



Correlations of Emotional Burnout with Self-Efficacy, Quality of Life, and Work Ability in Pre-University Employees

Dorin-Gheorghe Triff¹, Anișoara Pop², Bocoș Mușata³

Emergency County Hospital of Baia Mare, Technical University of Cluj Napoca, North University Center, Baia Mare, Romania¹

GE Palade University of Medicine, Pharmacy, Science, and Technology of Târgu Mureș, Romania²

Babeș-Bolyai University, Faculty of Psychology and Educational Sciences, Cluj Napoca, Romania³

Abstract

During the routine medical check-up, employees from 3 high schools voluntarily filled in a questionnaire that traced the emotional burnout (Maslach burnout inventory), perceived self-efficacy (self-efficacy scale), dimensions of the quality of life (ShortForm 36 questionnaire-SF36), work ability (Work ability index-WAI), together with demographics (age, seniority as an employee in the unit, gender, type of residence, level of education, and income), and 10 occupational stressors. Out of a total of 392 employees, 62.2% filled in the questionnaire. 76.63% of the respondents had low scores and 22.95% average scores of the burnout syndrome. In each of the 3 high schools, the perceived self-efficacy correlated significantly negatively with the burnout score for the entire group of respondents ($p = 0.006$; $p = 0.009$; and $p < 0.001$). In all 3 high schools, the burnout score correlated significantly negatively with the following dimensions of the quality of life: physical functioning, physical role functioning, emotional role functioning, vitality, mental health, social role functioning, general health perceptions. The burnout score correlated significantly positively in all the 3 high schools with 7 occupational stressors: impossibility of changing the unpleasant aspects at the work place, earnings, increased responsibility of the job, risk of illness and injury at work, communication with other employees, tasks, and work schedule. The association of perceived self-efficacy in each high school only for groups with low burnout scores and the lack of this association in groups with average burnout scores, as well as different associations depending on the school unit among the studied variables, shows the complexity of individual and organisational factors involved, but also their importance. Early diagnosis of emotional burnout is crucial as underlined by the significant negative association of the burnout score in all the 3 high schools with both the dimensions of the quality of life and perceived self-efficacy as well as with most of the studied occupational stressors.

Keywords: burnout, work-ability, self-efficacy, occupational stressors

Introduction

Among the host of occupational stressors, the following are well known: leadership style, interpersonal relationships at work, workplace design (which can generate risks of illness or injury), work tasks and work schedule [1]. Besides these, a stressor not to be overlooked in the field of education is that of excessive paperwork [2]. Likewise, workers with higher wages tend to have greater autonomy in relation to the workplace and this autonomy is associated with a better perception of health [3]. Autonomy in the workplace also covers decision-making issues, such as the possibility of modifying or optimising unpleasant aspects of the workplace. The burnout syndrome occurs frequently in education, especially in people who are highly involved and who have an increased sense of accountability, with consequences for the quality of their lives through its dimensions: emotional, social, and overall health.

Employees' perceptions of work capacity may be influenced by stress at work, and individual characteristics [4]. The level of perceived self-efficacy can differentiate on how individuals relate to stressors. People with low self-efficacy are more likely to believe that their effort does not bring any contribution to the success or accomplishment of an activity [5].

Material and method

During the regular medical check-up, the employees from three high schools were administered a questionnaire for voluntary completion, which included the following items:

- employees' individual characteristics (age, seniority as an employee in the unit, gender, type of residence, level of education, and income). The level of education had 4 answer options, from vocational school (number 1), to higher education (number 4). Income level per family member also had 4 response options (corresponding to scores between 1 and 4);



- the ten occupational stressors under study are presented in Table 1 below. Occupational stressors were scored on a Likert scale frequency from (1) to (4);

Table 1. Possible causes of stress for the workers

Nr.	Occupational stressor
1	Impossibility of changing unpleasant aspects in the workplace
2	Communication with and support from superiors
3	Workplace-specific increased responsibility
4	Risks of professional diseases are present in the workplace
5	Income level
6	Risks of hazards in the workplace
7	Type of communication and/or relationships (conflicts) with other employees
8	Work tasks
9	Work schedule
10	Need to fill in daily activity records/other forms

- emotional burnout was measured through the Maslach burnout inventory [6];
- dimensions of quality of life (ShortForm 36 questionnaire-SF36) [7];
- General self-efficacy scale [8];
- Work Ability Index (WAI) [9].

