## SLEEP AND BURNOUT



## RESULTS FROM A STUDY OF THE



## AUSTRIAN FEDERAL CHAMBER OF LABOUR (BAK-Study)

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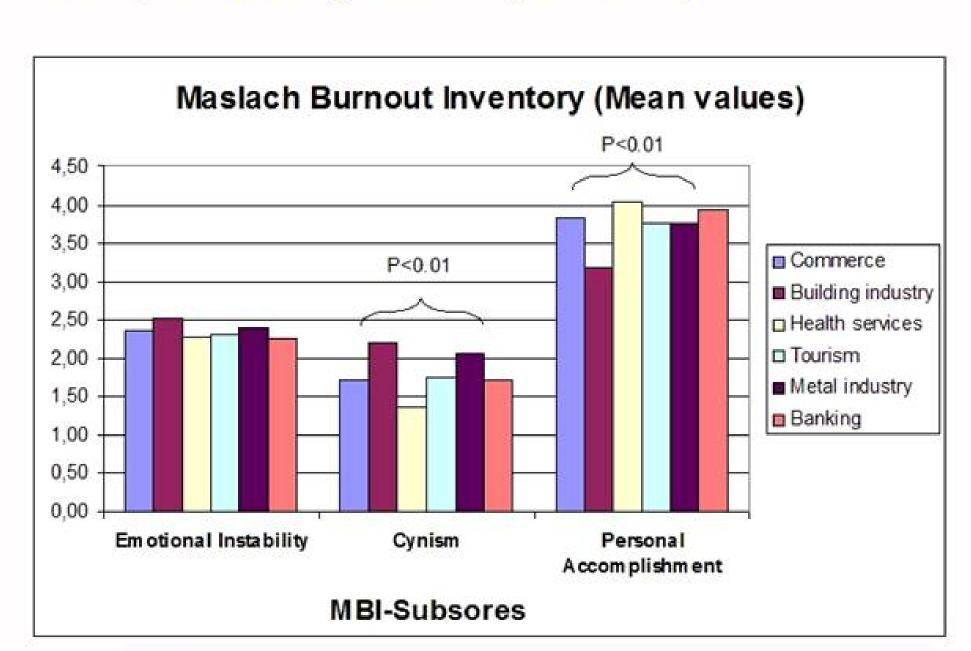
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<u>Objectives</u>: Complaints about sleep effect negatively working ability, stress resistance and are considered as a risk factors for burnout. Studies about how burnout affects sleep are rare. Therefore, we are pleased to present results of a comprehensive survey of the Austrian Federal Chamber of Labour (BAK-Study), assessing job satisfaction, general health, sleep and burnout. Burnout is a fairly new term in the scientific realm. In this study we relate to the definition by Maslach et al., 2001: Burnout is a form of extreme fatigue related to occupational stress and which is not relieved during the time normally used for recovery (evening, weekend, vacation).

<u>Methods</u>: The current investigation is based on a survey of the Austrian Federal Chamber of Labour on 4.214 employees (BAK-Study) between 17 and 67 years of age (47.5% women), representing several professions such as: commerce (18.4%), building industry (13.4%), health services (16.6%), tourism (11.5%), metal industry (23.6%) and banking (16.4%). Complaints about initiating and maintaining sleep are analysed with respect to burnout. Symptoms of burnout were assessed by the German 16-item version of the Maslach Burnout Inventory (MBI, Maslach et. al, 1996). Based on the subscore "emotional instability" (EI-factor), three groups were identified: low, medium and high risk for burnout.

**Results**: About 23% of the sample complained about difficulties in initiating and maintaining sleep several times per week which has significant consequences on the MBI scores, particularly on the sub-score "Emotional Instability" (see *Figure 1*). MBI subscores "Cynism" and "Personal Accomplishment" also differ significantly between professions (see *Figure 2*).

Fatigue related to work is significant correlated with the sub-score "Emotional Instability" and "Cynism". Chi-square statistics revealed a significant higher risk for burnout with increasing age (see *Figure 3*), job profession and work satisfaction. In addition, subjects with a high risk for burnout also suffer from various other somatic complaints (see *Figure 4*).



<u>Figure 2</u>: Mean values of MBI-subscores. MBI subscores "Cynism" and "Personal Accomplishment" differ significantly between professions (t-test, P<0.01).

