

Use of COPSOQ scales in some epidemiological studies in Sweden

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Destructive managerial leadership and psychological well-being among employees in Swedish, Polish, and Italian hotels.

- Anna Nyberg, 2nd paper i doctoral dissertation
- 554 questionnaires to hotel employees in 3 countries
- Leadership measured with modified GLOBE items:

Autocratic (0.804)

Autocratic, Dictatorial, Bossy, Elitist

Malevolent (0.837)

Hostile, Dishonest, Vindictive, Irritable

Self-Centered (0.709)

Self interested, Non-participative, Loner, Asocial

- COPSQ used to measure
 - working conditions
 - psychological well-being
- Explored differences between countries
- and association with well-being

Leadership and well-being

Table 4

Odds ratios and 95% CI of suffering from poor mental health, low vitality and high behavioural stress (variables dichotomised by the median) per one step increase in self centred/autocratic/malevolent leadership scale (1–7)

Adjustments in addition to age and gender:	None	Occupational group, type of hotel	Country	Hotel means of iso-strain
<u>Self-Centred leadership</u>				
Poor mental health	2.25*** (1.48;3.43)	2.02** (1.30;3.13)	2.04** (1.29;3.22)	1.87* (1.15;3.05)
Low vitality	1.91** (1.26;2.89)	2.04** (1.32;3.14)	2.12** (1.34;3.35)	1.78* (1.09;2.90)
High behavioural stress	1.81** (1.18;2.78)	1.58* (1.01;2.47)	1.87** (1.17;3.00)	1.75** (1.05;2.90)
<u>Autocratic leadership</u>				
Poor mental health	1.45** (1.10;1.93)	1.37 (0.98;1.90)	1.63* (1.09;2.45)	1.46 (0.90;2.36)
Low vitality	1.21 (0.91;1.59)	1.46* (1.06;2.02)	1.98** (1.33;2.96)	1.67* (1.04;2.69)
High behavioural stress	1.82*** (1.34;2.47)	1.54* (1.10;2.17)	1.40 (0.92;2.11)	1.22 (0.73;2.03)
<u>Malevolent leadership</u>				
Poor mental health	1.38* (1.03;1.86)	1.39 (0.99;1.97)	1.54* (1.05;2.26)	1.39 (0.92;2.11)
Low vitality	1.28 (0.95;1.72)	1.67** (1.18;2.36)	2.05*** (1.39;3.01)	1.80** (1.19;2.72)
High behavioural stress	2.03*** (1.46;2.82)	1.77** (1.23;2.54)	1.58* (1.06;2.36)	1.47 (0.94;2.29)

