



Occupational burnout among teachers: is it seasonal?

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The aim of this cross-sectional study was to compare occupational burnout in two groups of teachers from the district of Bijeljina (Bosnia and Herzegovina) measured with the Serbian version of the Maslach Burnout Inventory survey for workers in human services (MBI-HSS) at the beginning (group 1) and the end of the school year 2018/2019 (group 2) to see if there are seasonal differences. The questionnaire also included standard sociodemographic data and job description (primary and/or secondary school position, length of service, and overtime work). The prevalence of emotional exhaustion and depersonalisation was low in both groups. However, emotional exhaustion and depersonalisation scores significantly shifted to higher values between the beginning and the end of the school year. We also found a statistically significant association between emotional exhaustion and overtime and between depersonalisation and work in a secondary school ($p < 0.05$). These findings invite further research of occupational burnout seasonality in schoolteachers, preferably by following up cohorts which would be controlled for sociodemographic and work-related variables.

KEY WORDS: chronic stress; depersonalisation; educators; emotional exhaustion; primary school; secondary school; work-related problems

Occupational burnout is a multidimensional phenomenon that consists of three dimensions: emotional exhaustion (EE), depersonalisation/cynicism (DP), and a feeling of low personal accomplishment (PA) (1–3). Guseva Canu et al. (1), who have studied this phenomenon for many years, define it as “physical and emotional [...] exhaustion due to prolonged exposure to work-related problems”. In fact, occupational burnout has been included in the 11th revision of the International Classification of Diseases (ICD-11) as a syndrome resulting from chronic workplace stress that has not been successfully managed (4). Even though it has been recognised as occupational disease in many countries of the European Union (5), there is still some controversy about whether it is an occupational disease (6).

Controversy or not, occupational burnout has many consequences on individual mental and physical health, work performance (7), and on economy in general (6, 8). Various authors have investigated this phenomenon in a wide range of occupations, and the first research in teacher population began in the 1980s and 90s (9–11). Teaching is often associated with high emotional demands and stress associated with heavy workload, poor working environment and pupil/student behaviour, long working hours, covering for teacher shortages and absences, pressure of programme

targets and inspections, workplace physical and mental violence or bullying by students, parents, or colleagues, which greatly contributes to the burnout syndrome (12–15). Consequences include frequent presenteeism and/or absenteeism and/or disrupted teacher-student rapport, which can have consequences on students’ mental health and academic achievements (16, 17).

The prevalence of occupational burnout in teachers varies between countries (18). In Lithuania, high emotional exhaustion was reported in 25.6 %, high depersonalisation in 10.6 %, and a feeling of low personal accomplishment in 33.7 % of teachers (19). In Sweden these percentages were 36 %, 11 %, and 21 %, respectively (20), and in Italy 19.5 %, 3.7 %, and as high as 55.3 %, respectively among primary school teachers (21). In contrast, in the Republic of Srpska (Bosnia and Herzegovina) the prevalence of occupational burnout seems much lower: 5.1 %, 3.8 %, and 22.3 %, respectively (22).

We noticed, however, that the study conducted in Bosnia and Herzegovina took place at the beginning of the school year (22), whereas other studies took place at the end or during the school year (9, 19, 23). Considering the lower prevalence of occupational burnout in the Bosnian study, we decided to test the hypothesis that occupational burnout varies as the school year progresses toward

the end, and that differences in timing might account for some differences in findings between studies. We therefore repeated the survey with a new group of teachers from the same district at the end of the school year 2018/2019 and compared with the results of a previous group from the beginning of the same school year (22). Another aim of this study was to stratify occupational burnout by socio-demographic and occupational characteristics for both time points (beginning and end of school year).

