



DOI: 10.54919/physics/56.2024.67kve4

## The manifestation of professional burnout among university teachers under pandemic conditions

Ainura Karatayeva\*

L.N. Gumilyov Eurasian National University  
010008, 2 Satpayev Str., Astana, Republic of Kazakhstan

Gulpara Zhukenova

L.N. Gumilyov Eurasian National University  
010008, 2 Satpayev Str., Astana, Republic of Kazakhstan

### Abstract

**Relevance.** The relevance of this study focuses on the ways to work effectively under stressful situations. After all, the COVID-19 pandemic is a stressor, and burnout syndrome is directly linked to the stress caused by the pandemic. Education is particularly specific, since within the "human-human" professions, an important aspect is the social connection between those involved and the support inherent in the educational process. As education has been completely reorganised into distance education, an important part like belonging to society is neglected. This has a negative impact on both the emotional and mental component of the personality.

**Purpose.** The purpose of this study is to investigate burnout syndrome amidst the pandemic. The object is professional burnout as a key mechanism of productivity and efficiency. The subject is a manifestation of professional burnout among university teachers under the conditions of COVID-19 pandemic.

**Methodology.** The study involved the following research methods: theoretical (analysis, synthesis, generalisation, argumentation) and practical (mathematical statistics, methodology: Diagnostics of professional burnout by K. Maslachand and S. Jackson (adapted by N. Vodopyanova); Diagnostics of the level of emotional burnout by V. Boyko; Definition of mental burnout by A. Rukavishnikov).

**Results.** In the course of disclosing the subject, the immediate advantages and significant disadvantages of distance education were identified. The causes of burnout, the stages of its development and a number of techniques to minimise the manifestations of professional burnout were also highlighted.

**Conclusions.** According to the study, teachers today need to work on decreasing their levels of emotional exhaustion and detachment, and on increasing their "reduction in personal achievement". Substantial work should be done to reduce employees' stress levels and train them in self-regulation skills to manage their emotions effectively. The findings will be of use to all those involved in education, namely teachers, psychologists, administrators of educational institutions and ministers.

**Keywords:** students; personality; professional burnout; teachers; educational sphere; COVID-19 pandemic.

### Suggested Citation:

Karatayeva A, Zhukenova G. The manifestation of professional burnout among university teachers under pandemic conditions. *Sci Herald Uzhhorod Univ Ser Phys*. 2024;(56):674-683. DOI: 10.54919/physics/56.2024.67kve4

\*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (<https://creativecommons.org/licenses/by/4.0/>)

## **Introduction**

In today's age of information saturation, employees of various professions are faced with the task of not only carrying out their direct duties professionally, but also of maintaining their psychological state. In the modern world, risks, time pressures and constant challenges lead to stress, which in turn contributes to both physical and emotional overload resulting in burnout [1]. Within the framework of this study, pandemic COVID-19 will be considered as a cause of burnout. The economic, tourist, agricultural, transport and education sectors were severely affected by the pandemic. Attention should be focused on the latter sector. The forced, abrupt transition to distance teaching has provoked a significant deterioration in both the mental and physical strain of academic staff at higher education institutions. The introduction of lockdown has required a large number of teachers to quickly acquire previously unknown, latest digital technologies to provide effective teaching [2]. The constant tension caused by the pandemic leads to an increase in staff turnover and consequently to higher unemployment. This has a negative impact on the economic situation of the country [3-5].

A key value that has been disrupted by the pandemic is belonging to the society. The lockdown resulted in an increase in the social isolation that participants experienced during the learning process. In the teaching community, isolation is related to a lack of communication between colleagues; in the student community, it is related to peer-to-peer communication and a lack of peer support [6-8]. This, in turn, significantly affects the functioning of the individual's mental processes. Considering the aforementioned facts, the study of professional burnout and its prevention in the future is one of the urgent issues related to ensuring the effectiveness of teachers' professional activities. Burnout is a psychological symptom in which a person does not feel the strength and energy to satisfy his or her needs. In terms of professional burnout, it is a dysfunction associated with difficulties in performing professional duties. Burnout syndrome manifests on the following levels: physical (headache, nausea, dizziness, rapid fatigue, drowsiness, sluggishness); emotional (anger, frustration, apathy, anxiety, procrastination); mental (feeling of despair, hopelessness, aloofness in communication with colleagues, stereotyped thinking, impaired concentration of attention, memory); motivational (reduced personal motivation, lack of effort and enthusiasm, interest and idealism, emergence of frustration, job dissatisfaction, and even resignation). In the field of professional activity one notices dissatisfaction with the result of his or her activity, and the productivity decreases [9-11].

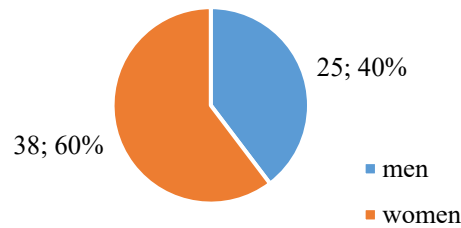
Teaching is considered a stressful profession in society in all forms of education. Teachers' burnout is a serious problem as it is associated with aloofness in the classroom and detachment from institutional goals, including those affecting students and the overall success of the institution.