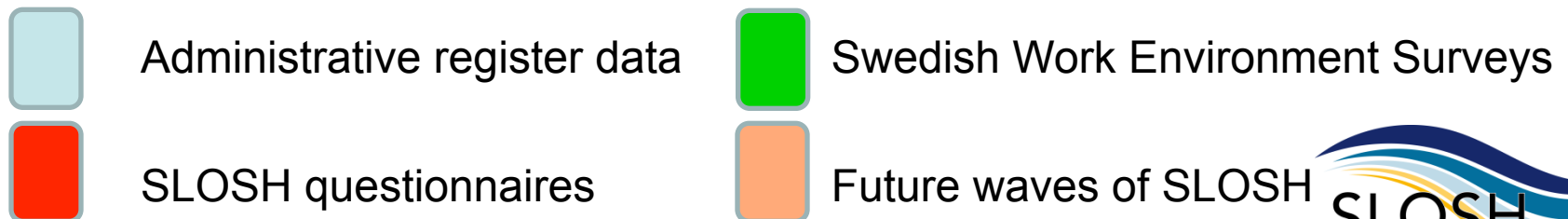
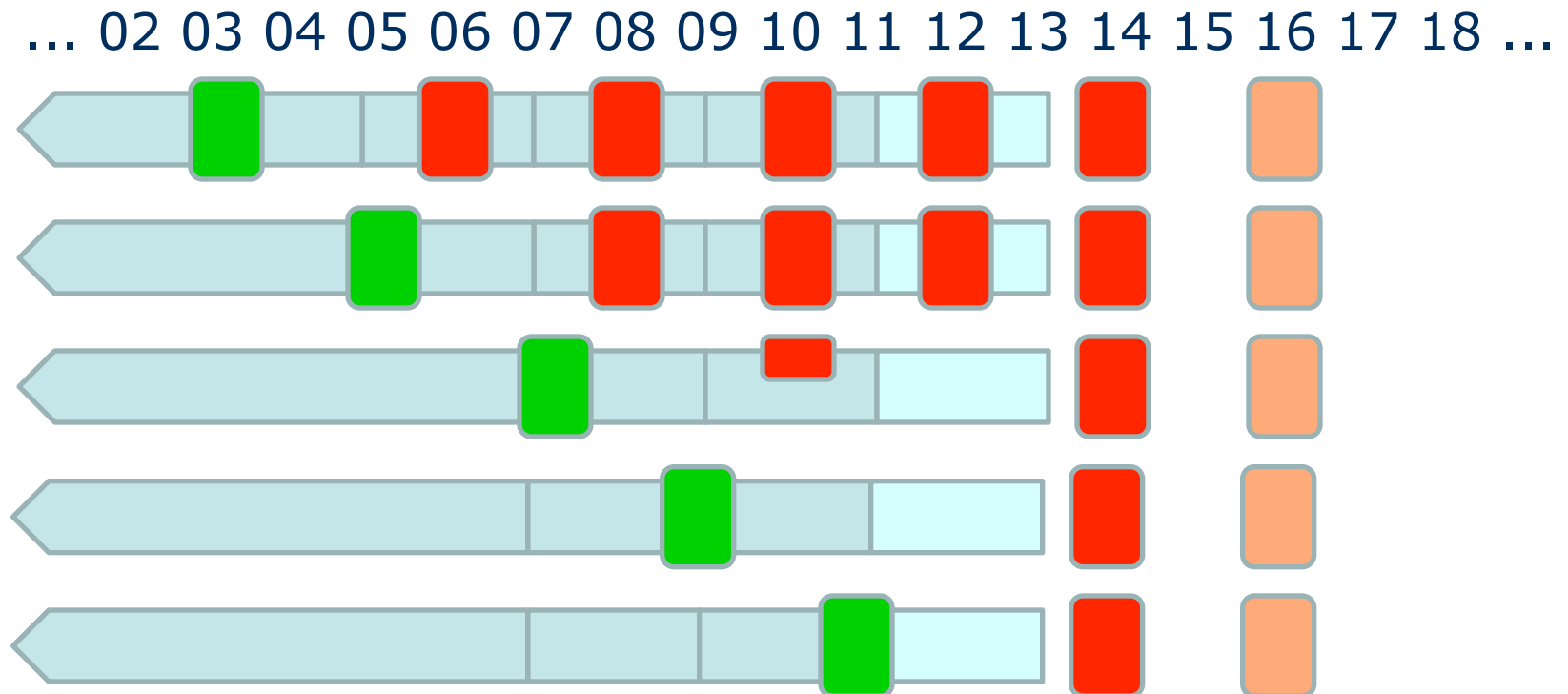
* $p < 0.05$, ** $p < 0.01$; *** $p < 0.001$.

Source: Nyberg A, Holmberg I, Bernin P, Alderling M, Akerblom S, Widerszal-Bazyl M, Magrin ME, Hasselhorn HM, Milczarek M, D'Angelo G, Denk M, Westerlund H, Theorell T. Destructive managerial leadership and psychological well-being among employees in Swedish, Polish, and Italian hotels. *Work-a Journal of Prevention Assessment & Rehabilitation* 2011;**39(3):267-81**.