PARTICIPANTS AND METHODS

Participants and methods used in the study conducted at the beginning of school year 2018/2019 have already been described in our earlier article (22). Briefly, the study included 952 primary and secondary school teachers. However, that earlier study also included responses from 96 teachers (response rate 91.43 %) from the district of Bijeljina (group 1), whose results were not published, and we wanted to run the second study in as close a sample as possible, considering that we could not repeat it with the same participants, as they were anonymous. We therefore randomly selected primary and secondary schools from the same Bijeljina district that participated in the first run, distributed the questionnaires to school principals, who then distributed them to teachers to fill in at school premises. Of 272 questionnaires distributed, 231 were completed (response rate 84.92 %).

All study procedures followed the ethical standards of the Institute for Occupational and Sports Medicine of the Republic of Srpska, Bosnia and Herzegovina (No. 01-24/18, 20/11/2018) and the 1964 Helsinki declaration with its later amendments. The study was approved by school principals and relevant Ministry. All participants received a leaflet with detailed information on study goals and were informed that the study was completely anonymous. Since participation in the study was voluntary and the questionnaire did not include any personal data, we felt that there was no need for signing an informed consent.

Data collection

For this research we designed a special questionnaire to include standard sociodemographic data (gender, age, marital status, number of children), job description (teaching in primary and/or secondary school, length of service, and overtime hours), and the Serbian version of the standardised and validated questionnaire Maslach Burnout Inventory-Human Service Survey, which consists of 22 questions and measures three dimensions of occupational burnout: emotional exhaustion (9 items), cynicism/depersonalisation (5 items), and personal accomplishment (8 items). Each of the 22 items asks respondents to rate their feelings on a 7-point Likert-type scale, ranging from never having (0 points) to having those feelings several times a week (6 points). Overall scores of each respondent were obtained by summing them up using a specific key for each of the three dimensions. The threshold for high emotional exhaustion is

27 or more points, for moderate exhaustion 17–26 points, and for low exhaustion 0–16 points. High depersonalisation starts at 13 points, moderate ranges between 7 and 12 points, and low between 0 and 6 points. Personal accomplishment is high at 39 and more points, moderate at 32–38 points, and low at 0–31 (24).

Statistical analysis

All our results are expressed as arithmetic means and medians and standard deviation or relative numbers. The MBI-HSS questionnaire is presented through the three continuous dimension scales. The Kolmogorov-Smirnov and the Shapiro-Wilk test did not confirm normality of the distribution ($p < 0.05$).

Differences in the distribution of independent variables between different categories of outcome variables were tested using the Mann-Whitney *U* test, and the Kruskal-Wallis test was applied to variables with more than two modalities. Categorical variables were presented by the number of observations and percentage. Frequencies between the groups were compared with the chi-squared test or Fisher's exact test. All statistical analyses were run with IBM SPSS Statistics for Windows, version 25.0. (IBM, Armonk, NY, USA).

RESULTS

Sociodemographic characteristics of the study groups

The first survey round at the beginning of school year 2018/2019 included 96 teachers (group 1), and the second at the end of the school year 231 teachers (group 2). The two groups significantly differ in gender, age, marital status, and length of service ($p < 0.05$) (Table 1).

Occupational burnout

The prevalence of occupational burnout in teachers at the beginning of the school year was low, as expected, and in line with our published report for the rest of the Republic of Srpska entity of Bosnia and Herzegovina. Surprisingly, however, it remained low in the second round of investigation at the end of the school year, even though the two samples do not match in sociodemographic characteristics.

The two groups do, however, differ in depersonalisation scale ($p < 0.001$), as moderate and high level of depersonalisation was reported more often in the group surveyed at the beginning of the school year (7.3 %) than in the group surveyed at the end (0 %) (Table 2).