Research experience shows that teachers with high levels of burnout have high levels of depression and lower rates of self-esteem. At the university level, this is even more worrying because the university transcends education as a dynamic agent of local and national development. Consequently, the factors related to teacher burnout are not only important for improving job satisfaction, self-health and learning outcomes, but also for society [6; 12; 13]. The object of the study is professional burnout as a key mechanism of productivity and efficiency. The subject of the study is a manifestation of professional burnout among university teachers under the conditions of COVID-19 pandemic.

The purpose of this study is to investigate burnout syndrome, which is caused by stressors under pandemic conditions. A number of tasks were defined to achieve the purpose of the study: to analyse the theoretical base concerning the development of professional burnout among teachers; to analyse the theoretical base regarding the influence of COVID-19 pandemic on the psychological state of education employees; to select practical methods, which will be effective in determining the level of burnout among the participants of the study; to conduct empirical research and draw conclusions based on the findings.

## **Materials and Methods**

Both theoretical and practical application methods were used in the study. The theoretical research methods include analysis, synthesis, generalisation, comparison, and classification. Analysis and synthesis are two interrelated logical methods of academic studies. They represent the processes of mental or factual decomposition of the whole into its constituent parts and combining the parts into a whole. Analysis is a valuable method because it enables dividing a complex phenomenon into simpler elements, separating the essential from the inessential, and reducing the complex to the simple. Synthesis, in turn, enables the parts to be composed and the examined phenomenon to be understood as a whole. Comparison is characterised by comparing an object or phenomenon to establish similarities or differences between them, and to find common factors. Comparison is always an important prerequisite for generalisation, which highlights the characteristics of objects and enables them to be grouped by types, groups and other attributes (classification). The methods used included: observation, interview, mathematical statistics, interpretative method, empirical investigation consisting of a set of techniques. The study was based at L.N. Gumilyov Eurasian National University, Department of Social Pedagogy and Self-Knowledge. The experimental sample consisted of 63 teachers. The details are presented in Figure 1. The age of the participants ranged from 28 to 52 years old. The average age of the subjects was  $39 \pm 2.1$  years and their teaching experience ranged from 2 to 24 years (mean length of experience –  $10.6 \pm 1.5$  years) [1].



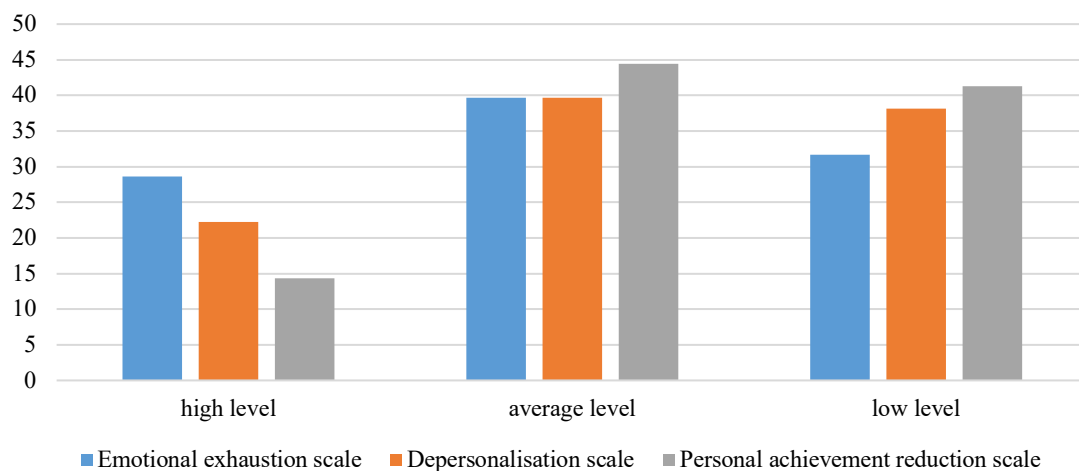
**Figure 1.** Graphical representation of the results for the gender distribution of the sample of study participants

The diagnostic complex of techniques consisted of the following: Diagnostics of professional burnout by K. Maslach and S. Jackson (adapted by N. Vodopyanova) [14]; Diagnostics of the level of emotional burnout by V. Boyko [15]; Definition of mental burnout by A. Rukavishnikov [16]. The Diagnostics of professional burnout by K. Maslach and S. Jackson (adapted by N. Vodopyanova) [14] is aimed to measure a degree of burnout in professions on the type "human-human". The method assesses a burnout within three spheres, namely: emotional exhaustion (i.e. when a person cannot devote to work as before); depersonalisation, i.e. development of negative attitude to colleagues; negative professional self-perception (reduction of personal achievements). Definition of mental burnout by A. Rukavishnikov [16] is aimed at studying burnout through psychoemotional exhaustion (exhaustion of emotional, physical, energy resources of a professional working with people); personal detachment (reduction of contacts with others, increased irritability and intolerance in communication situations, negativism towards other people); professional motivation (productivity in professional activity, optimism and interest towards work, self-assessment of professional activity). The Diagnostics of the level of emotional burnout by V. Boyko [15] is aimed at examining burnout through the study of certain phases. The phase of "tension", which includes the experience of psychotraumatic circumstances; the symptom of "dissatisfaction with oneself"; expansion of the sphere of emotional thriftiness; anxiety and depression. The phase of "resistance" and the phase of

"exhaustion" that includes a symptom of "emotional deficit"; a symptom of "emotional detachment"; a symptom of "personal detachment", and a symptom of "psychosomatic and psychovegetative disorders".