Psychosocial Working Conditions and Cognitive Complaints among Swedish Employees

- Cecilia Stenfors, 2nd study of doctoral thesis
- SLOSH 2006 and 2008
 - Swedish Longitudinal Occupational Survey of Health
- Theorell's Demand-Control Questionnaire
- Proprietary and other exposure measures
- Cognitive complaints from COPSOQ
 - Cognitive stress symptoms
- Cross-sectional and prospective analyses

SLOSH wave VI in 2016 (planned)



Work and Cognitive Complaints

Measure	1	2	3	4
Quantitative demands	.14***	.15***	.08***	.08***
Skill discretion	-.04***	-.04**	.00	-.01
Decision authority	-.03**	-.01	.00	.00
IT demands	.17***	.17***	.12***	.12***
Emotional demands	.02*	-.01	-.02*	-.01
Social support	-.15***	-.16***	-.06***	-.05***
Resources	-.11***	-.10***	-.05***	-.05***
Qualified (reference)	.	.	.	.
Underqualified	.09***	.08***	.05***	.05***
Overqualified	-.03**	-.03***	-.04***	-.04***
No conflicts (reference)	.	.	.	.
Conflicts. finished	.07***	.06***	.05***	.05***
Conflicts. ongoing	.09***	.07***	.04***	.03***
Depression	.	.	.48***	.44***
Disturbed sleep	.	.	.	.06***
Awakening problems	.	.	.	.09***
Accumulated adjusted R ²	.199	.238	.420	.433

Table S4. Cross sectional study results (2008).
n=8362.
Standardized β coefficients and adjusted R² for
multiple regression models 1-4, with cognitive
complaints as the outcome.

1. Psychosocial work factors, unadjusted model.
 2. Adjusted for Age, Sex, Educational level, Income, Alcohol consumption, Cardiovascular disease, Psychiatric illness.
 3. Adjusted for Depressive symptoms, in addition to model 2 covariates.
 4. Adjusted for Disturbed sleep and Awakening problems, in addition to model 3 covariates.
- * p<.05. ** p<.01. *** p<.001.

Source: Stenfors CU, Magnusson Hanson L, Oxenstierna G, Theorell T, Nilsson LG. Psychosocial Working Conditions and Cognitive Complaints among Swedish Employees. PLoS ONE 2013;**8(4):e60637**.

Work and Cognitive Complaints

Measure	1	2	3	4	1 ^a	2 ^a	3 ^a	4 ^a
Quantitative demands	.14***	.15***	.09***	.08***	.05**	.05**	.04**	.04**
Skill discretion	-.06**	-.04*	-.02	-.02	-.02	-.02	-.02	-.02
Decision authority	.00	.02	.04*	.04*	.01	.02	.02	.02
ICT demands	.13***	.12***	.09***	.08***	.03*	.03*	.03*	.03*
Emotional demands	.06***	.02	.02	.02	.03	.01	.01	.01
Social support	-.15***	-.16***	-.05**	-.05**	-.03*	-.03*	-.01	-.01
Resources	-.06***	-.06***	-.01	-.01	-.02	-.02	-.01	-.01
Underqualified [‡]	.08***	.08***	.05**	.05**	.04**	.04**	.03*	.03*
Overqualified [‡]	.00	.00	-.02	-.02	.00	.00	-.01	-.01
Depression	.	.	.45***	.43***	.	.	.15***	.14***
Disturbed sleep	.	.	.	.04*	.	.	.	.02
Awakening problems	.	.	.	.04*	.	.	.	.00
Cognitive complaints at T1	.	.	.	.	.62***	.61***	.53***	.53***
Adjusted R ²	.121	.144	.306	.310	.442	.448	.459	.459

Table S5. Prospective study results (T1-T2/2006-2008). n=3264. Standardized β coefficients and adjusted R² for multiple regression models 1-4 with predictors at T1 (2006) and cognitive complaints score (1-5) at T2 (2008) as the outcome.

1. Psychosocial work factors at T1, unadjusted model.
2. Adjusted for Age, Sex, Educational level, Income, Alcohol consumption, Cardiovascular disease and Psychiatric illness at T1.
3. Adjusted for Depressive symptoms at T1, in addition to model 2 covariates.
4. Adjusted for Disturbed sleep and Awakening problems at T1, in addition to model 3 covariates.