What is more in line with our expectations and perhaps more indicative, considering the demographic differences between the two groups of respondents, is a significant rise in the scores of emotional exhaustion and depersonalisation score and a non-

Table 1 Sociodemographic and job characteristics by respondent groups

Socio-demographic characteristics	All	Group 1	Group 2	p
	N (%)	(beginning of the school year 2018/19) N (%)	(end of the school year 2018/19) N (%)	
Gender				
Female	187 (57.2)	27 (28.1)	160 (69.3)	.000
Male	140 (42.8)	69 (71.9)	71 (30.7)	
Age (years)				
<35	82 (25.1)	35 (36.5)	47 (20.3)	.000
36–45	123 (37.6)	35 (36.5)	88 (38.1)	
46–55	111 (33.9)	15 (15.5)	96 (41.6)	
>56	11 (3.4)	11 (11.5)	0	
Marital status				
Married/cohabiting	170 (52.0)	25 (26.0)	145 (62.8)	.000
Single	133 (40.7)	65 (67.7)	68 (29.4)	
Divorced/Widowed	24 (7.3)	6 (6.3)	18 (7.8)	
Children				
Yes	218 (66.7)	62 (64.6)	156 (67.5)	.699
No	109 (33.3)	34 (35.4)	75 (32.5)	
Workplace				
Primary school	179 (54.7)	43 (44.8)	136 (58.9)	.054
Secondary school	144 (44.0)	51 (53.1)	93 (40.3)	
Combined	4 (1.2)	2 (2.1)	2 (0.8)	
Years of work				
<10	113 (34.6)	47 (49.0)	66 (28.6)	.001
11–20	125 (38.2)	34 (35.4)	91 (39.4)	
>20	89 (27.2)	15 (15.6)	74 (32.0)	
Overtime hours per week				
Never	221 (67.6)	60 (62.5)	161 (69.7)	.170
to 10 h	99 (30.3)	32 (33.3)	67 (29.0)	
>10 h	7 (2.1)	4 (4.2)	3 (1.3)	

significant drop in personal accomplishment score in respondents who took the survey at the end of the school year (Table 3).

Table 4 compares the prevalences (number and the percentage) of low, moderate, and high occupational burnout by dimensions and sociodemographic and job characteristics for either respondent group. The group taking the survey at the beginning of the school year showed a significant correlation between emotional exhaustion and overtime and between depersonalisation and work in the secondary school ($p < 0.05$).

Differences in dimension scores (Table 5) additionally point to significant correlations between emotional exhaustion and work in the secondary school, years of work, and overtime ($p < 0.05$) in the group surveyed at the beginning of school year and between emotional exhaustion and overtime in the group surveyed at the

end of the year. Depersonalisation significantly correlates with having children in the first and position in high school in the second group ($p < 0.05$). Personal accomplishment significantly correlates with the female gender in the group surveyed at the end of the school year ($p < 0.05$).

DISCUSSION

This is the first study that aimed at comparing occupational burnout in teachers at the beginning and end of the school year and has showed that, in general, burnout remained low at either time point. Our findings therefore do not confirm our hypothesis that burnout will be higher by the end of the school year. However,

Table 2 Occupational burnout (MBI-HSS)

Occupational burnout	Group 1 (beginning of the school year 2018/19)		Group 2 (end of the school year 2018/19)		p
	N (%)		N (%)		
Emotional exhaustion					
Low	87 (90.6)		217 (93.9)		.396
Moderate	6 (6.2)		7 (3.0)		
High	3 (3.1)		7 (2.1)		
Depersonalisation					
Low	89 (92.7)		231 (100)		.000
Moderate	4 (4.2)		0		
High	3 (3.1)		0		
Personal accomplishment					
Low	16 (16.7)		57 (24.7)		.284
Moderate	28 (29.2)		60 (26.0)		
High	52 (54.1)		114 (49.4)		

Table 3 Occupational burnout scores by dimension (MBI-HSS)

Occupational burnout scale scores	Group 1 (beginning of the school year 2018/19)		Group 2 (end of the school year 2018/19)		p
	Mean (SD)	Median (min–max)	Mean (SD)	Median (min–max)	
Emotional exhaustion	7.98 (6.96)	6.00 (0–34)	13.17 (10.59)	10.00 (0–54)	.000
Depersonalisation	2.05 (4.76)	1.00 (0–40)	2.87 (4.50)	1.00 (0–30)	.038
Personal accomplishment	38.18 (8.07)	39.00 (0–48)	36.41 (9.46)	38.00 (0–48)	.210

scores on the emotional exhaustion and depersonalisation scales shifted towards higher values in the group surveyed at the end of the year and point to work in secondary school, years of work, and overtime as significantly associated with the risk of occupational burnout.

