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Emotional Intelligence as a Factor in Preventing Professional Burnout among University Faculty

Abstract

The aim of this study was to identify the relationship between the level of emotional intelligence and signs of professional burnout among teachers at higher education institutions in Kazakhstan. Thirty-seven teachers from six universities in the country participated in the study. The empirical part included the use of N. Hall's emotional intelligence test (α = 0.935) and the MBI professional burnout questionnaire by K. Maslach and S. Jackson (α = 0.850). Statistical data processing was performed using Jamovi software and included descriptive statistics, t-tests for independent samples, and correlation analysis. The results showed that components of emotional intelligence, especially empathy and self-motivation, are negatively correlated with levels of psycho-emotional exhaustion and depersonalization. The data obtained confirm the high reliability of the methods used and emphasize the importance of developing emotional intelligence as a resource for preventing professional burnout among teachers.

Keywords: emotional intelligence, professional burnout, university teachers, empathy, correlation analysis

Introduction

In today's educational environment, professional burnout among higher education teachers is one of the most pressing issues. This phenomenon manifests itself in emotional exhaustion, depersonalization, and a decline in the sense of personal achievement. Professional burnout negatively affects not only the quality and effectiveness of teaching and the psychophysiological state of teachers, but also the level of student achievement, their motivation, the quality of interaction, and, in general, the educational process.

The results of international studies show that the emotional state of the teacher directly affects students. For example, a study conducted in Canada found that in groups where teachers experienced high levels of emotional exhaustion, students had elevated levels of cortisol, the stress hormone (Alexandra Sifferlin, 2016). This confirms that stress and burnout among teachers can have a negative impact on students.

However, not all teachers are equally susceptible to burnout. Some of them demonstrate high efficiency and quality of work even under conditions of intense stress. One factor that explains this difference may be the level of emotional intelligence. Emotional intelligence is a person's ability to understand, recognize, manage, and effectively use both their own emotions and the emotions of those around them.

Recent studies confirm that a high level of emotional intelligence is associated with lower levels of professional burnout and contributes to the psychological well-being of teachers. For example, a study conducted in Turkey in 2023 revealed a positive correlation between emotional intelligence, teaching effectiveness, and psychological well-being, and found that high levels of emotional intelligence help reduce the manifestations of burnout (Hüseyin Kotaman & Derya Evran, 2023).

Thus, studying the relationship between emotional intelligence and professional burnout among university teachers in the Kazakh context is a relevant scientific task. The results of such a study can contribute to the development of measures to prevent burnout through the development of

emotional intelligence, which, in turn, can improve the quality of education.

The purpose of the study is to determine the relationship between the level of professional burnout and emotional intelligence among university teachers in Kazakhstan.

Research questions:

1. What are the levels of development of various components of emotional intelligence and the severity of signs of professional burnout among university teachers in Kazakhstan?

2. Are there statistically significant differences in emotional intelligence and professional burnout indicators between men and women?

3. What is the relationship between the components of emotional intelligence and indicators of professional burnout among teachers?

Emotional intelligence (EI) is interpreted as an individual's ability to understand and distinguish their own emotions and feelings, as well as the emotions of others, to control them and use the information obtained to manage the process of thinking and behavior (Salovey & Mayer, 1990). The teaching profession is generally seen as a field of activity based on compassion, empathy, and high personal involvement. Despite the presence of significant internal (self-fulfillment, inner satisfaction) and external (public recognition, professional prestige) rewards, the work of a teacher is associated with many stressors that can lead to the development of professional burnout.

Literature review

Emotional intelligence (EI) is defined as an individual's ability to understand and distinguish their own emotions and feelings, as well as the emotions of others, to control them, and to use the information obtained to manage their thinking and behavior (Salovey & Mayer, 1990). The teaching profession is generally seen as a field of activity based on compassion, empathy, and high personal involvement. Despite the presence of significant internal (self-fulfillment, inner satisfaction) and external (public recognition, professional prestige) rewards, the work of a teacher is associated with many stressors that can lead to the development of professional burnout.

A number of studies in recent decades point to a steady increase in stress levels among teachers, which is due to both an increase in workload and difficulties in interpersonal relationships in the educational environment (Borg, 1990; Worrall & May, 1989). Among the most common causes of professional stress in teaching are student discipline problems, low academic motivation, time constraints, role conflict, lack of resources, and pressure from administrators and parents (Milstein & Farkas, 1988). At the same time, the reaction to stress factors is individual: some teachers limit themselves to manifestations of irritability and fatigue, while others experience pronounced psychosomatic and depressive symptoms (Kyriacou & Pratt, 1985).