## Results

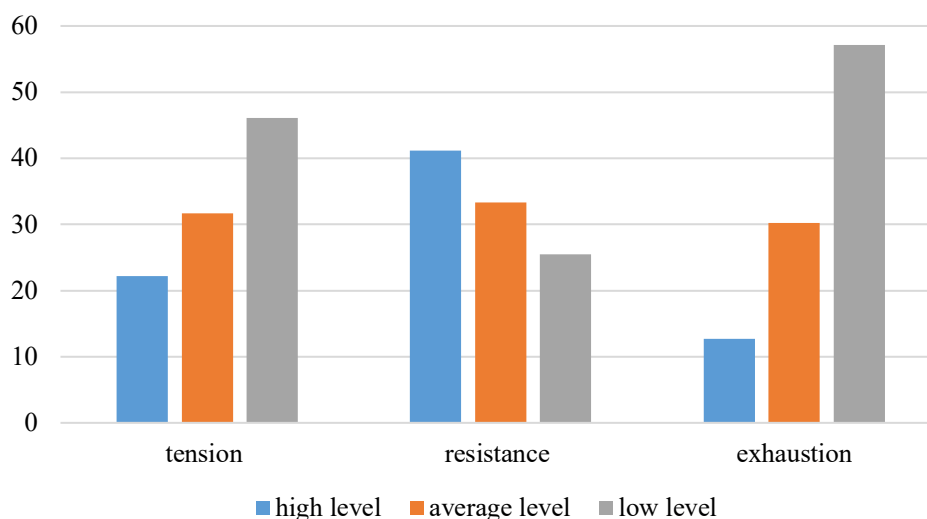
The study of stress as an underlying factor in the formation of professional burnout is also an important component for understanding the subject of the study. According to the American Institute of Stress, 75% to 90% of visits to the doctor are caused by stress. In particular, around 30% of illnesses caused by stress in the workplace lead to employee burnout and, as a consequence, increased employee turnover and a serious reduction in the efficiency and productivity of workers. Hence, there are various economic consequences and crises. Stress does not only affect business, but there are also major losses in other areas, such as the medical and educational sectors. The latter is worth a closer look and analysis. For example, the study of a professional burnout in one of universities of Karaganda city has revealed that 45.7% of examinees have a high and very high level of a burnout expression; 25.7% have an average level, 24.3% – a low level, and only 4.3% of participants successfully cope with the stress [1]. The findings of the study show the following indicators and conclusions. The results of the Diagnostics of professional burnout by K. Maslach and S. Jackson (adapted by N. Vodopyanova) [14] are presented graphically in Figure 2.



**Figure 2.** Graphical presentation of the results of the Diagnostics of professional burnout

According to the graph, the highest values of the "emotional exhaustion" scale (28.6%) indicate that teachers feel an acute lack of resources, i.e. strength and energy to perform their professional duties. They feel emotional overload, which is characterised by a decrease in general emotional background and subsequently by indifference towards professional activity. The lowest values are on the "reduction of personal achievements" scale (41.3%). This indicates that teachers find it difficult to assess their own activities, to identify their strengths and weaknesses in the professional field [17]. The results of the

Diagnostics of the level of emotional burnout by V. Boyko [15] are presented in Figure 3. The graph indicates that there are high values on the "resistance" scale. This is a state in which a person is between tension and exhaustion. It is a state of resilience to various stressors, and is acceptable in reproducing professional activities. This state does not require any special treatment. The indicators that need corrective methods are within the "tension" and "exhaustion" scales. These scales will be considered in more detail based on the symptoms they include.



**Figure 3.** Graphical presentation of the results of the Diagnostics of the level of emotional burnout by V. Boyko

The "tension" scale includes 4 symptoms, namely: anxiety and depression; expansion of the sphere of emotional thriftiness; experiencing psycho-traumatic circumstances;

and dissatisfaction with oneself. The results are demonstrated in Table 1.

**Table 1.** Quantitative indicators of symptoms on the "tension" scale

| No. | Symptom name                                         | Degree of symptom expression (%) |         |      |
|-----|------------------------------------------------------|----------------------------------|---------|------|
|     |                                                      | High                             | Average | Low  |
| 1.  | Anxiety and depression                               | 4.8                              | 4.8     | 90.4 |
| 2.  | Dissatisfaction with oneself                         | 9.5                              | 9.5     | 81.0 |
| 3.  | Experiencing psychologically traumatic circumstances | 12.7                             | 15.9    | 71.4 |
| 4.  | Expanding the sphere of emotional thriftiness        | 11.1                             | 3.2     | 85.7 |