What can be considered a limitation of our study design are demographic differences between the two groups, as they poorly match in the number of respondents (in fact, group 1 is too small), gender, age, marital status, and years of work, whereas an ideal design would have been to follow up the same group of participants across the school year, which can be addressed by future studies. Yet even with these differences between the groups, our results point to low burnout in both groups. We can only assume that differences in emotional exhaustion and depersonalisation between the two groups may be owed to the observed demographic differences, such as those between genders in these two dimensions (male teachers being more prone to depersonalisation and female to emotional exhaustion, see Table 3) reported elsewhere (20, 25–27). However, gender, age, marital status, and years of work do not seem to have influenced the reporting of emotional exhaustion and

depersonalisation in either group (see Tables 4 and 5), which suggests that sociodemographic differences between our groups may not be as great a limitation as feared. This assumption is supported by the results of our previous research, which found little or no association between sociodemographic characteristics and occupational burnout (22).

We did not find a similar study that would address seasonal differences in occupational burnout among teachers, but some studies in athletes point to significantly reduced sense of accomplishment by the end of the sporting season and to the burnout syndrome as a chronic process (28). Other studies show that exposure of social educators to violence or bullying at the workplace increases occupational burnout within 12 months (29) or even shorter intervals, with long-term cumulative effects (30).

CONCLUSIONS

This is the first randomised study to investigate the seasonal nature of occupational burnout among teachers using a standardised

Table 4 Prevalence (number and percentage) of low, moderate, and occupational burnout by dimensions and sociodemographic and job characteristics