^a Cognitive complaints at T1 has been adjusted for in addition to the other specified measures in the respective models.

[‡]Reference: qualified.

* p<.05. ** p<.01. *** p<.001.

Source: Stenfors CU, Magnusson Hanson L, Oxenstierna G, Theorell T, Nilsson LG. Psychosocial Working Conditions and Cognitive Complaints among Swedish Employees. PLoS ONE 2013;**8(4):e60637**.

Concentration requirements modify the effect of office type on indicators of health and performance



- Aram Seddigh, 1st study of doctoral thesis
- 1241 employees from 175 units in 5 organisations
- Main effects of office type
 - cell offices (own room)
 - shared room offices (2-4 people)
 - small open plan offices (4-9 people)
 - medium-sized open plan offices (10-24 people)
 - large open plan offices (25+ people)
 - flex offices (no fixed workstation)
- Modification by self-rated concentration requirements of the job
- COPSQ used to measure Cognitive stress

Open plan offices & cognitive stress

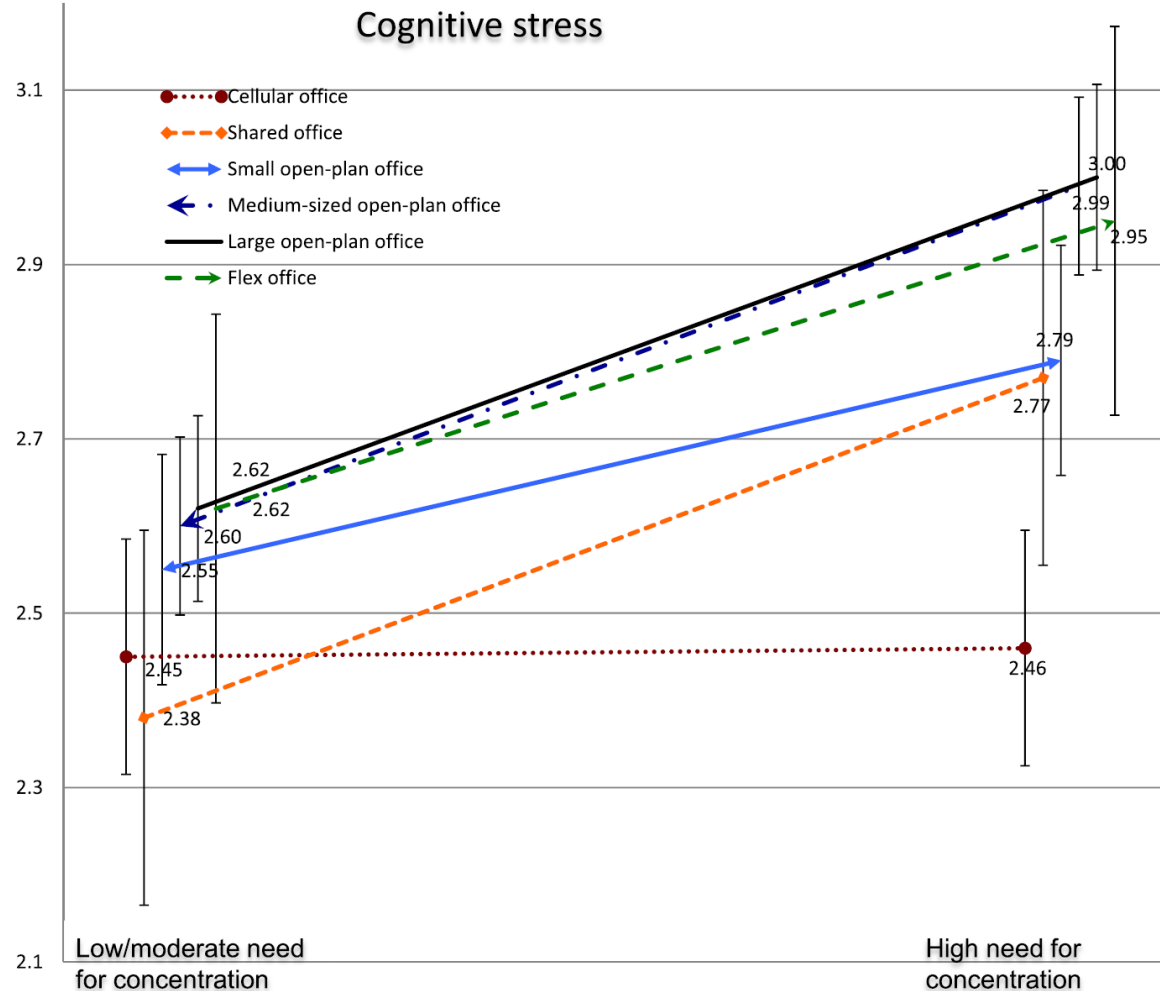