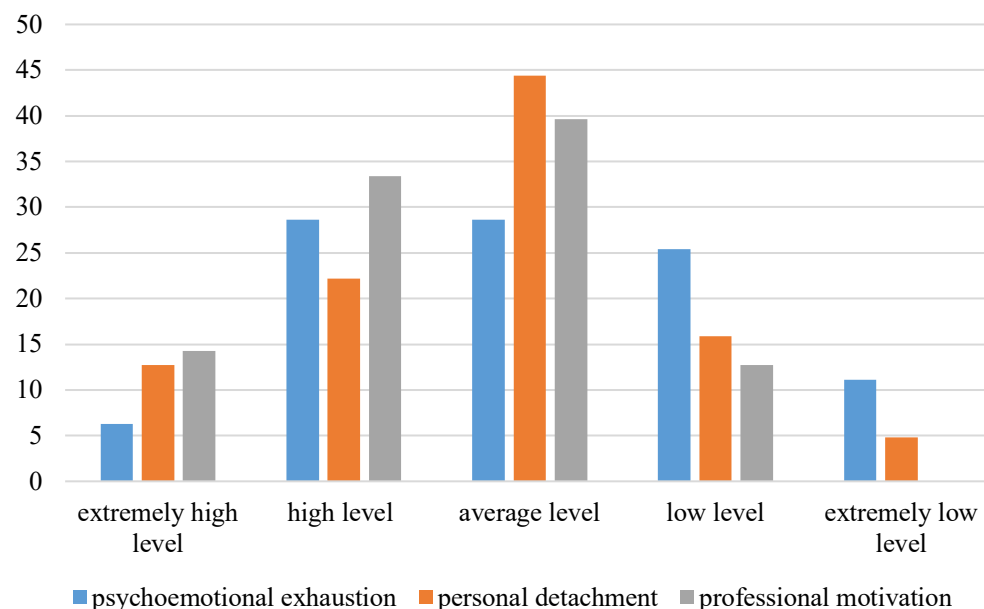
**Table 2.** Quantitative indicators on the "exhaustion" scale

| No. | Symptom name                                    | Degree of symptom expression (%) |         |      |
|-----|-------------------------------------------------|----------------------------------|---------|------|
|     |                                                 | High                             | Average | Low  |
| 1.  | Emotional deficit                               | 7.9                              | 3.2     | 88.9 |
| 2.  | Emotional detachment                            | 6.3                              | 15.9    | 77.8 |
| 3.  | Personal detachment                             | 3.2                              | 12.7    | 84.1 |
| 4.  | Psychosomatic and psychovegetative dysfunctions | 7.9                              | 19.1    | 73.0 |

The symptom of "emotional deficit" is expressed in 7.9% and is characterised by the presence of a range of destructive emotions such as harshness, rudeness, resentment, internal feelings of powerlessness, and an inability to empathise. The symptom of "emotional detachment", also known as depersonalisation, was identified in 6.3% of people. It is characterised by an almost total absence of emotion in professional activities, contributing to the professional deformation of the teacher. As for the symptom of "personal detachment" (3.2%), it refers to a change in the value orientations of the individual. It is quite common for a teacher to find working with people uninteresting, devoid of social value. The symptoms of "psychosomatic and psychovegetative dysfunctions" are observed in 7.9% of people. These disorders arise from the action of negative emotions within the personality, i.e. if emotions are not worked through and expressed they will lead to diseases of the organs and systems (gastrointestinal tract, cardiac system, lung system) of the body.

The results of the Definition of mental burnout by A. Rukavishnikov [16] are presented in Figure 4. The diagnosis was carried out on three scales, namely: personal

detachment, professional motivation and psychoemotional exhaustion. The "psychoemotional exhaustion" scale had extremely high values of 6.3% and high values of 28.6%. This indicates the exhaustion of the emotional, physical and energetic resources of the professional working with people. Literally, exhaustion manifests itself in chronic emotional and also physical fatigue and coldness in relation to others. The "personal detachment" scale showed extremely high values for 12.7% of the examinees. This indicates that teachers have a certain negativism and a significantly reduced number of contacts with others, cynicism and increased criticism in their attitudes towards people. There are also negative consequences in the working sphere, i.e. there is a formation of indifference towards their own career. There were no very low scores on the "professional motivation" scale. Low values were identified in 12.7%, indicating dissatisfaction with oneself as a professional, a high intensity of feeling low professional performance, and low self-esteem. High values on this scale (33.4%) and extremely high values (14.3%) indicate a rather satisfactory state of the employee motivation system.



**Figure 4.** Graphical presentation of results based on the methodology of A. Rukavishnikov

The analysis of the diagnostic results has shown that a comprehensive study of the process of professional burnout includes the study of emotional and mental burnout. According to the results of the methodology by K. Maslach, average values are the most pronounced. This indicates that remedial work should focus on reducing indicators of emotional exhaustion and detachment. It should also increase reductions in personal achievement, because it is difficult to grow professionally without an adequate perception of one's performance. According to the results of V. Boyko's methodology, it is necessary to work through employees' tension, to train them in methods of self-regulation of emotional states, and after that the activities performed will be more effective. According to the results of A. Rukavishnikov's methodology, particular

attention should be paid to the high values of the scales "psychoemotional exhaustion" and "motivation".