The Spearman correlation coefficient was used at a minimum probability threshold, $p = 0.05$ while for statistical processing we employed the IBM SPSS Statistics v.20 software package.

Results

The three high schools had a total number of 392 employees as follows: High school no.1 - 158 employees, high school no.2 - 103 employees, and high school no. 3 - 131 employees. Of these, 62.2% participated in the study, returning the filled in questionnaires.

In all the three high schools, the number of female employees was significantly higher than that of the male employees, most employees having higher education degrees. Most of the employees in the three high schools were also in their middle adulthood, with good, over 10 years' mean seniority in the work place (Table 2).

Table 2. Characteristics of respondents in the three school units

	Gender		"income/family member"	Age	Seniority in the unit	Education level
Highschool no.1	Male	Mean	2.25	42.88	17.00	3.89
		N	12	16	12	18
		Minimum	2	21	2	2
		Maximum	4	65	40	4
	Female	Mean	2.08	41.15	11.73	3.97
		N	64	73	67	74
		Minimum	1	23		2
		Maximum	3	69	41	4
Highschool no.2	Male	Mean	2.00	47.06	16.76	3.88
		N	17	17	17	17
		Minimum	1	26	2	3
		Maximum	3	61	43	4
	Female	Mean	2.20	41.46	12.95	3.98
		N	40	41	41	40
		Minimum	1	25	1	3
		Maximum	3	58	29	4
Highschool no.3	Male	Mean	2.00	50.10	17.25	3.20
		N	18	20	20	20
		Minimum	1	23	1	1
		Maximum	3	65	42	4



Female	Mean	1.93	44.38	14.37	3.43
	N	75	79	73	76
	Minimum	1	22	1	1
	Maximum	3	60	38	4

In terms of gender, there were significant differences in the 3 high schools according to the studied variables:

-In High School no. 1 the stressor "impossibility to get involved in changing the unpleasant aspects at work" has a higher level in female versus male employees ($p = 0.004$)

-In High School no. 2 the stressor "impossibility to get involved in changing unpleasant aspects at work" is a higher stressor in male versus female employees ($p = 0.029$) while the "role of physical functionality" has higher scores in female versus male employees ($p = 0.049$)

In High School No. 3, males are older compared to female employees ($p = 0.024$).

In all the three high schools, there are no significant differences in the scores of emotional burnout, perceived self-efficacy, the dimensions of quality of life, and work capacity according to the type of residence, age, "seniority in education", "income level / family member", level of education.

Comparing the results obtained in the three high schools, we noticed the following significant differences:

- *Age* is significantly different, with the highest value in employees from Highschool no. 3 compared to employees in Highschool no. 1, the latter having the lowest value (Kruskal Wallis test, $p = 0.03$);

- *Seniority in education* is highest in Highschool no. 3 and lowest in Highschool no. 1 ($p = 0.023$);

- *Physical functionality* has the highest values in Highschool no. 1 and the lowest in Highschool no. 3 ($P < 0.001$);

- *Pain* as quality of life dimension has the highest values in Highschool no 1 and the lowest in Highschool no. 3;

- *General state of health* as quality of life dimension has the highest values in Highschool no. 1 and the lowest in Highschool no. 3 ($p = 0.002$).

It should be noted that the perceived self-efficacy, the level of emotional burnout, the scores of the other dimensions of life quality, as well as the WAI score are without significant differences in the three high schools. In what follows, presentation of the probability threshold will be made in the following order: high school no.1, high school no.2, high school no.3.

For those who presented low burnout scores, these scores correlated significantly negatively with the perceived self-efficacy in all 3 high schools ($p = 0.014$, $p < 0.001$, $p < 0.001$), and with WAI only in two of the three surveyed high schools. There were no significant correlations between the burnout scores and perceived self-efficacy or WAI in employees with average burnout scores in any of the 3 high schools.