Sociodemographic and occupational characteristics	Emotional exhaustion												Depersonalisation												Personal accomplishment											
	Group 1				Group 2				Group 1				Group 2				Group 1				Group 2															
	N (%)	Moderate (%)	High (%)	P	N (%)	Low (%)	Moderate (%)	High (%)	N (%)	Moderate (%)	High (%)	P	N (%)	Low (%)	Moderate (%)	High (%)	N (%)	Moderate (%)	High (%)	N (%)	Low (%)	Moderate (%)	High (%)	N (%)	Low (%)	Moderate (%)	High (%)	P								
Female	24 (27.6)	1 (16.7)	2 (66.7)	.272	151 (69.6)	5 (71.4)	4 (57.1)	.775	25 (28.1)	1 (25.0)	1 (33.3)	0	160 (69.3)	4 (31.2)	8 (28.6)	14 (26.9)	34 (59.6)	41 (68.3)	85 (74.6)	24 (72.4)	5 (30.4)	2 (28.6)	4 (42.9)	71 (71.9)	11 (30.7)	23 (68.8)	19 (73.1)	.943								
Male	63 (72.4)	5 (83.3)	1 (33.3)		66 (30.4)	2 (28.6)	3 (42.9)		64 (71.9)	3 (75.0)	2 (66.7)	0	71 (30.7)	0 (68.8)	0 (71.4)	0 (73.1)	23 (40.4)	19 (31.7)	29 (25.4)																	
<35	34 (39.1)	1 (16.7)	0 (33.3)	.186	45 (20.7)	1 (14.3)	1 (14.3)	.860	33 (37.1)	1 (25.0)	1 (33.3)	0	47 (20.3)	6 (37.5)	12 (42.9)	17 (32.7)	9 (15.8)	16 (26.7)	22 (19.3)										.422							
36-45	28 (32.2)	4 (66.7)	3 (100)		81 (37.3)	4 (57.1)	3 (42.9)		31 (34.8)	3 (8.6)	0 (34.8)	0	88 (38.1)	6 (37.5)	9 (31.1)	20 (36.7)	26 (45.6)	22 (36.7)	40 (35.1)																	
46-55	14 (16.1)	1 (16.7)	0 (33.3)		91 (41.9)	2 (28.6)	3 (42.9)		14 (15.7)	0 (15.7)	0 (15.7)	0	96 (41.6)	1 (6.2)	4 (14.3)	10 (19.2)	22 (38.6)	2 (38.6)	52 (45.6)																	
>56	11 (12.6)	0 (0)	0 (0)		11 (12.4)	0 (0)	0 (0)		11 (12.4)	0 (0)	0 (0)	0	0 (0)	3 (18.3)	3 (10.7)	5 (9.6)	0 (0)	0 (0)	0 (0)																	
Married/Cohabiting	24 (27.6)	0 (33.3)	1 (66.7)	.507	135 (62.2)	5 (71.4)	5 (71.4)	.854	25 (28.1)	0 (0)	0 (33.3)	0	145 (62.8)	5 (31.2)	7 (25.0)	13 (25.0)	37 (64.9)	33 (55.0)	75 (65.8)											.708						
Single	57 (65.5)	6 (100)	2 (66.7)		64 (29.5)	2 (28.6)	2 (28.6)		59 (66.3)	4 (100)	2 (66.7)	0	68 (29.4)	10 (62.5)	19 (67.9)	36 (69.2)	16 (28.1)	21 (35.0)	31 (27.2)																	
Divorced/Widowed	5 (6.9)	0 (0)	0 (33.3)		18 (8.3)	0 (0)	0 (33.3)		5 (5.6)	0 (0)	1 (33.3)	0	18 (7.8)	1 (6.2)	2 (7.1)	3 (5.8)	4 (7.0)	6 (10.0)	8 (7.0)																	
Yes	55 (63.2)	5 (83.3)	2 (66.7)	.607	146 (67.3)	5 (71.4)	5 (71.4)	.950	55 (61.8)	4 (100)	3 (100)	0	156 (68.4)	11 (68.8)	18 (64.3)	18 (35.7)	39 (68.4)	41 (68.3)	76 (66.7)																	
No	32 (36.8)	1 (16.7)	1 (33.3)		71 (32.7)	2 (28.6)	2 (28.6)		34 (38.2)	0 (0)	0 (38.2)	0	75 (32.5)	5 (31.2)	10 (35.7)	18 (35.7)	18 (31.6)	19 (31.7)	38 (33.3)																	
Primary school	41 (47.1)	1 (16.7)	1 (33.3)	.609	125 (57.6)	5 (67.3)	6 (85.7)	.605	39 (43.8)	4 (100)	0 (33.3)	0	136 (58.8)	6 (37.5)	11 (39.3)	26 (50.0)	31 (54.2)	32 (54.2)	73 (64.6)												.285					
Secondary school	44 (50.6)	4 (83.3)	2 (66.7)		90 (41.5)	2 (28.6)	1 (14.3)		49 (55.1)	0 (0)	2 (66.7)	0	93 (40.3)	9 (56.2)	16 (57.1)	26 (50.0)	26 (45.1)	27 (45.8)	40 (35.4)																	
Combined	2 (2.3)	0 (0)	0 (0)		2 (0.9)	0 (0)	0 (0)		1 (1.1)	0 (0)	1 (33.3)	0	2 (0.9)	1 (6.2)	1 (3.6)	0 (0)	2 (0.7)	0 (0)	0 (0)																	
<10	44 (50.6)	1 (16.7)	2 (66.7)	.125	61 (28.1)	3 (42.9)	2 (28.6)	.860	45 (50.6)	1 (25.0)	1 (33.3)	0	66 (28.6)	8 (50.0)	13 (46.4)	26 (50.0)	15 (26.3)	17 (28.3)	34 (29.8)												.939					
11-20	28 (32.2)	5 (83.3)	1 (33.3)		85 (39.2)	3 (42.9)	3 (42.9)		31 (34.8)	2 (50.0)	1 (33.3)	0	91 (39.4)	5 (31.2)	10 (35.7)	19 (36.5)	25 (43.9)	24 (40.0)	42 (36.8)																	
>20	15 (17.2)	0 (0)	0 (33.3)		71 (32.7)	1 (14.3)	2 (28.6)		13 (14.6)	1 (25.0)	1 (33.3)	0	74 (32.0)	3 (18.8)	5 (17.9)	7 (13.5)	17 (29.8)	19 (31.7)	38 (33.3)																	
Never	58 (66.7)	1 (16.7)	1 (33.3)	.000	153 (70.5)	3 (42.9)	5 (71.4)	.573	58 (65.2)	1 (25.0)	1 (33.3)	0	161 (69.7)	9 (56.2)	14 (50.0)	37 (71.2)	36 (63.2)	42 (70.0)	83 (72.8)												.372					
<10 h	27 (31.0)	5 (83.3)	0 (0)		61 (28.1)	4 (57.1)	5 (71.4)		28 (31.5)	2 (50.0)	0 (66.7)	0	67 (29.0)	6 (37.5)	13 (46.4)	13 (25.0)	19 (33.3)	18 (30.0)	30 (26.8)																	
>10 h	2 (2.3)	0 (0)	0 (66.7)		3 (1.4)	0 (0)	0 (0)		3 (3.4)	1 (25.0)	0 (0)	0	5 (2.2)	1 (6.3)	1 (3.6)	2 (3.8)	2 (3.5)	1 (1.7)	1 (0.9)																	