Burnout, first described by Freudenberger in 1974 (Freudenberger, 1974), is considered a chronic exhaustion manifested in emotional fatigue, depersonalization, and a decreased sense of personal accomplishment (Maslach & Jackson, 1981; Maslach, Jackson & Leiter, 1996). It negatively affects not only the quality of work, but also the physical and mental health of the teacher, as well as the effectiveness of the educational process as a whole (Maslach & Leiter, 1997; Klusmann et al., 2016; Madigan & Kim, 2021). The consequences include decreased productivity, loss of interest in work, deterioration of interaction with students, professional isolation, and an increased likelihood of leaving the profession (Vandenberghe & Huberman, 1999).

Numerous studies confirm that susceptibility to burnout depends on a combination of factors: gender, age, seniority, level of education, marital status, individual personality traits, and perception of stress (Schaufeli, 2003; Ozkanal, 2010). However, it is particularly interesting to study why, under the same conditions, some teachers demonstrate high resistance to stress, while others quickly lose their emotional resources. One of the key explanations is the level of emotional intelligence development.

Emotional intelligence, as defined by Mayer and Salovey (Mayer&Salovey, 1997), includes four key skills: perceiving and identifying emotions, using emotions to support thinking, understanding emotional processes, and managing emotions. Developed EI contributes to effective interaction, constructive conflict resolution, reduced impact of stressors, and maintenance of mental

health (Ogińska-Bulik, 2005; Gohm et al., 2005). Studies in different countries show that high EI is associated with low levels of burnout symptoms and increased job satisfaction (Alavinia, 2009; Hüseyin Kotaman & Derya Evran, 2023).

At the same time, despite the growing interest in the relationship between EI and burnout, the number of studies focusing on higher education teachers remains limited (Chang, 2009). Few studies conducted in a university setting have identified specific factors that influence stress and burnout. For example, a large study in Croatia (N = 1,168) showed that the main stressors for university teachers are high workload, material and technical conditions of work, relationships with colleagues and students, as well as organizational aspects of their work. At the same time, women reported higher levels of stress than men, and teachers with higher academic status noted greater difficulties related to the organization of the work process.

Thus, the analysis of the literature indicates the importance of studying the role of emotional intelligence in the prevention of professional burnout among university teachers. This factor can act as a resource to mitigate the negative effects of stress, improve psychological well-being, and enhance the quality of educational activities. Given the lack of research on this topic in the Kazakhstani context, conducting an empirical study aimed at identifying the relationship between EI and burnout among university teachers appears to be relevant and practically significant.

Materials and methods

The study is correlational and comparative in nature and aims to examine the relationship between components of emotional intelligence and signs of professional burnout among university teachers. Gender differences in key indicators were also analyzed.

The study involved 37 teachers from six universities in Kazakhstan: L.N. Gumilyov Eurasian National University, SDU (Suleyman Demirel University), Maqsut Narikbayev University, Turan-Astana University, Narkhoz University, and Al-Farabi Kazakh National University. The age composition of the sample was as follows: under 25 years old – 4 people (10.8%), 26 to 35 years old – 9 people (24.3%), 36 to 45 years old – 12 people (32.4%), 46 to 55 years old – 10 people (27.0%), and 56 to 65 years old – 2 people (5.4%).

To achieve the research objective and obtain reliable data on the relationship between emotional intelligence and professional burnout among university teachers, the following diagnostic methods were used: emotional intelligence test (N. Hall), professional burnout questionnaire (MBI, Maslach Burnout Inventory).

Emotional Intelligence Test (N. Hall) – the technique includes 30 statements rated on a 6-point scale from –3 to +3. It covers five components: emotional awareness, managing one's emotions, self-motivation, empathy, and recognizing the emotions of others. Cronbach's alpha reliability: $\alpha = 0.935$.

The Maslach Burnout Inventory (MBI) consists of 22 statements distributed across three scales: psycho-emotional exhaustion, depersonalization, and personal accomplishment reduction. Responses are rated on a frequency scale (from “never” to “every day”). Scale reliability: $\alpha = 0.850$.

The study was conducted online using an anonymous questionnaire that included both methods. Participation was voluntary. The instruments were presented in Kazakh and Russian.

Data processing and statistical analysis were performed in Jamovi (version 2.6, Russian interface) using descriptive statistics (mean, median, standard deviation, minimum, and maximum), scale reliability analysis with Cronbach's alpha coefficient calculation, correlation analysis (Pearson correlation matrix), and Student's t-test for independent samples to identify gender differences.