In all the three high schools, age correlates positively with seniority as an employee in the unit (all with $p < 0.001$), whereas the burnout score correlates significantly negatively with the following dimensions of the quality of life:

- physical functioning: $p = 0.002$, $p < 0.001$, $p = 0.017$;

- physical role functioning: $p = 0.011$, $p = 0.021$, $p = 0.001$;

- emotional role functioning: $p = 0.045$, $p = 0.007$, $p = 0.027$;

- vitality: $p < 0.001$, $p < 0.001$, $p < 0.001$;

- mental health: $p < 0.001$, $p < 0.001$, $p < 0.001$;

- social role functioning: $p = 0.001$, $p < 0.001$, $p = 0.002$;

- general health perceptions: $p = 0.012$, $p < 0.001$, $p = 0.007$.

The burnout score correlates significantly positively in all the three high schools with the following 7 occupational stressors:

-earnings: $p = 0.005$, $p < 0.001$, $p = 0.049$;

-increased responsibility of the position: $p = 0.012$, $p = 0.016$, $p < 0.001$;

-risk of sickness: $p < 0.001$, $p = 0.004$, $p = 0.01$;

-risk of hazards is present in the job: $p < 0.001$, $p = 0.008$, $p = 0.003$;

-communication with the other employees: $p = 0.02$, $p = 0.001$, $p < 0.001$;

-work tasks: $p = 0.008$, $p = 0.003$, $p < 0.001$;

-work schedule: $p < 0.001$, $p = 0.027$, $p < 0.001$.

The burnout score correlates significantly negatively in all the three high schools with the perceived self-efficacy $p = 0.006$, $p = 0.009$, $p < 0.001$.



Conclusions

The importance and complexity of individual and organisational factors involved in the interconnections between burnout and the other variables in the current study is underlined by the association of perceived self-efficacy in each high school only for groups with low burnout scores and the lack of this association in groups with average burnout scores, as well as different associations among the studied variables depending on the school unit.

Likewise, the significant negative association of the burnout score in all the three high schools with both the dimensions of the quality of life and perceived self-efficacy, as well as with most of the studied occupational stressors demonstrate that the early diagnosis of emotional burnout is crucial.

References

- [1] EU OSHA (n.d.). European Agency for Safety and Health at Work-EU OSHA, available at URL: <https://osha.europa.eu/en/themes/psychosocial-risks-and-stress> (accessed at 02.05.2020)
- [2] Manassero A., Buades E.G., Torrens G, et al (2006) Teacher burnout: attributional aspects . Psychology in Spain, Vol. 10. No 1, 66-74
- [3] Sinclair R.R., Cheung, J. H. (2016). "Money Matters: Recommendations for Financial Stress Research in Occupational Health Psychology". Stress and Health. 32 (3): 181–193. doi:10.1002/smi.2688. PMID 27400815.
- [4] van den Berg TIJ, Elders LAM, de Zwart BCH, et al.(2009). The effects of work-related and individual factors on the Work Ability Index: a systematic review, Occupational and Environmental Medicine ;66:211-220.
- [5] Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).
- [6] Maslach, C., Jackson, S.E, & Leiter, M.P. (1996). "[MBI: The Maslach Burnout Inventory: Manual](#)". Palo Alto: Consulting Psychologists Press. Available at URL: https://www.researchgate.net/publication/277816643_The_Maslach_Burnout_Inventory_Manual (cited at 30.10.2017)
- [7] RAND Health Care (n.d.).36-Item Short Form Survey (SF-36) https://www.rand.org/health-care/surveys_tools/mos/36-item-short-form.html
- [8] Schwarzer R. et all. (2002). Is General Self-Efficacy a Universal Construct?. European Journal of Psychological Assessment, Vol. 18, Issue 3, pp. 242–251
- [9] Tuomi K, Ilmarinen J, Jahkola A, Katajarinne L, Tulkki A. (1998). Work Ability Index, 2nd revised ed. HelsinkiFinnish Institute of Occupational Health