

Emotional Intelligence and Burnout of Teachers of Higher Education Institutions

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Abstract: Emotional intelligence is an important resource for overcoming professional stress in members of socioeconomic professions. The research objective is to determine the role of its components in the development of emotional burnout. A natural experiment was conducted, which determined the manifestations of emotional burnout of 56 university teachers at the end of the academic year. The author used the questionnaire. Two experimental groups were identified in the general sample: teachers with burnout and those resistant to burnout (16 and 30 people, respectively). At the end of the academic year, signs of burnout were detected in one-third of university teachers. The leading symptoms are emotional exhaustion and depersonalisation, with no reduction in professional achievement. The dynamics of emotional life during the annual professional cycle are shown. The integrated indicator of emotional intelligence (EI) remains at the same level, but there are structural changes in the components of intrapersonal intelligence. At the end of the year, teachers' attention to their emotional states, work roles, and communication increase significantly. At the same time, there is a decrease in the ability to manage their own emotions. Resistance to burnout is accompanied by a high ability to realise and control their own emotions with a relatively vague focus on the emotional states of others. It was concluded that individual components of EI (intrapersonal and interpersonal, understanding and management) have different effects on burnout symptoms.

Keywords: Professional burnout, emotional exhaustion, depersonalisation, emotional competence, emotion management.

INTRODUCTION

Emotional intelligence (EI) – a new concept that emerged in the 90s of the 20th century as a counterbalance to traditional ideas about the factors of human success and well-being [1-8]. It covers a wide range of adaptive skills that predict prosocial behaviour: the ability to perceive, identify and analyse one's feelings and emotions, as well as understand other people's emotions, adequately express them, manage them consciously and use emotional information to control one's behaviour and activities, improving interpersonal relationships, resolving conflicts, preventing stress, personal growth, etc. The idea of the possibility of intellectual operations with emotions was recognised in academic circles, gained

wide public resonance and popularity among readers [6-15].

Among the components of mental health caused by EI, the authors are interested in emotional burnout – one of the most common problems, which still has no solution despite many years of efforts of organisational and practical psychologists. Burnout syndrome is characterised by a state of emotional exhaustion, cynicism, loss of motivation, decreased efficiency, and depreciation of their achievements, which occurs due to the accumulation of chronic occupational stress [16-21]. In English-language publications, the term *emotional labour* is often used, which refers to professional requirements that alienate a person from their feelings and change the nature of emotional regulation [11].

The concepts of "emotional intelligence" and "emotional burnout" belong to the same phenomenological field and accompany the

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performance of the same activities. The connection between them seems quite obvious. Numerous studies in different organisational cultures and methodologies have obtained negative correlations between EI and burnout [12-14]. However, there is a lack of research to explain the mechanisms underlying this relationship. It is known that a high level of EI increases the ability of teachers to effectively interact with students and proactively overcome professional difficulties [15]. Reduces the risk of burnout and secondary trauma to social workers by avoiding unhealthy coping strategies [16]. Chinese colleagues write about the mediating role of "positive work affects" in civil servants [17]. J. Cheng and T. McCarthy [18] draw attention to the positive aspects of negative experiences in the workplace – situational anxiety can stimulate the effectiveness of work tasks. The authors present emotional exhaustion, cognitive intervention, and self-regulation as separate contrasting processes that determine the relationship between negative emotions and work efficiency.

Emotional intelligence is usually associated with positive psychological outcomes, but there is evidence to demonstrate the complexity of this relationship. Experiments on performing emotionally difficult tasks in the workplace have shown that the intrapersonal components of EI reduce the subjective experience of stress but are accompanied by physiological costs [22]. There is also little information on the interaction and role of intrapersonal and interpersonal components of EI. Recent studies [23-28] have shown that a high level of interpersonal emotional competence reduces the protective functions of EI and provokes parental burnout.

Thus, in scientific data on the impact of emotional intelligence on burnout, many unresolved contradictions relate to the role of individual components of this complex phenomenon. Clarification of the nature of the relationship between EI and burnout requires the organisation of experimental studies. The purpose of this work is to clarify the importance of emotional intelligence as a resource for overcoming professional stress in representatives of socioeconomic professions, to clarify the role of its components in the development of emotional burnout.

