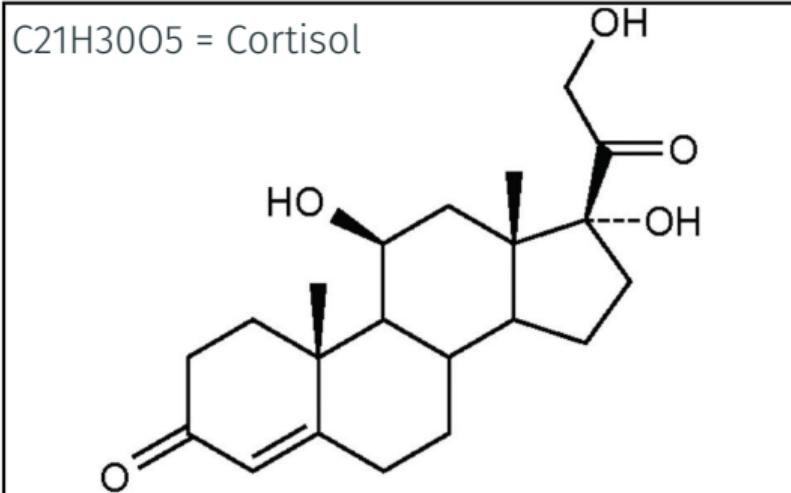
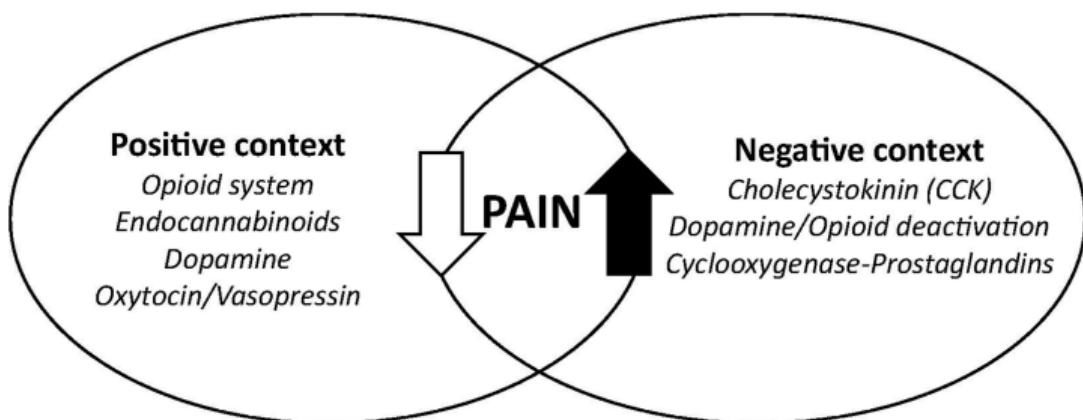
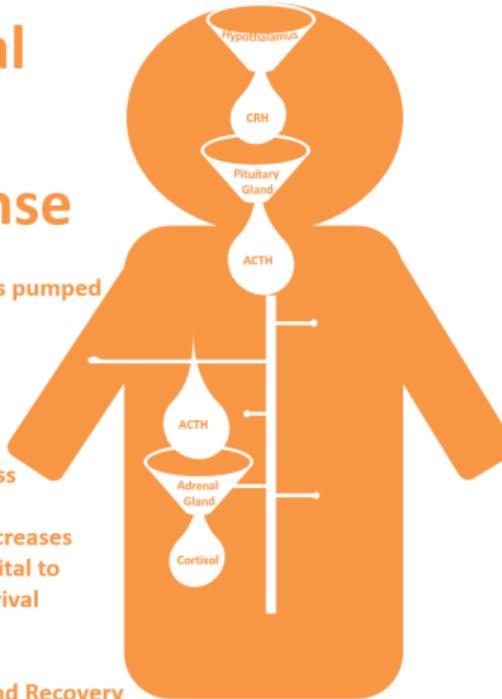