## Discussion

As has already been noted, the process of burnout is rather destructive to the full development and functioning of the individual. Concretising the harms of burnout, there are three main aspects, namely: anti-motivational, which consists in discouraging the subject to perform his or her professional activities and reducing the level of achievement in the realisation of professional and social goals. The anti-cognitive aspect lies in the simplification of the individual's cognitive structures aimed at learning about social objects, narrowing the scope of professional experience, and forming negative evaluations of his or her professional competence. The deregulatory aspect lies in

the disruption of the professional activity system, which is reflected in reduced professional performance and low levels of life satisfaction [18-20]. Professional burnout syndrome is predominantly affecting (considering the stable, calm socio-economic situation in the world and in the country in particular) the following categories of people: those who have recently changed jobs and are currently adapting to a new work environment; employees waiting for recertification or further training; workaholics; employees aged over 45; those who have reached certain heights in their field, but at the moment feel emptiness, lack of meaning and further perspectives [21-23].

As for the emergence of professional burnout caused by the COVID-19 pandemic, the reasons are quite different and should be analysed using teachers as an example. Firstly, regular overtime, which is often associated with staff absence caused by the illness. Secondly, there are the additional responsibilities of a thorough sanitary and hygienic function in educational institutions. Thirdly, there is the dramatic shift to distance teaching. This requires much more time and effort from teachers to ensure that the quality of the educational services provided is not inferior to that of face-to-face teaching. Fourth, an additional

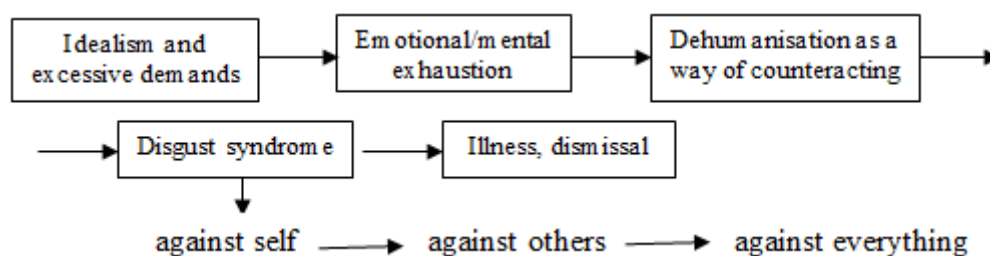
stressor is the lack of technical equipment for the use of distance mode, and the failures of the respective platforms due to overloaded servers. Fifth, the increased risk of infection through contact with young people, who are often asymptomatic carriers of the coronavirus. Sixth, there is an excessive fear of getting sick or fear for relatives and friends. Finally, there is a lack of material motivation for additional psychological and physical stress in the process of fulfilling one's professional duties. In addition to these reasons, a high level of stress is also responsible for professional burnout syndrome, which is caused by monotony of duties, irregular working hours, tight schedule, lack of breaks and days off, tight deadlines for tasks, lack of remuneration, strained relations with colleagues, conflicts, and unfavourable moral and psychological climate [24-26]. Thus, the process of burnout is not something new in the field of academic studies. The stressors that cause and worsen burnout may seem relatively new. Therefore, it is worth analysing the mechanism of a burnout process and the levels a person goes through from the initial stage of a burnout to the final one. The detailed stages are shown graphically in Table 3.

**Table 3.** A five-stage mechanism of burnout

|                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. "Honeymoon". The teacher is satisfied with his or her activities, and at this stage there remains a certain enthusiasm for the work. But as work stresses increase, enthusiasm decreases and activities become less and less enjoyable.                                                                                                                             |
| 2. "Lack of resource". This stage is characterised by apathy, fatigue, sleep problems. There is a disappearance or minimisation of the attractiveness of work and a decrease in efficiency. Disruptions in work discipline may occur. Where there is motivation, the teacher works at the expense of internal resources, but this is detrimental to his or her health. |
| 3. "Chronic symptoms". Lack of rest and recovery leads to: propensity for illness, exhaustion, feelings of depression, acute anger, chronic irritability, feelings of being "cornered".                                                                                                                                                                                |
| 4. "Crisis". Chronic illnesses develop and performance is reduced (partially or completely). Worries about quality of life and own inefficiency are exacerbated.                                                                                                                                                                                                       |
| 5. "Breaking through the wall". Mental and physical problems develop into an acute form (can even be life-threatening, triggering dangerous illnesses). Career is at risk because of the large number of problems.                                                                                                                                                     |

Thus, burnout can be gradual, with a cumulative effect, or it can be abrupt, rapid as in the case of a pandemic. Therefore, it is necessary to pay attention to strategies that a person uses in case of stress. Many of them turn out to be

ineffective, because stress is not eliminated, but rather aggravated [19]. These strategies are presented in more detail in Figure 5.



