



THE RELATIONSHIP BETWEEN JOB STRESSORS, SOCIO-DEMOGRAPHIC FACTORS AND EMPLOYEE BURNOUT



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INTRODUCTION

Different aspects of job stressors have been linked to burnout among employees [1]. However, to our knowledge, none of the studies on burnout employed the cognitive ergonomics approach that quantifies the burden of stressors on human resources [2]. In addition, the results of studies which address experience of burnout and the contribution of different socio-demographic variables to burnout are inconsistent. So far, the research findings indicate that singles especially men are more exposed to burnout than married individual and people with higher educational levels experience more job burnout [1, 3]. Meta-analytic findings also indicate small negative correlation between employee age and emotional exhaustion, and a small negative correlation between years of experience in a field and emotional exhaustion [4]. Regarding gender differences women are slightly more emotionally exhausted than men while men are somewhat more depersonalized [5] .

AIM

Our study aimed to develop a prediction model of employee burnout that includes both job stressors and socio-demographic variables.

RESULTS

Table 2. *M and SD of the measured variables.*

VARIABLE	M	SD
STRESS DIMENSIONS		
Underload	6.3	2.8
High demand	17.9	5.5
Strictness	12.3	3.3
Extrinsic time pressure	4.7	1.6
Aversive/noxious exposure	5.4	3.8
Avoidance/symbolic aversiveness	4.8	2.7
Conflict/uncertainty	9.4	4.0
Total OSI score	61.3	10.7
BURNOUT DIMENSIONS		
Exhaustion	22.4	3.2
Disengagement	21.4	3.0
Σ HEALTH PROBLEMS - LAST YEAR	2.7	2.2
JOB TENURE (yrs)	16.7	10.7

Table 3. *Predictor of burnout dimensions by stress dimensions and selected socio-demographic variables (Multiple Linear Regression Analysis, hierarchical method).*

Model	R	R ²	F change (df1, df2)	p
Criterion: disengagement				
1	0.253 ^a	0.064	3.571 (7, 365)	0.001
2	0.359 ^b	0.129	3.821 (7, 358)	0.001
3	0.365 ^c	0.133	0.565 (3,355)	0.638
4	0.367 ^d	0.135	0.606 (1, 354)	0.437
5	0.371 ^e	0.138	0.318 (4, 350)	0.866
Criterion: emotional exhaustion				
1	0.142 ^a	0.020	1.066 (7, 365)	0.385
2	0.243 ^b	0.059	2.124 (7, 358)	0.040
3	0.259 ^c	0.067	1.040 (3,355)	0.375
4	0.259 ^d	0.067	0.008(1, 354)	0.931
5	0.266 ^e	0.071	0.337 (4, 350)	0.853

^a stress dimensions

^b stress dimensions, age, gender, education

^c stress dimensions, age, gender, education, marital status, children, elder care,

^d stress dimensions, age, gender, education, marital status, children, elder care, health problems

^e stress dimensions, age, gender, education, marital status, children, elder care, health problems, type of employment, type of contract, turnover intention, job tenure

METHODS

A total of 413 Slovenian employees in different occupations filled out General form of Occupational stress index (OSI, Belkić and Savić, 2008) questionnaire and Oldenburg Burnout Inventory (OLBI, Demerouti et al., 2003).

The General OSI Questionnaire [2] is applicable to workers of any occupational profile. It measures seven stress dimensions (underload, high demand, strictness, external time pressure, aversive physical exposures, symbolic aversiveness, and conflict or uncertainty) on different levels of information transmission (sensory input, central decision-making and output/task performance). Each element of the OSI is scored on a scale from 0 to 2, with zero being "not present" and 2 as "strongly present. The sum of the factor scores comprises the total OSI score, which is an attempt to quantitate the overall burden upon the human operator of a given set of working conditions.

The Oldenburg Burnout [6] measures two dimensions of burnout: exhaustion and disengagement. The exhaustion subscale refers to general feelings of emptiness, overtaxing from work, a strong need for rest, and a state of physical exhaustion. Disengagement subscale refers to distancing oneself from the object and the content of one's work and to negative, cynical attitudes and behaviors toward one's work in general. Each subscale includes four positively worded and four negatively worded items that are scored on a four-point scale from strongly agree (1) to strongly disagree (4), so that higher scores indicate a higher level of burnout.

Information on the following sociodemographic factors was collected: turnover intention, job tenure, type of employment, gender, age, education level, marital status, children, elder care, health problems in the last 12 months.

Hierarchically moderated multiple regressions were used to analyze the relationship between job stressors, socio-demographic variables and burnout.

To examine the relationship between burnout, stress dimensions and socio-demographic variables, two hierarchical multiple regression analysis were carried out with the two subscales of burnout as dependent variables (Table 3). As independent variables OSI stress dimensions were entered first (step 1), folowed by the basic socio-demographic data – gender , age, education (step 2), marital status, children, elder care (step 3), number of health problems in the last year (step 4) and basic employment characteristics – type of employment, type of contract, turnover intention, job tenure (step 5). All factors included in the model predicted 13,8 % of the variance in disengagement and 7,1 % of the variance in emotional exhaustion. Stress dimensions and basic socio-demographic data (gender , age, education) significantly contributed to burnout dimensions.