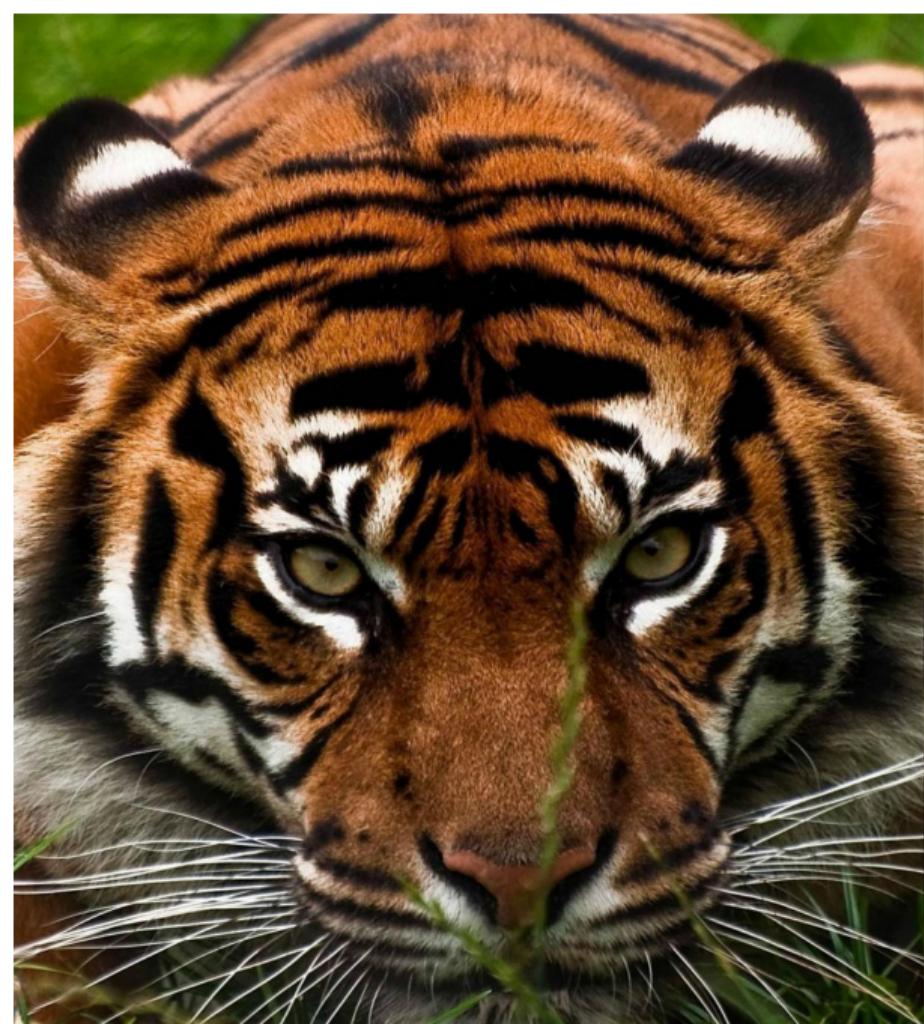
Image retrieved from http://www.yourmemopause.type.com/steroidpathway/cortisol_file/image003.gif (Accessed 2 Nov 2010)



General Stress Response

- Increased fuel is pumped into your blood
- Blood Pressure increases
- Breathing increases
- Mental Alertness increases
- Muscle Tone increases
- Functions not vital to immediate survival shut down:
 - Digestion
 - Growth and Recovery