**Figure 5.** Graphic representation of ineffective ways of dealing with stress

When considering burnout syndrome in professional teaching, with stressors such as the pandemic, the main cause is the rapid shift of teaching from face-to-face – understandable and familiar – to distance teaching – incomprehensible, undeveloped and new. Certainly, distance education is not the worst solution as an alternative to discontinuing the educational process. Therefore, both the positive and negative aspects of reproducing distance education should be analysed. The

main advantages include: accessibility (in terms of convenience, no need to travel long distances to the place of study); leading educational technologies; personalised learning processes; flexible schedules for consultations with the teacher. However, there are a number of disadvantages to this system, namely: difficult identification of distance students, since at the present stage of technology development it is quite difficult to verify who exactly is handing in individual assignments or

test papers. Another significant disadvantage is the simplified contact between teacher and student. Having analysed the background of a burnout occurrence among teaching staff an important element of disclosing this subject is informing about the methods and techniques of overcoming a burnout. Minimisation and further prevention of a burnout development can be considered in three aspects, namely: conditions of teachers' activity organisation; strategies to improve psychological climate in the team and remedial work with individual features of a personality [27; 17].

The conditions of the organisation of teachers' work can minimise burnout if the administration of the institution provides employees with opportunities for professional development and introduces certain social projects aimed at increasing motivation. Training staff in time-management skills (managing their own time) is also one of the methods. Workspace organisation is another important criterion in the area of combating burnout. Within the framework of this area, one can talk about creating favourable conditions during the working day: provision of reference materials and other teaching aids, technical equipment at the workplace, including office equipment and assistance during their use. The workplace must also meet sanitary and hygiene standards (light, temperature, cleanliness). The work schedule should include adequate time for meals and rest (for recuperation). Improving the psychological climate in a team is about creating a unified, supportive space where people can always get the support, understanding and help they need

from their colleagues. Another thing worth considering is the spiritual development of the individual, which leads to greater tolerance and understanding [28; 29].

Work with individual personality traits focuses on three main areas. Firstly, it is the development of creativity, as one of the signs of burnout is rigidity of thinking, resistance to changes. Creativity, in its turn, means quickness, flexibility, accuracy and originality of thinking, fertile imagination, sense of humour. Creativity is a powerful factor of a person's development, determining his or her readiness to changes and rejection of stereotypes. The second area to be worked on involves leveling the influence of negative professional and personal factors that contribute to emotional burnout. In this case it is necessary to work on development of employees' ability to solve conflict situations, to find constructive solutions, to achieve the set goals, and to reconsider the system of values and motives that impede professional and personal improvement. Different kinds of training can be used for this, training in self-confidence, self-disclosure, personal growth, decision-making, etc. The third area is aimed at relieving employees' stress states that will arise from busy activities, developing self-regulation skills, learning relaxation techniques, controlling their own physical and mental state, and increasing stress resistance [17; 30]. Among the general recommendations for combating burnout are: sport, rest, regimen, psychological protection and harmony. These mechanisms are described in detail in Table 4.

**Table 4.** Recommendations on combating burnout

| No. | Name of activity         | Brief description                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | Sport                    | Physical activity is not only a good prevention of illness and weight gain, but also a panacea for all psychological trauma. It is important to realise that each individual person can enjoy different sports activities, some people like yoga and meditation, some prefer jogging and swimming in the morning, while others enjoy working out at the gym.                                                                          |
| 2.  | Rest                     | Work efficiency depends directly on proper rest and relaxation. Rest, just like work, requires a certain amount of time to get back to duties with a renewed energy boost. There are many types of rest. Some people choose a relaxing atmosphere with their family and friends, some prefer a trip somewhere, while others like to regain their energy through a release of adrenaline into the bloodstream (extreme types of rest). |
| 3.  | Regimen                  | An organised and planned day will help to focus on work in a timely manner and accustom the body to the necessary rest.                                                                                                                                                                                                                                                                                                               |
| 4.  | Psychological protection | The ability to create an imaginary barrier between oneself and the person one finds intolerable will enable one to control emotions and not react to possible emotional provocations from others. This, in turn, will save nerve cells and prevent unwanted stress.                                                                                                                                                                   |
| 5.  | Harmony                  | Maintain inner peace and mental balance, avoid mixing work and private life. Try not to waste energy discussing personal lives and problems of both own and those of colleagues. Share personal problems only with very close people.                                                                                                                                                                                                 |

Thus, the issue of burnout was analysed and it was found that teacher's work has undergone a particularly acute change in terms of the work format due to the spread of the COVID-19 pandemic. Teachers had to master the latest technologies at an accelerated pace to ensure that the quality of services provided was at least as good as the face-to-face ones. Teachers faced another challenge: coping with the increased levels of stress caused by the lockdown environment. Tension is as one of the factors of the burnout process. To deal with a burnout a number of techniques were described aimed at a quick overcoming of

a burnout among the teaching staff. The following methods were singled out: sport, rest, regimen, etc. Remedial work with teachers also has an important function, which is aimed at developing the skills necessary to deal with professional burnout. The main areas of work included improving the psychological climate of the team and working with individual personality traits.

## Conclusions

The analysis of the issue of professional burnout syndrome among teachers has shown that the subject is indeed

relevant. After all, in the process of training future specialists no proper attention is paid to the development of individual qualities that would help to cope with the stresses that abound in teaching activity. For example, with the increase in the spread of coronavirus and the introduction of lockdown, the teaching system has drastically changed the vector of service delivery from the usual face-to-face to distance teaching. This has become a powerful stressor for domestic teachers, leading to psychological imbalance in the personality and, as a consequence, burnout. In the course of disclosing the subject, the immediate advantages and significant disadvantages of distance education were identified. The causes of burnout, the stages of its development and, finally, a number of techniques to minimise the manifestations of professional burnout were also highlighted.