Fig. 2. Unweighted marginal means for cognitive stress with 95% CIs, adjusted for age, sex, education and labor market sector.

Source: Seddigh A, Berntson E, Danielson CB, Westerlund H. Concentration requirements modify the effect of office type on indicators of health and performance. *Journal of Environmental Psychology* 2014;**38**:167-74.

Interactions between lean management and the psychosocial work environment in a hospital setting

- Waqar Ulhassan, 3rd study of doctoral thesis
- Implementation of lean with different success in 3 departments
- Modified COPSOQ questionnaire
- T1: n=129; T2: n=131

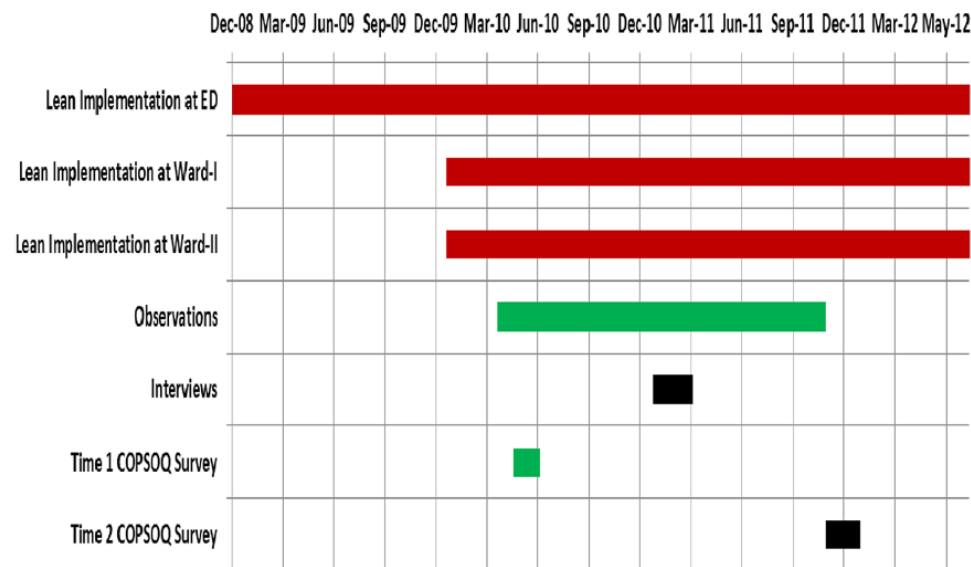


Figure 1 Timeline for Lean intervention and data collection at three settings. Red bars denote Lean intervention, black bars denote interviews, green bars denote observations and blue bars denote surveys.

Source: Ulhassan W, von Thiele Schwarz U, Thor J, & Westerlund H. Interactions between lean management and the psychosocial work environment in a hospital setting - a multi-method study. *BMC health services research* 2014;**14**:480.