MATERIALS AND METHODS

To find out the cause-and-effect relationship, the authors resorted to a natural experiment, observing the manifestations of emotional burnout of teachers at the beginning and end of the school year. Due to the

cyclical nature of this work, the authors had the opportunity to observe the natural dynamics of these features. The first diagnostic measurement took place in autumn 2019 in the first week of the school year, the second – in May 2020. The sample consisted of 56 teachers of various specialities who worked in three universities in Zaporizhzhia. Participation was voluntary, participants were informed about the purpose and methods of the study. To exclude the influence of gender and occupational factors, women at the stage of secondary professionalisation (according to E.F. Zeer) were selected to participate in the study. The age of the respondents was 34-42 years, the experience of pedagogical work was from 11 to 20 years (average age 37.6; average experience 15.5).

Two methods were used to diagnose the emotional state of teachers. The Professional Burnout Questionnaire – a Russian-language version of the Maslach burnout inventory adapted by N.Ye. Vodopyanova and O.S. Starchenkova in 2003. This tool measures three classic symptoms that correspond to the stages of burnout: emotional exhaustion, depersonalisation, and reduction of professional achievements. K. Izard's Scale of Differential Emotions was also used, which allowed assessing the expression of ten basic emotions that form the basis of a person's emotional life: interest, joy, surprise, grief, anger, contempt, disgust, fear, shame and guilt. To evaluate emotional intelligence, the questionnaire Emln by D.V. Lyusin was used. The author considers EI to understand feelings and manage them, including intrapersonal and interpersonal aspects [24]. The five primary scales, which reflect the ability to understand and interpret, express, and manage one's own and others' emotions, can be combined into five secondary integral indicators [27-34].

After data collection, descriptive statistics in the sample were calculated. Analysis of the Kolmogorov-Smirnov criterion confirmed the normality of the distribution, which allowed the use of parametric criteria for further processing. Diagnostic measurements at the beginning and end of the year were compared using a paired Student's t-test. In addition, according to the results of the diagnosis of burnout and emotional states in the general sample, two experimental groups were identified: burnout and burnout-resistant teachers (16 and 30 people). A comparative analysis of EI values was performed using a student's t-test for independent samples. The calculations were performed in the SPSS Statistic program.

Table 1: Average Indicators of Burnout Symptoms in Teachers of Higher Education Institutions at the Beginning and End of the School Year (M ± SD, 56 People)

Scales of the questionnaire "Professional burnout"	The first test (September of 2019)	The second test (May of 2020)	Comparative analysis	
			t emp.	p (Val.)
Emotional exhaustion	20.71±7.54	23.36±8.14	-2.18	0.031
Depersonalisation	9.51±4.33	11.55±5.26	-2.62	0.010
Reduction of professional achievements	34.06±6.52	34.20±6.67	-0.66	0.509

Note: The "Reduction of professional achievements" scale is inverse and is interpreted as assessing their professional success.

RESULTS

Diagnostic cross-sections at the beginning and end of the school year showed a significant increase in symptoms of burnout in teachers. Statistically significant differences relate to emotional exhaustion and depersonalisation indicators, while the perception of their professional achievements remains at the same level (Table 1).

It should be noted that among the interviewed teachers at the beginning of the year, four people were identified with pronounced signs of emotional exhaustion and depersonalisation. At the end of the year, their number quadrupled. 28.6% of respondents indicated a pronounced experience of psycho-emotional exhaustion: decreased tone, loss of positive feelings, affective lability, a feeling that they work too much, and dissatisfaction with life in general. In 17.9% of teachers, this was accompanied by symptoms of depersonalisation: cynicism and the formation of destructive relationships with others. At the same time, there was no reduction in professional achievements – respondents highly value their competence and are satisfied with the profession. The obtained results correspond to the general picture of pedagogical workers' burnout described in previous research [25, 26]. The accumulation of stress can explain some

increases in averages due to the difficult epidemiological situation in the spring of 2020, accompanied by the urgent introduction of new forms of education.

Differential assessment of basic emotions using the scales of K. Izard allowed clarifying the dynamics of emotional life during the annual cycle of professional activity. The profile of basic emotions in Figure 1 reflects the effective colour of the current activities of teachers.