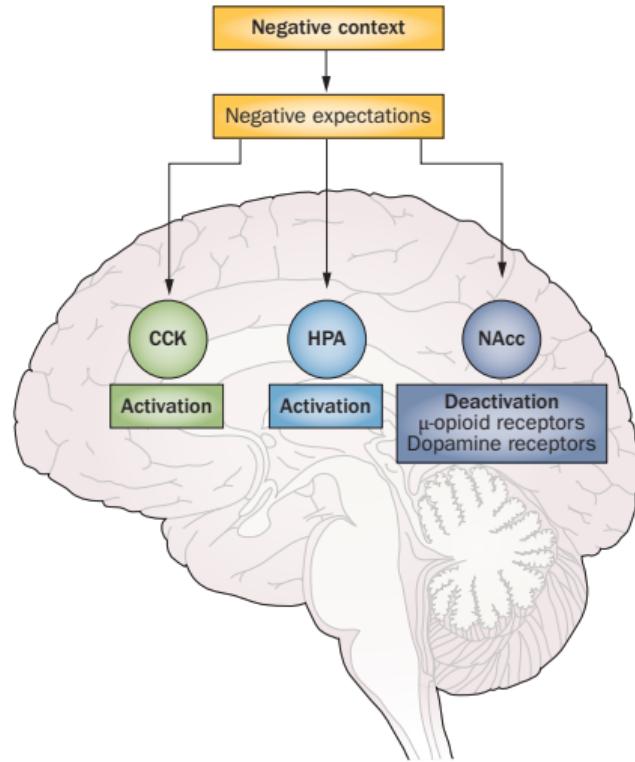


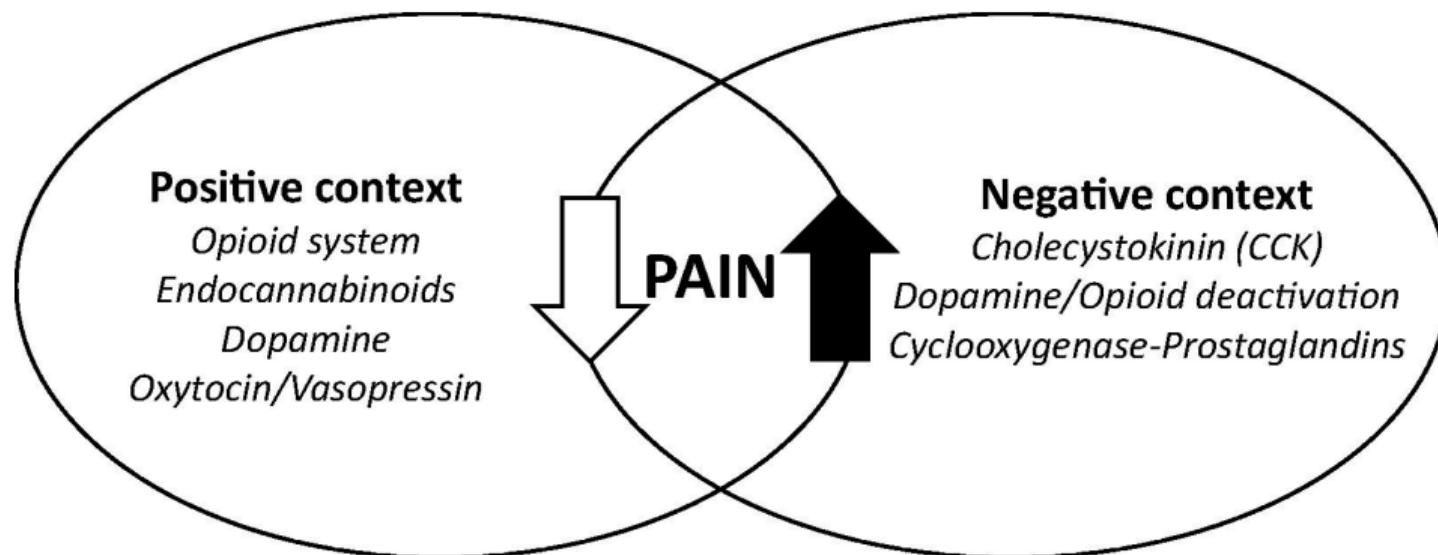


Psykologisk "alarm" - konsekvenser

| Psykologisk | Atferd | Somatisk |
|--------------------------------------|-------------------------------------|--|
| Angst | Overspising eller nedsatt appetitt | Hodepine |
| Irritabilitet | Utålmodighet | Stramme kjever, skjære tenner |
| Nedstemthet | Kranglevorenhet | Brystsmerter |
| Defensiv | Prokrastinasjon | Pustebesvær |
| Sinne, humørsvingninger | Bruk av alkohol/narkotika | Hjertebank |
| Hypersensitivitet | Røyker mer | Høyt blodtrykk |
| Apati | Trekker seg tilbake og isolerer seg | Muskelsmerter |
| Depresjon | Negligerer ansvar | Fordøyelsesbesvær, forstoppelse, diaré |
| Trehet i tenkning | Dårlig jobbprestasjon | Svetting |
| Følelser av hjelpesløshet, håpløshet | Dårlig personlig hygiene | Tretthet, søvnproblemer |
| Forstyrrelser av nære relasjoner | Endret religiøs praksis | Ofte syk |