Among them there were both common methods, such as sports, rest, regimen, etc., and individual training of personal features (self-esteem, decision-making, self-confidence, motivation, conflict resolution, work with the value sphere, stress management) of a person with the help of specialists. The pandemic has revealed particularly

pronounced gaps in many areas of life and, in particular, in teaching, as distance education has demonstrated the challenges that remain to be addressed in the local education system. The study is a prime example of this. It was also necessary to make adjustments to the education system and to the training of teachers for their professional activity as early as the tertiary level. This study will be useful both for teachers and administrators of higher education institutions to adjust training programmes. Moreover, it will help working educators and administrators of educational institutions to create training programmes for practising teachers. The findings of the diagnostics provide a field for further studies on dealing with stressful situations and combating professional, emotional and personal burnout.

### **Acknowledgements**

None.

### **Conflict of Interest**

None.

### **References**

- [1] Rakhmatilla A, Bulatbaeva AA. The problem of mental burnout of teachers. *Econ Soc.* 2021;4(83):13-19.
- [2] Poggio TYu. Analysis of psychodiagnostic tools for continuing the professional development of scientific and pedagogical practitioners in laying the foundations of higher education. *VcheniZapiski TNU VI Vernadsky Ser Psychol.* 2021;32(71):88-92.
- [3] Shevchuk TO. Psychological correction of emotional burnout among teachers in distance learning, qualifying master's work. Vinnitsa: Donetsk National University named after VasilyStus; 2021.
- [4] Deryaev AR. Choosing the profile of an inclined – directional well in the Caspian sea area of Turkmenistan. *SOCAR Proceed.* 2024;1:32-39.
- [5] Selvakumar RD, Alkaabi AK, Ryu J, Lee H. Role of dielectric force and solid extraction in electrohydrodynamic flow assisted melting. *J Energ Stor.* 2023;73:109169.
- [6] Parte L, Herrador-Alcaide T. Teaching Disruption by COVID-19: Burnout, Isolation, and Sense of Belonging in Accounting Tutors in E-Learning and B-Learning. *Int J Envir Res Publ Health.* 2021;18:2-22.
- [7] Prokopov VG, Fialko NM, Sherenkovskaya GP, Yurchuk VL, Borisov YuS, Murashov AP, Korzhik VN. Effect of the coating porosity on the processes of heat transfer under, gas-thermal atomization. *Poroshk Metall.* 1993;(2):22-26.
- [8] Capasso C, Rubino L, Rubino G, Veneri O. Data Analytics for Performance Modelling of Photovoltaic Systems in the Internet of Energy Scenario. In: *2021 IEEE 15th International Conference on Compatibility, Power Electronics and Power Engineering, CPE-POWERENG 2021.* Florence: Institute of Electrical and Electronics Engineers; 2021. DOI: 10.1109/CPE-POWERENG50821.2021.9501202
- [9] Antipina UD, Alekseeva SN. Occupational burnout syndrome. *Bull North-East Fed Univ MK Ammosov Ser Med Sci.* 2017;1(06):99-105.
- [10] Sokal L, Trudel LE, Babb J. Canadian teachers' attitudes towards change, efficacy, and burnout during the COVID-19 pandemic. *Int J Educ Res Open.* 2020;1:article number 100016.
- [11] Stepanchuk AP. The impact of quarantine restrictions on the development of professional burnout of teachers of higher educational institutions. *Actual Probl Mod Med.* 2020;1(73):141-145.
- [12] Fioretto M, Langella R, Raimondo G, Rubino G, Rubino L, Serbia N, Testa A, Marino P. Design criteria for AC link reactors in active front end converters for renewable energy applications in smart grids. In: *2012 IEEE International Energy Conference and Exhibition, ENERGYCON 2012 (pp. 515-520);* 2012. DOI: 10.1109/EnergyCon.2012.6348207
- [13] Ali M, Alkaabi AK, Lee JI. CFD simulation of an integrated PCM-based thermal energy storage within a nuclear power plant connected to a grid with constant or variable power demand. *Nucl Eng Des.* 2022;394:111819.
- [14] Diagnostics of professional burnout by K Maslach and S Jackson (adapted by N Vodopyanova); 2021. <https://inlnk.ru/MjJypx>.
- [15] Bojko VV. Psihoenergetika. Sankt-Peterburg: Piter; 2008.
- [16] Rukavishnikov AA. Diagnostics of interpersonal relationships. In: VV Kozlov, NP Fetiskin, GM Manuilov (Eds.), *Socio-psychological diagnostics of the development of personality and small groups (pp. 119-121).* Moscow: Publishing House of Institute of Psychotherapy; 2002.
- [17] Tretyakova VS. The study of the syndrome of emotional burnout in the pedagogical environment. *Vocat Educ Lab*

Mar. 2019;2:71-85.

