

# BURNOUT AMONG SLOVENIAN EMPLOYEES: A META-ANALYTIC REVIEW OF RELATED VARIABLES

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## INTRODUCTION & AIM

Occupational burnout has gained an increased attention among professionals and researchers also in the Slovenian research field, since the number of publications gradually increased over the last few years. The aim of our study was to analyse relevant empirical Slovenian research papers on occupational burnout and systematically review the findings concerning the correlates of burnout.

Table 1. A meta-analytic review of the most relevant studies concerned with occupational burnout in educational sector [1-12], health care sector [13-16], military and police [17-21] and other occupations [23-26],

## METHODS

A meta-analytic review was performed on Cooperative Online Bibliographic System and Services (Cobiss) from 2004 to 2010 with the following keywords: burnout, stress management, stress risk factors, job satisfaction, mobbing, staff turnover, absenteeism, presenteeism. We identified 148 papers (from initial 1490) concerned with occupational burnout, out of which 27 studies using Maslach Burnout Inventory were included into the qualitative meta-analysis.

## RESULTS

Almost half of the studies were performed among employees in the educational sector, whereas most of the remaining studies included military and health sector. The majority of participants reported moderate levels of burnout. The majority of studies explored associations of burnout dimensions (emotional exhaustion, depersonalization and personal accomplishment) with basic sociodemographic variables (e.g. gender, age, education, working years), work environment variables (e.g. overload, role conflict, responsibility, relations) and individual characteristics (e.g. health, personality, work and life satisfaction, coping strategies).