Sosialt klima/kontekst





"Sosial smitte" (Benedetti et al., 2014)

- Studenter på fjelltur i Alpene
- En person ble informert om mulig "hypobarisk hodepine"
- 36 personer ringte neste uke for å få vite mer om dette
- Disse 36 opplevde mer hodepine enn de som ikke hadde ringt
- Inflammatoriske markører i spyttprøver
- Hjernekjemien endret seg i de "sosialt infiserte" individene

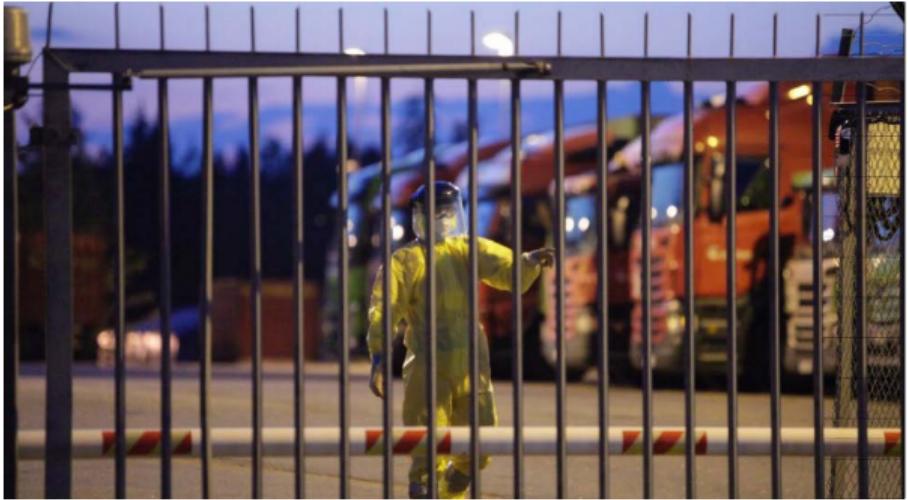




Hvis du vil holde deg slank, så bør du ikke stresse på jobb, viser en ny undersøkelse. FOTO: ILLUSTRASJONSCANPIX

Fetere med stressende jobb

Jobbstress øker risikoen for fedme.



EVAKUERT: En postterminal i Stokke ble evakuert torsdag kveld, og 100 meter radius rundt ble avsperret. Årsaken var en konvolutt med hvitt pulver, som etter analyse viste seg å være mel. 44 personer ble sendt til sjekk på sykehus, hvorav 14 av dem ble lagt inn på isolat. Foto: Peder Gjersæ / NTB scanpix

Psykologer tror placeboeffektens onde tvilling kan ha ført til Stokke-drama

44 personer sendt til sykehus i Vestfold etter funn av mel på postterminal.

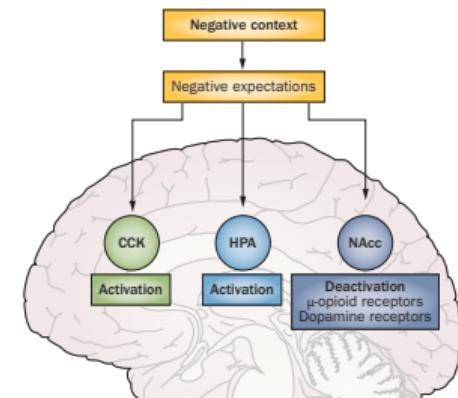


Smittende hodepine

Høyfjellshodepine etter ryktespredning

- Studenter på fjelltur i Alpene
- En person ble informert om mulig "hypobarisk hodepine"
- 36 personer ringte neste uke for å få vite mer om dette
- Disse 36 opplevde mer hodepine enn de som ikke hadde ringt
- Inflammatoriske markører i spyttprøver
- Hjernekjemien endret seg i de "sosialt infiserte" individene