Group 1 – respondents taking the survey at the beginning of the school year 2018/19; Group 2 – respondents taking the survey at the end of the school year 2018/19

Table 5 Occupational burnout scores by dimension and sociodemographic and job characteristics

Sociodemographic and job characteristics	Emotional exhaustion			Depersonalisation			Personal accomplishment					
	Group 1		Group 2	Group 1		Group 2	Group 1		Group 2			
	Median (min-max)	P	Median (min-max)	P	Median (min-max)	P	Median (min-max)	P	Median (min-max)			
Gender												
Female	5.00 (0-34)	.922	11.00 (0-47)	.705	0.00 (0-14)	.845	1.0 (0-20)	.076	39.00 (12-48)	.648	40.00 (7-48)	.020
Male	7.00 (0-32)		9.0 (0-54)		1.0 (0-40)		1.0 (0-30)		40.00 (0-48)		36.00 (0-48)	
Age (years)												
<35	7.00 (0-20)	.461	9.00 (0-43)	.664	0.00 (0-40)	.144	1.00 (0-15)	.671	38.00 (0-48)	.902	37.00 (12-47)	.309
36-45	6.00 (0-34)		10.00 (0-54)		1.00 (0-14)		1.00 (0-30)		40.00 (20-48)		36.50 (0-48)	
46-55	8.00 (0-20)		12.00 (0-47)		1.00 (0-14)		1.00 (0-20)		41.00 (25-47)		39.50 (13-48)	
>56	5.00 (0-14)				0.0 (0-4)				34.00 (12-47)			
Marital status												
Married/Cohabiting	5.00 (0-34)	.467	11.00 (0-54)	.407	0.00 (0-6)	.148	1.0 (0-30)	.599	39.00 (26-48)	.575	39.00 (0-48)	.788
Single	7.00 (0-32)		9.50 (0-43)		1.00 (0-40)		1.00 (0-21)		40.00 (0-48)		38.00 (12-48)	
Divorced/Widowed	7.00 (0-14)		9.50 (0-26)		1.00 (0-14)		2.00 (0-12)		37.50 (30-42)		37.00 (17-48)	
Children												
Yes	6.50 (0-32)	.377	11.00 (0-54)	.402	1.00 (0-40)	.010	1.00 (0-30)	.360	39.00 (0-48)	.339	38.00 (0-48)	.893
No	5.00 (0-34)		10.00 (0-43)		0.00 (0-6)		1.00 (0-21)		40.00 (26-48)		39.00 (12-48)	
Workplace												
Primary school	5.00 (0-34)	.014	10.00 (0-54)	.386	0.00 (0-10)	.602	1.00 (0-30)	.028	41.00 (23-48)	.122	40.50 (0-48)	.149
Secondary school	8.00 (0-32)		10.00 (0-44)		1.00 (0-14)		2.00 (0-19)		39.00 (12-48)		37.00 (12-48)	
Combined	2.50 (2-3)		20.00 (19-21)		20.00 (0-40)		3.00 (1-5)		18.50 (0-37)		37.00 (34-40)	
Years of work												
<10	8.00 (0-34)	.049	8.00 (0-43)	.511	1.00 (0-40)	.908	1.00 (0-11)	.960	39.00 (0-4487)	.526	39.50 (0-47)	.539
11-20	7.50 (0-324)		10.00 (0-54)		1.00 (0-30)		1.00 (0-30)		40.50 (20-48)		37.00 (5-48)	
>20	5.00 (0-14)		9.00 (0-47)		1.00 (0-16)		0.00 (0-16)		37.00 (12-47)		39.00 (13-48)	
Overtime hours per week												
Never	5.00 (0-27)	.012	9.00 (0-54)	.010	0.00 (0-40)	.483	1.00 (0-30)	.016	41.00 (0-48)	.186	39.00 (0-48)	.266
<10 h	7.50 (0-24)		17.00 (0-47)		1.00 (0-14)		2.00 (0-20)		37.50 (20-48)		37.00 (7-48)	
>10 h	21.50 (9-34)		7.00 (0-21)		7.00 (0-8)		0.00 (0-17)		25.00 (28-41)		38.00 (21-42)	