Results

In the first stage, descriptive statistics were analyzed for all scales reflecting the levels of emotional intelligence and professional burnout among teachers. The average values for the components of emotional intelligence range from –3.95 (empathy) to –0.08 (emotional awareness), which indicates that these qualities are not sufficiently pronounced in the general sample. The greatest variation is observed on the self-motivation scale (SD = 7.92), and the smallest on empathy

(SD = 6.79).

The average level of psycho-emotional exhaustion was 31.03 points, with a possible range from 10 to 49, which corresponds to a moderate level of expression. Depersonalization averaged 16.27 points, and reduction in personal achievements averaged 26.54 points, which also indicates moderate manifestations of professional burnout among teachers (Table 1).

Table 1

Descriptive statistics for emotional intelligence and professional burnout scales (n = 37)

	Mean	Median	SD	Min	Max
Emotional Awareness	-0.0811	0	7.16	-15	15
Self-Emotion Management	-1.8108	-2	7.25	-12	13
Self-Motivation	-0.6757	0	7.92	-14	15
Empathy	-3.9459	-3	6.79	-14	12
Recognition of Others' Emotions	-0.1622	0	6.88	-13	18
Psycho-Emotional Exhaustion	31.0270	33	9.78	10	49
Depersonalization	16.2703	18	6.05	4	25
Reduced Personal Accomplishment	26.5405	25	8.88	12	46

A comparative analysis by gender (t-test for independent samples) did not reveal any statistically significant differences between men (n = 10) and women (n = 27) on all scales. However, moderate differences were observed on the psycho-emotional exhaustion scale: men showed lower mean values (M = 26.30, SD = 7.29) than women (M = 32.78, SD = 10.11), with a p-value of 0.073, which is close to the level of statistical significance. The effect on this scale is assessed as moderate (Cohen's d = –0.68). For the other indicators, the differences ranged from weak to moderate, but all p-values exceeded the 0.05 threshold. The results of the analysis are presented in Table 2.

Table 2

Gender differences on emotional intelligence and professional burnout scales (t-test)

Variable	Men (n = 10), M ± SD	Women (n = 27), M ± SD	t (df = 35)	p	Cohen's d
Emotional Awareness	0.50 ± 6.24	–0.30 ± 7.57	0.30	0.769	0.11
Self-Emotion Management	0.20 ± 6.70	–2.56 ± 7.42	1.03	0.311	0.38
Self-Motivation	0.80 ± 7.89	–1.22 ± 8.02	0.68	0.498	0.25
Empathy	–2.00 ± 6.51	–4.67 ± 6.86	1.06	0.295	0.39
Recognition of Others' Emotions	–0.20 ± 5.37	–0.15 ± 7.43	0.02	0.984	–0.01
Psycho-Emotional Exhaustion	26.30 ± 7.29	32.78 ± 10.11	–1.85	0.073	–0.68

Depersonalization	14.10 ± 6.01	17.04 ± 5.98	–1.34	0.188	–0.50
Reduced Personal Accomplishment	28.20 ± 7.50	25.93 ± 9.40	0.69	0.497	0.25

Correlation analysis (Pearson's method) revealed strong correlations between the components of emotional intelligence, as well as their connection with symptoms of professional burnout. All components of emotional intelligence showed a strong positive correlation with each other, especially between empathy and self-motivation ($r = 0.824$, $p < 0.001$), as well as between empathy and emotion management ($r = 0.793$, $p < 0.001$), which indicates the internal consistency of the structure of emotional intelligence.

Indicators of professional burnout showed inverse correlations with emotional intelligence. The most pronounced negative correlations were observed between empathy and depersonalization ($r = –0.524$, $p < 0.001$), as well as between empathy and psycho-emotional exhaustion ($r = –0.473$, $p < 0.01$). This indicates the protective role of empathy in preventing burnout. It is interesting to note that the reduction in personal achievements correlates positively with the components of emotional intelligence, which may indicate the specificity of the perception of achievements in an academic environment. The complete correlation matrix is presented in Table 3.