- [18] Aplashova AZh, Demidenko RN, Kabakova MP. Supervision as a method of preventing professional burnout of educational psychologists. *KazNU Bull Psychol Sociol Ser.* 2016;(59);18-24.
- [19] Begun-Trachuk LO. The study of professional and emotional burnout in psychological and pedagogical theory and practice. *Mus Art Educ Disc.* 2020;5:128-133.
- [20] Borisov YuS, Oliker VE, Korzhik VN, Kunitskii YuA, Krasyuk AD, Revo SL. Structural characteristics of flame-sprayed Fe-Ni-B alloy coatings. *Sov Pow Metall Metal Ceram.* 1987;26(11):885-888.
- [21] Kiselitsya OM, Bogdanyuk AM, Gulina LV, Svekla RM. Prediction and prevention of the syndrome of occupational disability and chronic auto and physical education teachers. *Youth Sci.* 2018;3.3(55.3):89-92.
- [22] Cherdymova EI, Chernysheva EL, Machnev VL. Professional burnout syndrome. Samara: Samara University Publishing House; 2019.
- [23] Deryaev AR. Investigation of the properties of fine clays in the fields of Turkmenistan for the development of drilling fluids. *Neft Khoz Oil Indust.* 2024;2024(3):46-50.
- [24] Mendez I, Martinez-Ramon JP, Ruiz-Esteban C, Garcia-Fernandez JM. Latent Profiles of Burnout, Self-Esteem and Depressive Symptomatology among Teachers. *Int J Envir Res Publ Health.* 2020;18:article number 6760.
- [25] Zhuravleva LA. Professional burnout of university teachers during the COVID-19 pandemic. *Educ Law.* 2021;7:300-306.
- [26] Korzhik VN. Theoretical analysis of the conditions required for rendering metallic alloys amorphous during gas-thermal spraying - I. Determining the cooling rate of a spray-dispersed material. *Sov Pow Metall Metal Ceram.* 1992;31(9):772-777.
- [27] Prokopenko IA. Professional burnout of teachers as a psychological and pedagogical problem. *Sci Notes Ped Dep.* 2019;45:59-64.
- [28] Fernandez-Batanero J-M, Roman-Gravan P, Reyes-Rebollo M-M, Montenegro-Rueda M. Impact of educational technology on teacher stress and anxiety: A literature review. *Int J Envir Res Publ Health.* 2021;18(2):article number 548.
- [29] Semenist YuR. Psychological features of emotional burnout of teachers of higher educational institutions. Kyiv: National University of Kyiv-Mohyla Academy; 2021.
- [30] Sydorets V, Korzhyk V, Khaskin V, Babych O, Bondarenko O. Electrical characteristics of the equipment for the hybrid plasma-MIG welding. In: *58th Annual International Scientific Conference on Power and Electrical Engineering of Riga Technical University, RTUCON 2017 (pp. 1-6);* 2017.

## **Прояв професійного вигорання у викладачів ВНЗ в умовах пандемії**

**Айнура Каратаєва**

Євразійський національний університет імені Л. М. Гумільова  
010008, вул. Сатпаєва, 2, м. Астана, Республіка Казахстан

**Гульпара Жуkenова**

Євразійський національний університет імені Л. М. Гумільова  
010008, вул. Сатпаєва, 2, м. Астана, Республіка Казахстан

### **Анотація**

**Актуальність.** Актуальність даного дослідження зосереджена на способах ефективної роботи в стресових ситуаціях. Зрештою, пандемія COVID-19 є стресом, а синдром професійного вигорання безпосередньо пов'язаний зі стресом, спричиненим пандемією. У сфери освіти особлива специфіка, оскільки в рамках професій "людина-людина" важливим аспектом є соціальний зв'язок між залученими та підтримка, закладена в освітньому процесі. Оскільки освіту було повністю реорганізовано на дистанційну, така важлива частина, як приналежність до суспільства, нехтується. Це негативно позначається як на емоційній, так і на психічній складовій особистості.

**Мета.** Мета цього дослідження – вивчити синдром вигорання в умовах пандемії. Об'єкт – професійне вигорання як ключовий механізм продуктивності та ефективності. Суб'єкт – прояв професійного вигорання викладачів ВНЗ в умовах пандемії COVID-19.

**Методологія.** У дослідженні використано такі методи дослідження: теоретичний (аналіз, синтез, узагальнення, аргументація) та практичний (математична статистика, методика: Діагностика професійного вигорання К. Маслачанда і С. Джексона (в адаптації Н. Водоп'янової); Діагностика рівня емоційного вигорання В. Бойка; Визначення психічного вигорання А. Рукавишнікова).

**Результати.** У ході розкриття теми були визначені безпосередні переваги та суттєві недоліки дистанційної освіти. Також було висвітлено причини виникнення професійного вигорання, етапи його розвитку та низку прийомів мінімізації проявів професійного вигорання.

**Висновки.** Відповідно до дослідження, сьогодні вчителям потрібно працювати над зниженням рівня емоційного виснаження та відчуженості, а також над збільшенням "зниження особистих досягнень". Необхідно провести значну роботу, щоб знизити рівень стресу співробітників і навчити їх навичкам саморегуляції, щоб ефективно керувати своїми емоціями.

**Ключові слова:** особистість; професійне вигорання; вчителі; освітня сфера; COVID-19 пандемія.