Benedetti og medarbeidere 2014



Hvilke faktorer vet vi noe om?
(muskelskjelettplager)

Work & Stress

Vol. 25, No. 3, July–September 2011, 243–256



The impact of work-related psychosocial stressors on the onset of musculoskeletal disorders in specific body regions: A review and meta-analysis of 54 longitudinal studies

Angelika Hauke^{a*}, Julia Flintrop^b, Emmanuelle Brun^c and Reiner Rugulies^d

^a*Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA)¹, Sankt Augustin, Germany;* ^b*Federal Institute for Occupational Safety and Health (BAuA), Berlin, Germany;* ^c*European Agency for Safety and Health at Work (EU-OSHA), Bilbao, Spain;*

^d*National Research Centre for the Working Environment (NRCWE), Copenhagen, Denmark*

Statistisk signifikante **små til medium** effekter på risikoen for nye tilfeller av MSP for:

1. Jobbkrav (42 studier)
2. Sosial støtte (40)
3. Jobbkontroll (23)
4. "Skill discretion" (22)
5. Jobbtilfredshet (21)
6. Kontroll over avgjørelser (18)
7. "Job strain" (høye krav + lav kontroll) (14)
8. Psykososialt "distress" (10)



Contents lists available at SciVerse ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed



Review

Psychosocial work stressors as antecedents of musculoskeletal problems: A systematic review and meta-analysis of stability-adjusted longitudinal studies

Jessica Lang ^{a,*}, Elke Ochsmann ^a, Thomas Kraus ^a, Jonas W.B. Lang ^b

^a Institute for Occupational Medicine, RWTH Aachen University, Pauwelsstraße 30, 52074 Aachen, Germany

^b Department of Work and Social Psychology, Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands

ARTICLE INFO

Article history:

Available online 11 May 2012

Keywords:

Psychosocial work stressors

Musculoskeletal symptoms

Musculoskeletal disorders (MSD)

Occupational health psychology

Meta-analysis

Review

ABSTRACT

Although the relationship between psychosocial workplace conditions and musculoskeletal problems has been extensively studied, the causal impact of psychosocial workplace factors in the development of musculoskeletal problems remains unclear. The purpose of the present study was to conduct a systematic review of baseline-adjusted prospective longitudinal studies estimating the lagged effect of psychosocial risk factors on musculoskeletal problems in industrialized work settings. A literature review was conducted by searching the MEDLINE, EMBASE, and PsychINFO databases dated until August 2009. The authors classified studies into categories of psychological work stressors and musculoskeletal problems. Available effect sizes were converted to odds ratios (OR). ORs were then pooled for each stressor–problem relationship using a random-effects model. Additionally, the possibility of publication

Ni "eksponeringskategorier" basert på litteraturen:

1. Jobbkrav
2. Jobbkontroll
3. "Job strain" (høye krav + lav kontroll)
4. Sosial støtte
5. Støtte fra nærmeste leder
6. Støtte fra medarbeidere
7. Jobbtilfredshet
8. Monotont arbeid
9. Jobbusikkerhet
10. Overtidsarbeid (Ikke nok studier)
11. Jobbstress (Ikke nok studier)
12. Skiftarbeid (Ikke nok studier)

Konklusjon:

"de fleste psykososiale stressorer hadde små, men signifikante effekter over tid på utviklingen av muskelskjelettplager"

RESEARCH ARTICLE

Open Access

Musculoskeletal pain and effort-reward imbalance- a systematic review

Peter Koch^{1*}, Anja Schablon¹, Ute Latza² and Albert Nienhaus^{1,3}

Abstract

Background: Musculoskeletal pain may be triggered by physical strains and psychosocial risk factors. The effort-reward imbalance model (ERI model) is a stress model which measures psychosocial factors in the working world. The question is whether workers with an effort-reward imbalance report musculoskeletal pain more frequently than those with no effort-reward imbalance. A systematic review using a best evidence synthesis approach was conducted to answer this question.