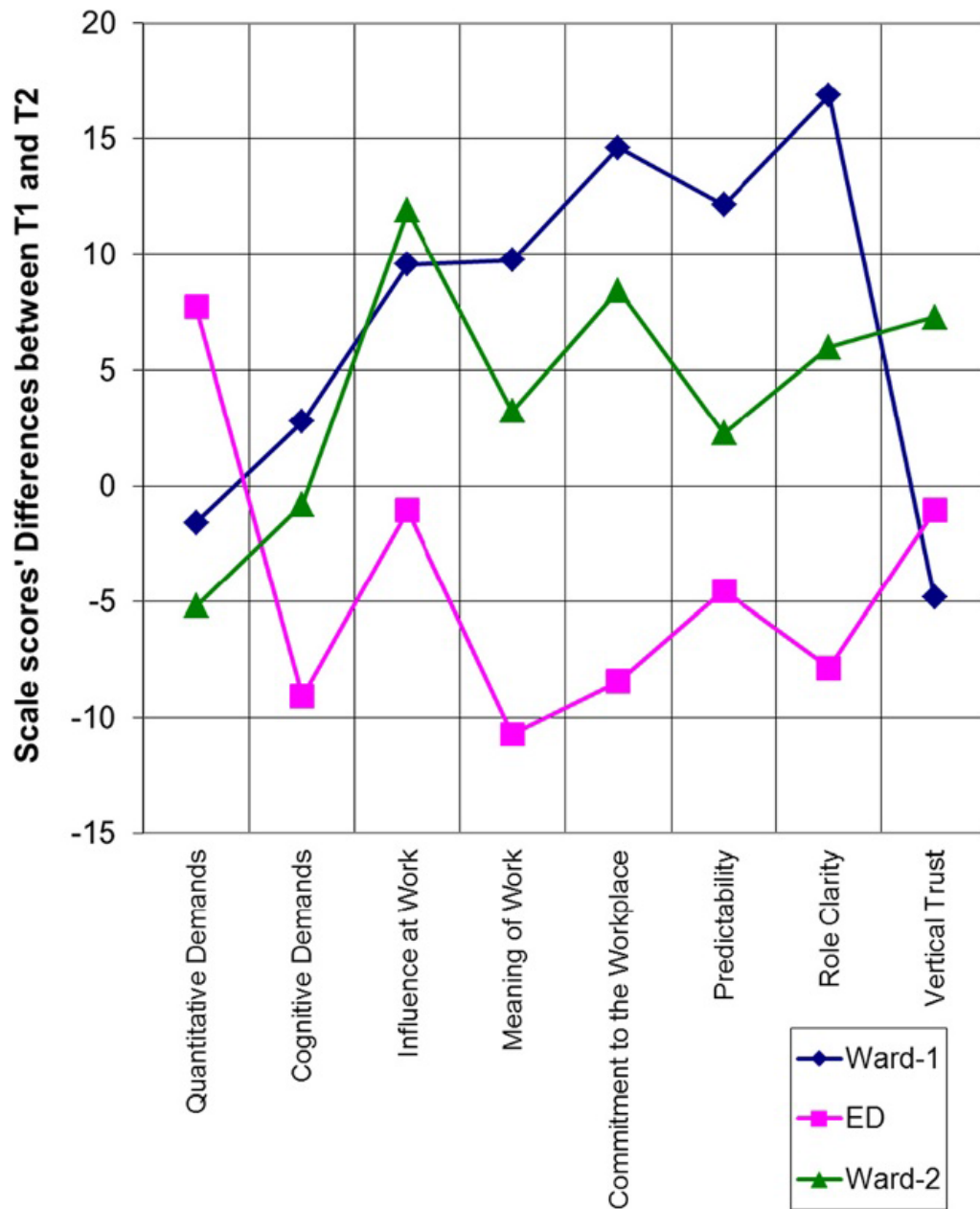


Figure 2 Changes in scales relevant to Lean. Graphical representation of changes found in only selected COPSOQ scales which were expected to be most responsive to Lean at three units.

Ward-1: Active employee participation

Ward-2: Partial lean intervention

ED: Failing earlier implementation

Source: Ulhassan W, von Thiele Schwarz U, Thor J, & Westerlund H. Interactions between lean management and the psychosocial work environment in a hospital setting - a multi-method study. *BMC health services research* 2014;**14**:480.



THANKS FOR YOUR ATTENTION!

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