Group 1 – respondents taking the survey at the beginning of the school year 2018/19; Group 2 – respondents taking the survey at the end of the school year 2018/19

and validated instrument, most often used to assess occupational burnout.

Although the distribution of occupational burnout classifications (low, moderate, high) was not different between the school teachers studied at the beginning and the end of the school year, our results have shown higher scores of emotional exhaustion and depersonalisation and lower levels of personal accomplishment at the end of the school year. These findings invite further research of occupational burnout seasonality in schoolteachers, preferably by following up cohorts which would be controlled for sociodemographic and work-related variables.

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Conflicts of interest

None to report.

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Ima li sindrom izgaranja nastavnika na poslu sezonski karakter?

U ovom je presječnom istraživanju uspoređena prevalencija sindroma izgaranja na poslu u dvjema skupinama nastavnika na području Bijeljine u Bosni i Hercegovini te je procijenjen njegov sezonski karakter. Sindrom izgaranja na poslu mjereno je na početku (skupina I.) i na kraju školske 2018./2019. godine (skupina II.). Za potrebe ovoga istraživanja korištena je srpska inačica Maslachina upitnika izgaranja na poslu za stručnjake pomagačkih zanimanja (izv. *Maslach Burnout Inventory Survey for Workers in Human Services*, krat. *MBI-HSS*). Upitnik je uključivao i standardne sociodemografske podatke, kao i podatke o radnomu mjestu (rad u osnovnoj i/ili srednjoj školi, dužina radnog staža i prekovremeni rad). Prevalencija emocionalne iscrpljenosti i depersonalizacije bila je niska u objema skupinama ispitanika na početku mjerenja, ali se na kraju školske godine povećala. Utvrđena je statistički značajna razlika između emocionalne iscrpljenosti i prekovremenoga rada, kao i između depersonalizacije i rada u srednjim školama ($p < 0,05$). Rezultati istraživanja upućuju na potrebu daljnjeg ispitivanja sezonskoga karaktera sindroma izgaranja na nastavničkom poslu, po mogućnosti kohortnim istraživanjem kojim bi se pratile sociodemografske i radne varijable ispitanika.

KLJUČNE RIJEČI: depersonalizacija; emocionalna iscrpljenost; kronični stres; prosvjetni radnici; osnovne škole; problemi povezani s radom; srednje škole