Author(s) and publication year	BURNOUT LEVEL	CORRELATES OF BURNOUT			
		WORK FACTORS	SOC-DEMO FACTORS	HEALTH, WELL-BEING, SATISFACTION WITH LIFE, JOB	PERSONALITY, MOTIVATION, BELIEFS, COPING
[1] Bertoncelj (2005); school counselors, N=153	EXH (M=37.7; SD=22.45), DEP (M=10.53; SD=8.38), PA (M=75.63, SD=12.86); 55% of the sample average burnout (high EXH, low DEP, high PA)	non-sign. r, t (p>0.05) age, years of employment, gender, type of school (primary, high school)			hardiness: commitment (EXH r=0.41**; DEP r=0.20*, PA r=-0.24*); control (EXH r=0.18*; PA r=-0.20*); challenge (DEP=0.31**)
[2] Demšar and Zubukovec (2009); teachers, N=228	EXH (M=47.4; SD=20.61), DEP (M=11.2; SD=9.75), PA (M=69.5, SD=12.72); 63% of the sample low burnout (low EXH, DEP, high PA)	group with 11-20 yrs of employment sign. (p<0.01) more burnout; group with less working hrs/week sign. (p<0.01) higher DEP; teachers of younger scholars/social sciences sign. (p<0.01) higher PA		thinking of changing the job sign. (p<0.01) more burnout; more satisfied with work sign. (p<0.01) less burnout	multiple regression: sign. (p<0.01) more burnout experienced by teachers that talk about their problems with colleagues and friends, sign. (p<0.01) less burnout experienced by teachers that follow the advice of colleagues and friends
[3] Depoll Steiner (2010); teachers, N=242	63% of teachers low burnout (low EXH, DEP, high PA)	frequent and intense workload contributes the most to burnout; teachers of younger scholars sign. (p<0.05) lower EXH and DEP, higher PA			
[4] Gazvoda and Zorc-Maver (2007); teachers, N=130	majority of the sample low to moderate burnout (low EXH, DEP, high PA)	teachers of younger scholars sign. (p<0.05) higher PA	learning styles stat. sign. r (p<0.05) (theorist with EXH, pragmatist with PA)		
[5] Grof (2009); teachers; N=448	61 % of the teachers low burnout (low EXH and DEP, high PA); EXH (M=20.80; SD=10.10), DEP (M=5.80; SD=4.45), PA (M=33.43, SD=5.94)	emotion oriented coping (EXH r =0.14*); problem oriented coping (DEP r=0.13*, PA r=0.3*)			
[6] Kavčič (2004); working with people with mental deficiency, N=164	majority of teachers low burnout (low EXH, DEP, high PA)	professional groups: teachers sign. (p<0.05) more frequent EXH; caregivers sign. (p<0.05) more frequent DEP	years of employment non-sign. r (p>0.05)	hardiness (commitment, control, challenge) non-sign. r (p>0.05)	problem oriented coping sign. (p<0.05) more frequent and intense PA; emotion oriented coping sign. (p<0.05) more frequent and intense EXH and DIS
[7] Langer (2009); teachers, N=211		years of employment positive r with EXH (freq, intensity), DEP (intensity); no. of children with mental disability per class positive r with EXH (freq, intensity); satisfaction with the headmaster positive r with EXH, DIS (freq, intensity)	school in rural/urban environment: rural area higher PA, in city higher DEP	hardiness: commitment, control positive r with EXH and DEP; days of sick leave positive r with EXH	
[8] Markelj (2008); sports teachers; N=54	less burnout than Slovenian teachers in general				sport activities, psychological relaxation, good preparation for classes
[9] Potocnik (2004); working with people with mental deficiency, N=200	majority of participant low burnout (low EXH, DEP, high PA)	years of employment, content of work (with people, administrative) non-sign. r (p>0.05)	age, gender, education non-sign. r (p>0.05)	type A personality sig. r (positive for EXH, DIS; neg. for PA); type A personality moderates relation between EXH and achievement motivation	
[10] Razpotnik (2007); teachers for children with intellectual disability, N=25		years of work sign. positive r (p>0.05) with EXH, DIS	education non-sign. r (p>0.05) r	well being sign. positive r (p<0.05)	
[11] Verčkovnik (2006); special educators and rehabilitation pedagogues, N=94	freq EXH (M=16.31; SD=10.59), DEP (M=4.67; SD=4.58), PA (M=35.37, SD=7.05); intensity (M=18.10; SD=12.96), DEP (M=5.72; SD=5.29), PA (M=40.06, SD=8.78); majority of the sample low burnout (low EXH, DEP, high PA)				
[12] Virtič (2010); teachers, pharmacists, N=88	majority of participants low burnout (low EXH, DIS, high PA)	workload sign. positive r (p<0.05) with EXH; work community, shared work values sign. negative r (p<0.05) with DEP			
[13] Žnidarič (2010); workers in the area of mental deficiency, N=185	freq EXH (M=21.13; SD=11.97), DEP (M=5.81; SD=6.22), PA (M=35.29, SD=7.28); intensity (M=25.10; SD=14.21), DEP (M=7.32; SD=7.23), PA (M=38.59, SD=7.70);	years of employment sign. r with (freq EXH r=0.17*; intensity EXH r=0.14*)	age sign. r with (freq EXH r=0.18*; intensity EXH r=0.13*, freq PA r=0.16*);	sign. r (p<0.05) with personality dimensions of index profile emotions questionnaire; personality profile doesn't show high risk for burnout	
[14] Jeleč (2008); social workers in health institutions, N=50	40% of the sample low EXH, moderate DEP and moderate PA	5 main factors of work stressors showed 1)conflicting demands between professional and administrative work and unclear professional roles 2)conflict 3)lack of professional skills 4)professional unreliability 5)work responsibility; high sign. r (p<0.01) of EXH and factors 1-4 (0.5-0.75); DEP and factors 1 and 2 (0.35-0.45);		psychological and physiological symptoms high sign. (p<0.01) r with EXH (0.65-0.85) and DEP (0.4-0.6)	