In general, positive emotions prevailed in teachers' lives and professional activity, but some changes occurred during the year. The feeling of joy significantly decreased ($t = 3.33$ at $p = 0.001$); at the same time, the severity of fear ($t = -2.38$, $p = 0.019$), surprise ($t = -1.95$, $p = 0.053$) and anger ($t = 1.75$, $p = 0.092$) increased. Integral indices of emotions were calculated as the arithmetic mean of the scales. Comparative analysis showed a statistically significant decrease in positive emotions and an increase in the severity of anxiety and depression during the year (but the variation of individual data is very large) (Table 2).

Identified complexes of emotions mediate the subjective attitude of teachers to the existing life and professional situation. These results were obtained for

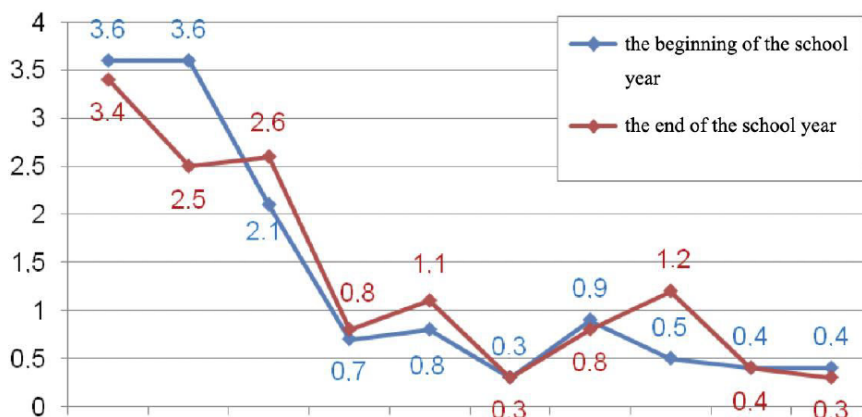


Figure 1: Average indicators of K. Izard's Scales of Differential Emotions in the sample of freelance teachers (56 people).

Table 2: Average Indicators of Emotional Reflection of the Current Situation in Teachers of Free Economic Zones at The Beginning and End of the School Year (M ± SD, 56 People)

Scales of differential emotions	The first test (September of 2019)	The second test (May of 2020)	Comparative analysis	
			t emp.	P (Val.)
Index of positive emotions (interest, joy, surprise)	3.12±1.56	2.84±1.67	2.32	0.021
Index of acute negative emotions (grief, anger, disgust, contempt)	0.66±0.22	0.75±0.28	-0.20	0.837
Index of anxious and depressive emotions (fear, shame, guilt)	0.43±0.32	0.63±0.44	-2.01	0.052

the first time and allow expanding and specifying the idea of experiencing emotional burnout in teachers of free speech. But the analysis of integrated indices somewhat reduced the differential properties of the obtained indicators, so further, the values of the primary scales will be analysed. Thus, during the school year (one professional cycle), teachers burn out emotionally, which is evidence of the stress of the profession. If to consider burnout in terms of stress adaptation syndrome, it is necessary to consider the stage of mobilisation and depletion of resources [35-45]. At the stage of mobilisation, professional stress should actualise (form and develop) competencies to regulate their own emotions, which is a component of emotional intelligence.

According to the results of the diagnosis of emotional intelligence, a complex and ambiguous picture was obtained. During the school year, some components of EI show a tendency to increase, some decrease or remain unchanged. As a result, the integrated EI remains at about the same level and has

no statistically significant differences in the two diagnostic sections (Table 3).

A survey showed that teachers high rate their own emotional and cognitive abilities (low EI scores were not found in the sample). The interpersonal component prevails: understanding and controlling other people's emotions. Teachers are tuned to cognitive-emotional cognition, appreciate their ability to understand a person's emotional state based on external manifestations (facial expressions, gestures, voice, etc.), consider themselves empathetic and sensitive to internal states, able to evoke the right emotions in other people, reduce the intensity of unwanted experiences. This result is quite expected, given that emotion management is one of the main professional tasks of pedagogical work. During the year, the severity of this component does not change significantly. At the end of the year, teachers' attention to their emotional states, their impact on work and communication increased significantly ($p = 0.041$). However, there was some decrease in the ability to control their emotions, but at

Table 3: Average Indicators of Emotional Intelligence in Teachers of Free Economic Education at the Beginning and End of the School Year (M ± SD, 56 People)