Significant predictors of disengagement dimension included OSI stress dimensions underload and high demands, gender and education (Table 4); higher disengagement is experienced by male employees with higher education and lower scores on stress dimensions underload ($\beta = -0.168$) and high demands ($\beta = -0.154$). Besides OSI stress dimension high demands and education are also significant predictors of exhaustion dimension (Table 5); employees that experience less stress on dimension high demands ($\beta = -0.205$) and have higher educational level, experience more exhaustion.

Table 4. *Model 2 for dependent variable disengagement (Multiple Linear Regression analysis, enter method).*

R=0.367, R²=0.135, ΔF (14,376)=4.176, p<0.01

Predictor	B	SE B	β
Constant	23.600	1.096	
Underload	-0.180	0.063	-0.168**
High demand	-0.083	0.035	-0.154*
Strictness	-0.018	0.052	-0.019
Extrinsic time pressure	0.195	0.111	0.100
Aversive/noxious exposure	-0.067	0.050	-0.087
Avoidance/symbolic aversiveness	-0.054	0.060	-0.050
Conflict/uncertainty	-0.077	0.043	-0.102
Women vs. men	0.749	0.324	0.128*
<30 yrs vs. >50 yrs	0.282	0.501	0.041
<30 yrs vs. 41-50 yrs	0.221	0.478	0.036
<30 yrs vs. 31-40 yrs	0.648	0.480	0.100
Primary education vs. spec., PhD	1.959	0.970	0.121*
Primary education vs. university	2.173	0.563	0.353**
Primary education vs. high school	1.532	0.483	0.262**

* p .05 (two-tailed). ** p .01 (two-tailed)

Table 5. *Model 2 for dependent variable exhaustion (Multiple Linear Regression analysis, enter method).*

R=0.265, R²=0.070, ΔF (14,376)=2.029, p=0.015

Predictor	B	SE B	β
Constant	22.295	1.074	
Underload	-0.089	0.062	-0.088
High demand	-0.105	0.034	-0.205**
Strictness	-0.024	0.051	-0.027
Extrinsic time pressure	0.113	0.109	0.061
Aversive/noxious exposure	-0.062	0.049	-0.085
Avoidance/symbolic aversiveness	0.029	0.059	0.028
Conflict/uncertainty	0.026	0.042	0.036
Women vs. men	0.507	0.318	0.092
<30 yrs vs. >50 yrs	0.352	0.491	0.055
<30 yrs vs. 41-50 yrs	-0.024	0.469	-0.004
<30 yrs vs. 31-40 yrs	0.516	0.471	0.084
Primary education vs. spec., PhD	0.685	0.951	0.045
Primary education vs. university	1.500	0.552	0.257**
Primary education vs. high school	0.971	0.473	0.176*

* p .05 (two-tailed). ** p .01 (two-tailed)

Table 1. *Basic socio-demographic characteristics of the sample.*

SOC-DEMO CHARACTERISTIC	%
GENDER	
Male	52.1
Female	47.8
AGE (yrs)	
< 30	11.9
31-40	27.4
41-50	35.9
>50	24.8
EDUCATION LEVEL	
I.,II. level (primary school or less)	15.4
III.,IV. level (high school)	49.1
V., VI. level (bachelors, masters)	32.2
VII.,VIII. level (spec., PhD	3.4
MARITAL STATUS	
Single, divorced	19.7
Married, in a relationship	80.3
CHILDREN	
No	18.1
Yes	81.9
ELDER CARE	
No	87.7
Yes	12.3
TYPE OF EMPLOYMENT	
Full-time	98.5
Part-time	1.5
TYPE OF CONTRACT	
Long-term	91.5
Fixed-term	8.5
TURNOVER INTENTION	
No	81.6
Yes	18.4

CONCLUSIONS

The present study is one of the first that uses cognitive ergonomic approach to examine relatedness of stress and burnout. It also includes a broader range of socio-demographic variables to examine their relationship with burnout. Results suggests that certain stress dimensions are significant predictors of burnout, but account for relatively small proportion of explained variance. The study also replicates past research on the importance of psychosocial stressors, especially gender and education [1, 3], in the development of burnout. Moreover it suggests that there are also other predictors of employee burnout that we did not take into account. Nonetheless, it points to a need to further examine which factors arising from broader socio-demographic context are important predictions of burnout and should therefore be implemented in burnout prevention strategies.

References

[1] Maslach, C., Schaufeli, W.B. & Leiter, M.P. (2001). Job burnout. Annual Review of Psychology, 52, 397-422. [2] Belkić, K. & Savić, C. (2008). The occupational stress index: An approach derived from cognitive ergonomics applicable to clinical practice. Scandinavian Journal of Work and Environmental Health, 6, 169-175. [3] Schaufeli, W. B., Leiter, P. M., & Maslach, C. (2009). Burnout: thirty five years of research and practice, Career Development International, 14(3), 204-220. [4] Brewer , E. W. & Shapard , L. (2004). Employee burnout: A meta-analysis of the relationship between age or years of experience. Human Resource Development, 3(2), 102-123. [5] Purvanova, R. K. & Muros, J. (2010). Gender differences in burnout: A meta-analysis. Journal of Vocational Behavior, 77(2), 168-185. [6] Demerouti, E., Bakker, A.B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. European Journal of Psychological Assessment , 18, 296-307.



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