[15] Maček (2007); health care, N=130	freq EXH (M=20.40; SD=10.02), DEP (M=7.82; SD=5.43), PA (M=34.83, SD=6.67); intensity (M=22.24; SD=12.43), DEP (M=7.85; SD=6.18), PA (M=38.89, SD=7.96); 53.8% of participants show at least one sign of high burnout (high DEP, EXH, low PA); majority of sample low burnout	work institution (hospital, health centre), years of employment, no. of working hours per week non-sign. r (p>0.05); years of work on particular work position sign. r with intensity EXH (0.19*)	age, gender non-sign. r (p>0.05); education sign. r with intensity PA (0.23**)	hardiness (commitment, control, challenge) sign. r with PA (0.4-0.55**); EXH (-0.18*- -0.46**); DEP (-0.2*- -0.5**)	EXH (positive reinterpretation and growth r=0.27**; mental disengagement r=0.3**; focus on& venting of emotions r=0.27*; turning to religion r=0.20*; behavioral disengagement r=0.24**); DEP (positive reinterpretation and growth r=0.25**; mental disengagement r=0.22*; focus on& venting of emotions r=0.24*; denial r=0.21*; behavioral disengagement r=0.21**); PA (positive reinterpretation and growth r=0.51**; active coping r=0.29**; restraint coping r=0.27**; planning r=0.43**)
[16] Primožič (2005); nurses of elderly, N=50	index of burnout: freq EXH (M=3.32; SD=1.18), DEP (M=1.40; SD=1.03), PA (M=4.24, SD=1.14); intensity EXH (M=2.72; SD=1.57), DEP (M=1.67; SD=1.09), PA (M=4.38, SD=1.29); half of the sample low burnout (low EXH, DEP, high PA); third of the sample medium burnout	11-20 years of working experience sign. (p<0.01) higher EXH, DEP	age sign. r (p<0.05)	psychosomatic problems in the past (EXH r=0.45**) in the last 12 months (EXH r=0.43**); problems with mental health sign. r (p<0.05) with EXH; satisfaction with work sign. r with intensity of burnout (r=0.3*); satisfaction with income sign. r with EXH (r=0.3*), PA (r=0.4*)	
[17] Masten, Dimec, Tušak, Tušak and Tkavc (2008); [18] Tušak, Dimec, Masten and Tušak (2008); military, N=137				bad health (EXH, DIS r=0.5-0.6*); wish to stay in SA (EXH r=0.47**, DIS r=0.43**, PA r=0.27**); satisfaction with the occupation (EXH r=0.43**, DIS r=0.42**, PA r=0.24**); satisfaction with life (EXH, DEP r= -0.3*)	
[19] Purgaj (2007); police, N=115	freq EXH (M=19.77; SD=11.13), DEP (M=12.56; SD=6.24), PA (M=30.45, SD=7.06); intensity EXH (M=20.32; SD=12.24), DEP (M=13.55; SD=6.97), PA (M=32.41, SD=8.64)	employed in traffic significantly more (p<0.05) EXH and DIS than employed at the border	gender, education non-sign. t (p>0.05) age (EXH r=0.43*, DEP r=0.29**), years of work sign. r (EXH r=0.47**, DEP r=0.34**)		
[20] Selič (2008), [21] Selič, Rus Makovec and Petek (2008)	EXH (healthy M=14.6, less healthy M=16.5, participants of missions M=18.3); DIS (healthy M=6.8, less healthy M=9.2, participants of missions M=10.2); PA (healthy M=31.4, less healthy M=30.5, participants of missions M=29.2); participants of missions sign. (p<0.05) higher burnout (higher EXH, DEP, lower PA)			sign. (p<0.01) differences between participants that are more healthy and those who are less healthy (based on sick leave criterion); more healthy lower EXH, DEP, higher PA); well being (EXH r=0.32**, DIS r=0.14**; PA r=0.14**)	
[22] Selič, Serec, Petek and Rus Makovec (2010); military, N=390					
[23] Brezavšček (2007); employees of casino, N=331	EXH (M=41.60; SD=23.23), DEP (M=22.45; SD=12.10), PA (M=59.54, SD=15.90)	higher hierarchy level (DEP r=0.32*; PA r=0.32*); years of working experience in the company (EXH r=0.24*)	gender non-sign. t (p>0.05)	hardiness: commitment (EXH r=0.42**. DEP r=0.31**, PA r=0.29**); control (EXH r=0.21*); challenge (EXH r=0.20*, PA r=0.20*)	satisfaction with life (EXH r=0.32**; DEP r=0.21*)
[24] Celin (2006); coaches (sport), N=148	freq EXH (M=13.66; SD=8.83), DEP (M=4.36; SD=4.07), PA (M=36.63, SD=5.61); intensity EXH (M=14.82; SD=10.40), DEP (M=5.32.85; SD=4.88), PA (M=41.46, SD=7.60); 73% of the sample low burnout (low EXH, DEP, high PA)	age, years of employment non-sign. r (p>0.05)	gender, education non-sign. t (p>0.05) years of being a coach r=0.17* with intensity PA	trait anxiety (EXH r= 0.62**; DEP r=0.47**; PA r=0.5**); competitiveness (freq EXH r=0.18*; DEP r= 0.35**), unhealthy dependence on external rewards (intensity EXH =0.17*; intensity DEP r=0.18*); hostility (EXH r= 0.5**; DEP r=0.37**; PA r=0.26*), impatience (EXH r= 0.32**; DEP r=0.31**; PA r=0.2*); intention to leave job (EXH freq (r=0.28**), EXH intensity (r=0.34**); PA (r=0.20*))	
[25] Jeleč and Ovsenik (2009); tourism workers, N=31	average EXH, DIS, high PA	gender, age, education level, working years non-sign. t (p>0.05)			
[26] Kovačič and Bilban (2007); different professions, women after breast cancer, N=100	in comparison with other Slovenian samples (e.g. teachers, coaches) patients before illness experienced more burnout; the highest score on EXH	years of work sign. (p>0.05) negative r with EXH, DEP and sign. (p>0.05) positive r with PA			

## CONCLUSION

The results indicated that professional burnout significantly correlated with work demands, personality factors (personality hardiness), physical and psychological well being, intention to change job, satisfaction with work/life and emotion oriented (non-active) coping strategies. Though investigating different occupational sectors, our results largely replicated past research on burnout findings. Results may lead to a better understanding of reciprocal interactions between the personal and environmental factors contributing to job burnout.

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