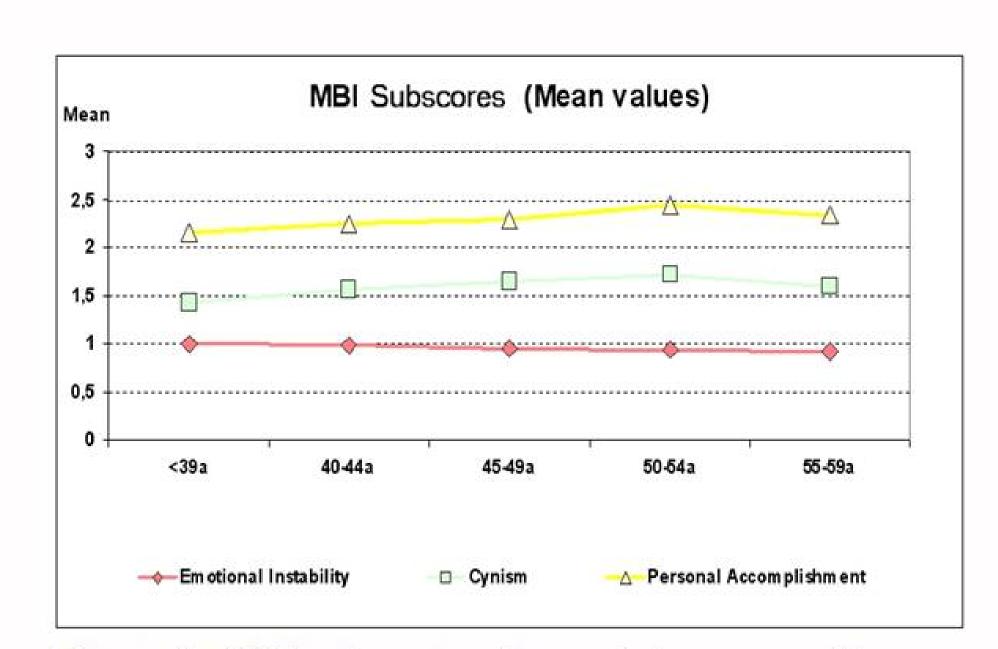
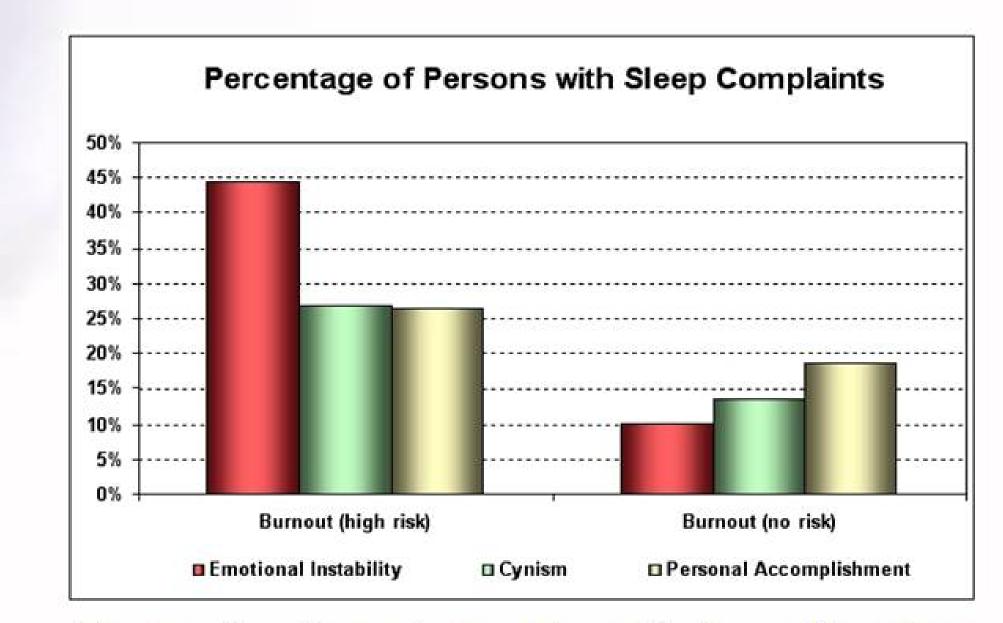


Figure 3: MBI subscores (means) increase with age. As compared with younger employees, elderly have significant higher means in subscores "Cynism" and "Personal Accomplishment" (t-test, P<0.05).



<u>Figure 1</u>: Percentage of subjects with sleep complaints and high risk for burnout. High risk, especially high scores in "Emotional Instability" is associated with sleep complaints.

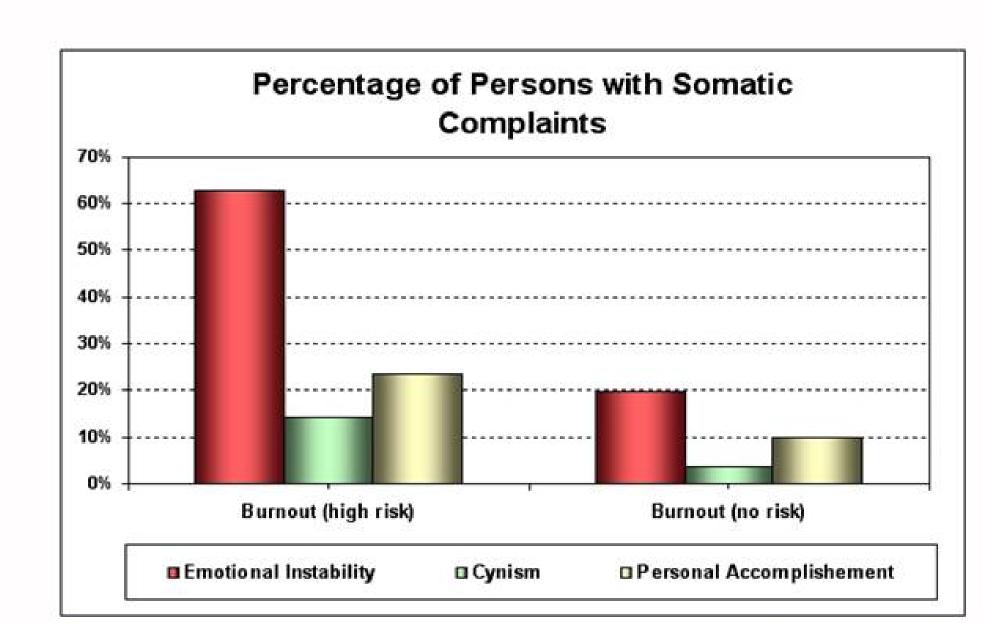


Figure 4: Percentage of subjects with somatic complaints and high risk for burnout. High risk, especially high scores in "Emotional Instability" is associated with various somatic complaints.

<u>Conclusion</u>: Employees with disturbed sleep have a higher risk for developing syndromes related to burnout. Therefore, public debates must concentrate more on the consequences of non-restorative sleep on working life.