Stress and Mental Health

K Ahola et al. JOEM (2006) Vol.48#10 p 1023 – 1030.
Contribution of Burnout to the Association between Job Strain and Depression: the Health 2000 Study

The study shows that the concepts of burnout and depression are strongly correlated. This was the first attempt to measure this in a large cohort. The study lends weight to the idea that burnout precedes depression. If so, prevention of burnout would help prevent occupational depression.

Job strain seems to be a strong predictor of burnout and of depressive symptoms but not of depressive disorder. The apparent contradiction could just be a measure of the low conversion rate from burnout to depression or, that job strain is not a predictor of depression.

Previous history of mental disorder is a very strong predictor of burnout, depressive symptoms and current depression.

Burnout is characterised by emotional exhaustion, lack of work efficacy and cynicism. It is supposed that this state is caused or made worse by stress at work and that it may be an intermediate state before clinical depression. If so, factors which predict work-related burnout and protection from burnout should also predict work-related depression and protection from depression, though the strengths of prediction would probably vary. The stress-burnout association should be stronger than the stress-depression association.

Burnout is often measured for research purposes using the Maslach Burnout Inventory. This produces a Burnout score; contributions from exhaustion exceeding those from lack of efficacy and cynicism by a ratio of 4 to 3. Scores from 1.5 to 6 are often taken to mean the subject has significant burnout.

This was a cross-sectional study of 3,270 people of working age. The aim was to measure the extent to which burnout and depression were in fact the same concept and, whether job strain was predictive of depressive disorder.

Questionnaires and clinical examinations were completed by ~80% of the cohort. Burnout, depression and job strain questions were included in the questionnaire based on standard tools. Potential covariates included alcohol consumption, smoking, physical activity, body mass index, gender, age, marital status, employment status and physical ill health as determined by clinical examination.

At the time of the observation 3% were on sick leave and 1% on sabbatical.

There was measure of stressful life events.

Burnout was more common among:
- o   older workers, (aged 55 to 64)
- o   unmarried,
- o   manual occupational status,
- o   consumed larger amounts of alcohol,
- o   physically inactive or overweight,
- o   physical illness or a history of mental disorder.

A history of mental disorder was the strongest predictor of burnout (OR = 2.3 (95% CI = 1.8 to 2.9)), depressive symptoms (OR = 4.0 (95% CI = 3.2 to 5.0)) and depressive disorder (OR = 7.4 (95% CI = 5.5 to 10.0)).

The association between burnout and depressive symptoms was measured by an odds ratio of 8.1 (95% CI = 6.5 to 10.0) and for depressive disorder OR = 5.0 (95% CI = 3.9 to 6.6). That is, it was very likely that those who scored highly on the burnout tool would also score highly on the depression tools.

High job strain was predictive of burnout OR = 7.4 (95% CI = 5.6 to 9.6). High job strain was also predictive of depressive symptoms (OR of the order of 3.9) but was inconsistently related to depressive disorders in all the analyses and especially when corrected for burnout.

Comment
At its simplest level the study confirms the obvious i.e. that people in a low state of mental well being report negative aspects of their work to be worse than those who have higher well being, and, that measures of burnout and depressive symptoms are significantly interrelated.

The data show that job strain measurements have low predictive power for depressive disorders (i.e. depression that is severe enough to attract a clinical diagnosis). This could mean that job strain does not significantly cause depressive disorders or that there is a link but the survey tool doesn't measure strain [or other causal factors] appropriately.

There was a strong association between measured job strain and measured burnout and depressive symptoms.

Strengths of the study:
A large cohort with a high proportion of full participation, simultaneous analysis of burnout and depression.

Weaknesses:
Cross sectional design, single measure of burnout, self report for job strain and burnout.

Conclusions
Current methods of measuring job strain may not be appropriate in the prediction of occupational depression.

Measures of burnout and depression are not independent when applied to real people. If they really are distinct phenomena:
- o   the current measurement methods do not resolve them sufficiently
- o   there is some support for burnout being an intermediate step on the way to depression

―――――