Table 3

Correlation matrix between components of emotional intelligence and indicators of professional burnout (n = 37)

	1	2	3	4	5	6	7	8
1	—							
2	0.496**	—						
3	0.669***	0.711***	—					
4	0.648***	0.793***	0.824***	—				
5	0.765***	0.620***	0.809***	0.809***	—			
6	-0.169	-0.320	-0.347*	-0.473**	-0.245	—		
7	-0.271	-0.454**	-0.421**	-0.524***	-0.308	0.801***	—	
8	0.444**	0.292	0.474**	0.500**	0.455**	-0.60***	-0.60***	—

Note. *p < .05, **p < .01, ***p < .001
1 – Emotional awareness, 2 – Emotion regulation, 3 – Self-motivation, 4 – Empathy, 5 – Recognition of others' emotions, 6 – Psycho-emotional exhaustion, 7 – Depersonalization, 8 – Reduced personal accomplishment

Discussion

The results of this study confirmed the hypothesis that higher levels of emotional intelligence, particularly empathy, self-motivation, and the ability to manage one's emotions, are associated with less severe symptoms of professional burnout among university teachers. Descriptive statistics

(Table 1) showed that in the study sample, the levels of emotional intelligence components ranged from low to moderate on average, indicating potential for their targeted development. The empathy indicator was particularly low (M = –3.95, SD = 6.79), while the greatest variation in values was observed on the self-motivation scale (SD = 7.92), indicating heterogeneity of the sample in this aspect.

Correlation analysis (Table 3) revealed significant negative correlations between empathy and depersonalization ($r = –0.524$, $p < 0.001$), as well as between empathy and psycho-emotional exhaustion ($r = –0.473$, $p < 0.01$). These data are consistent with the findings of Oginska-Bulik (2005) and Kotaman & Evran (2023), who showed that empathy performs a protective function in conditions of chronic occupational stress. From the perspective of Maslach and Jackson's (1981) burnout model, emotional exhaustion and depersonalization are key components of burnout syndrome, and a high level of empathy can mitigate their manifestations through better understanding and regulation of both one's own emotions and those of others.

Interestingly, the reduction in personal achievements was positively correlated with components of emotional intelligence, including empathy ($r = 0.500$, $p < 0.01$) and self-motivation ($r = 0.474$, $p < 0.01$). This may reflect the specifics of the academic environment, where high professional standards and perfectionism often lead to an underestimation of one's own results, even among teachers with developed emotional competencies. This observation requires further research, as it does not clearly correspond to traditional models of the relationship between emotional intelligence and professional well-being.

A comparative analysis by gender (Table 2) did not reveal any statistically significant differences, but some trends were identified: women showed higher levels of psycho-emotional exhaustion (M = 32.78) compared to men (M = 26.30), $p = 0.073$, with a medium effect size (Cohen’s $d = –0.68$). This trend is consistent with the results of Horvat et al. (2002), which also noted greater susceptibility of female teachers to emotional exhaustion, which may be associated with higher emotional involvement and workload.

From a theoretical point of view, the results obtained are consistent with the concept of Salovey and Mayer (1990), who view emotional intelligence as a resource for adaptation that increases resilience to professional stress. The practical significance lies in the fact that developing components of emotional intelligence—in particular, empathy, self-motivation, and emotional self-regulation skills—can be an effective strategy for preventing burnout among teachers. In higher education, this can be achieved through training, professional development programs, and coaching sessions aimed at building emotional resilience and reducing depersonalization and emotional exhaustion.

Despite the significance of the results obtained, the study has a number of limitations. First, the sample size ($n = 37$) limits the statistical power of the analysis and the possibility of generalizing the conclusions to a wider population of university teachers. Second, the study had a cross-sectional design, which does not allow for the establishment of clear causal relationships between emotional intelligence and manifestations of professional burnout. Third, the data were based on self-reports, which potentially increases the risk of bias due to subjective perceptions and social desirability of responses. Finally, the study did not take into account external factors such as organizational climate, workload, or level of institutional support, which may also influence burnout.

In the future, it would be advisable to expand the sample to include teachers from different regions and disciplines, which would increase the representativeness of the data. A promising direction is to conduct longitudinal studies that will allow us to track the dynamics of changes in emotional intelligence and burnout symptoms over time. Of particular interest is the experimental testing of emotional intelligence development programs aimed at preventing and reducing professional burnout.

Conclusion

The study revealed important patterns between the level of emotional intelligence and signs of

professional burnout among higher education teachers. The results indicate that higher levels of emotional intelligence components such as empathy, self-motivation, and emotion management are associated with lower levels of psycho-emotional exhaustion and depersonalization. This confirms the assumption that emotional intelligence plays a protective role in conditions of professional stress and can be considered a resource for preventing burnout.

Gender differences were also identified in some indicators, although no statistically significant differences were found. This requires further research with a larger sample size. The high reliability of the methods used allows us to speak of the validity of the results.

The data obtained can be used in the development of psychological support programs and programs to improve the emotional competence of teachers, aimed at preventing professional burnout and improving the well-being of teaching staff in the higher education system.

Conflict of Interest

The authors confirm that they have no conflict of interest.

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