Methods: A literature search was conducted for the period from 1996 to 2012, using three databases (Pubmed, Embase and PsycINFO). The research criteria related to psychosocial, work-related stress as per the ERI model and to musculoskeletal pain. A quality score was developed using various quality criteria to assess the standard of the

- Konklusjon: Ingen konklusjon kan trekkes
- Hva trenger vi?
 - Flere studier





A systematic overview on the risk effects of psychosocial work characteristics on musculoskeletal disorders, absenteeism, and workplace accidents

Yacine Taibi ^{a,*}, Yannick A. Metzler ^{a,b}, Silja Bellingrath ^a, Andreas Müller ^a

^a Institute of Psychology, Department of Work and Organizational Psychology, University of Duisburg-Essen, Universitätsstraße 2, 45141, Essen, Germany

^b Department of Occupational Medicine, Occupational Safety and Health, Thyssenkrupp Steel Europe AG, Kaiser-Wilhelm-Straße 100, 47166, Duisburg, Germany

ARTICLE INFO

Keywords:

Psychosocial work characteristics

Risk assessment

Stress

ABSTRACT

The present article provides a systematic overview on the relationship between psychosocial work characteristics and musculoskeletal disorders, absenteeism, and workplace accidents. The study identified and reviewed the findings of 24 systematic reviews or meta-analysis and 6 longitudinal studies. Publications were systematically searched in several databases from 1966 to January 2021. To summarize the level of evidence, a best evidence synthesis was performed, and the quality of included studies was rated.

High job demands, high job strain, high effort/reward-imbalance and low social support showed a strong evidence to increase the risk for musculoskeletal disorders. In addition to job demands and job strain, low perceived fairness proved to be a risk factor of absenteeism with strong evidence. Due to the small number of studies, no reliable evidence assessment for workplace accidents was possible. The summarized findings can improve risk assessment methods, by providing a systematic estimation of the potential risk severity of psychosocial work characteristics and assist practitioners in further developing the psychosocial risk assessment.



A systematic overview on the risk effects of psychosocial work

char
work

Yacine

^a Institute
^b Department

ARTI

Keywords:
Psychosoc
Risk asses
Stress

Systematiske kunnskapsgjennomganger + prospektive studier fra 2017 og fremover, basert på "de mest anerkjente konsptene og teoriene på jobbstress og jobbdesign":

Job characteristics model (Hackman and Oldham, 1976)

Job strain model (Karasek, 1979)

Job demands-resources model (Demerouti et al., 2001)

Effort-reward imbalance model (Siegrist, 2009)

Challenge-hindrance model of occupational stress (Cavanaugh et al., 2000)

Action regulation theory (Hacker, 2003)

Emotion work (Zapf et al., 2001)

Organizational justice (Judge and Colquitt, 2004)

improve risk assessment methods, by providing a systematic estimation of the potential risk severity of psychosocial work characteristics and assist practitioners in further developing the psychosocial risk assessment.

Sterk evidens - konsistente funn i minst to kunnskapsgjennomganger av høy kvalitet.

- Høye jobbkrav
- Høy "job strain" (høye krav + lav kontroll)
- Ubalanse mellom innsats og belønning
- Lite sosial støtte
- Lav grad av opplevd organisatorisk rettferdighet

Rimelig evidens – konsistente funn i en kunnskapsgjennomgang av høy kvalitet eller flere kunnskapsgjennomganger av lavere kvalitet.

- Lav jobbkontroll
- Lav kontroll over arbeidstid
- Mobbing/trakassering
- Hindrance stressors
- Rollekonflikt
- Interpersonlige konflikter

"Take home"

- "Psykososialt arbeidsmiljø" kan være så mangt (kanskje burde vi unngå begrepet og være mer spesifikke?)
- Tidligere forskning - og dermed eksisterende kunnskap - har vært dominert av noen få teoretiske modeller (krav-kontroll, innsats-belønning)
 - Noen av dem er muligens ikke godt egnet nå som da de ble lansert?
- Men: stadig mer forskning har studert en rekke mer spesifikke faktorer, noe man kan se på de siste systematiske kunnskapsgjennomgangene!