EI scales	The first test (September of 2019)	The second test (May of 2020)	Comparative analysis	
			t emp.	p (Val.)
Understanding other people's emotions	25.94±3.54	25.88±3.57	0.06	0.951
Controlling other people's emotions	23.36±3.75	22.97±4.03	0.72	0.470
Understanding one's own emotions	20.55±4.04	22.13±4.74	-2.07	0.041
Controlling one's own emotions	14.32±3.06	13.07±3.41	1.79	0.076
Expression control	12.19±3.28	11.77±3.56	1.08	0.281
<i>Integral scales:</i>				
Intrapersonal EI	47.06±6.64	46.97±6.83	0.46	0.642
Interpersonal EI	49.30±6.71	48.85±6.88	0.64	0.518
Ability to understand one's own and others' emotions	46.49±6.65	48.01±6.63	-1.21	0.230
Ability to control their own and others' emotions	49.87±6.73	47.81±7.06	1.69	0.094
Total EI	96.36±11.96	95.82±12.05	0.95	0.337

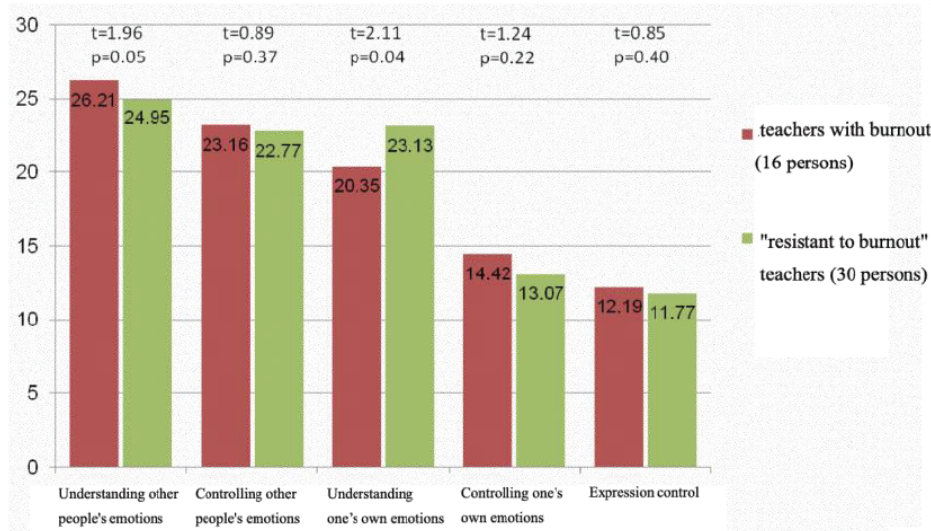


Figure 2: Average indicators of emotional intelligence in teachers of higher education institutions, prone and resistant to emotional burnout.

the tendency level ($p = 0.076$). The obtained results indicate that EI is a heterogeneous mental phenomenon, which complicates the study of its impact on professional adaptation. In the context of burnout symptoms, integral indicators are uninformative; it is important to change the primary components of dealing with their own emotions.

According to the results of burnout testing and differentiation of basic emotional states at the end of the school year, two experimental groups were identified in the sample of teachers: burnout (16 people) and burnout resistance (30 people). A comparative analysis of EI indicators in the groups showed that resistance to burnout is accompanied by a high ability to realise and control their own emotions with a relatively vague focus on the emotional states of others (Figure 2).

DISCUSSION

EI researchers emphasise the important role of the affective sphere in thinking and decision-making, proclaiming the possibility of rapid development of emotional competencies at any age, proposed theoretical models [16]. There are two main theoretical and methodological approaches and appropriate diagnostic tools for studying this phenomenon [17-19]. The first is cognitive [1], which focuses on intellectual operations with emotional stimuli; in this case, the ability to correctly recognise emotions, respond adequately in emotionally charged situations, etc., are studied. The second – personal consider EI as a set of traits and properties that determine adaptation but are

not included in traditional intelligence tests. Reflection on one's own emotional world and behaviour allows the use of self-report questionnaires to assess confidence in one's emotional competence [2, 3, 20-23].

Today, the ARA catalogue has more than 6000 publications that reveal the features of cognitive-emotional processes in different clinical, age, professional and ethnic groups. Convincing evidence of the relationship between EI and mental and physical health [4], its contribution to the quality of interpersonal relationships [1, 24, 25] and the adaptive functioning of an individual [5, 44-55]. The level of EI determines the dynamics and complexity of emotional life [6, 27-29]; correlates with a person's ability to realise their talents and skills, playing an even more important role in self-realisation than cognitive abilities [2]. The works of Ukrainian scientists consider the stress-protective and adaptive functions of emotional intelligence [7, 30, 49], its ability to counteract various types of stress: information [8], examination [9], professional [10]. Emotional intelligence promotes productivity, satisfaction, personal and professional achievement, especially in activities that involve frequent interpersonal contact and emotional stress [55-61].

Among the various aspects of EI, regulating emotions is seen as the most promising psychological resource. A study of emotionally intensive labour strategies proved the ability to block the loss of emotional resources and prevent psycho-emotional exhaustion. Cognitive regulation of emotions allows for positive personal growth after trauma [19, 20]. Most of the described developments aim to study correlations,

which does not provide information about causal relationships, but only registers the common variability of characteristics [60-70]. Thus, this relationship can be interpreted on the other hand – a decrease in EI may result from reduced performance and cognitive impairment due to burnout. For example, a study of Ukrainian police found a significant reduction in all components of EI in managers with more than eight years of experience: they are not clearly aware of their feelings, have difficulty managing their emotions and understanding the feelings of others [21, 56, 71-73]. The authors interpret this fact as a sign of emotional burnout and professional deformation.

The results conclude that certain components of EI play the opposite role in the development of burnout symptoms. In teachers who are resistant to burnout, understanding their own and other people's emotions is balanced. In contrast, in teachers with burnout, the focus on other people's feelings is dominated by the ability to understand and analyse their own emotions [74-79].

The regulatory component of EI is significantly higher in the group of teachers prone to burnout. This may indicate the actualisation of the relevant abilities in the burnout situation (a resource for psychological overcoming). However, there is scientific evidence that emotional self-control increases mental stress, and therefore may increase the symptoms of burnout. According to E. Franchow and Y. Suchy [27], suppression of expression in everyday life leads to exhaustion, significantly impairs performance and impairs cognitive function. Most likely, the control of one's own emotions acts as a resource in the first stages of professional stress (resource mobilisation) but later leads to psycho-emotional exhaustion [80-82].

The obtained results confirm the previous observations of Western colleagues: intrapersonal and interpersonal components of EI in the context of burnout do not work cumulatively. A high level of interpersonal competencies reduces the protective functions of the intrapersonal components of EI [23, 41, 83-85]. In addition, the authors have shown that the components of understanding and managing emotions also have a multifaceted effect on the development of burnout symptoms.

CONCLUSIONS

When interpreting the results, it should be borne in mind that professional activity significantly affects EI formation. During the school year (one professional

cycle), freelance teachers are exposed to the negative impact of burnout, manifested in emotional exhaustion, depersonalisation, decreased feelings of joy, and increased severity of anxiety and depressive reactions. Structural changes in emotional intelligence accompany the increase in the symptoms of emotional burnout: increased attention to control their emotional reactions and reduced ability to understand and recognise internal signals. In teachers who are resistant to burnout, the understanding of their own and others' emotions is balanced, while the teachers with burnout are dominated by a focus on the feelings of others. In addition, organisational factors determine the deployment of burnout symptoms and resources to overcome them. Since emotional intelligence was measured only as a personality trait, this imposes certain restrictions on the interpretation of the results and, at the same time, opens the prospects for further research – especially the necessity to develop quality diagnostic tools.

The survey found that teachers rate high their own emotional and cognitive abilities, which are dominated by understanding and managing other people's emotions. Teachers' professional activity is aimed at cognitive-emotional cognition, understanding a person's emotional state based on external manifestations, challenging other people to the required emotions, and reducing the intensity of unwanted experiences. But in a large number of teachers, reduced ability to control their own emotions as a result of burnout was noticed. However, it was found that resistance to burnout is accompanied by a high ability to realise and control their own emotions with a relatively vague focus on the emotional states of others.

Thus, emotional intelligence (namely – its intrapersonal components) are a reliable predictor of overcoming occupational stress and a psychological resource that helps reduce the symptoms of burnout. But this resource is exhaustive, and it requires high psychophysiological costs. This determines the relevance of appropriate training programs for representatives of emotionally difficult professions.

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SUPPLEMENTAL MATERIALS

The supplemental materials can be downloaded from the journal website along with the article.

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