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## Studies on University Professors' Emotional Burnout

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### Abstract

The article represents the results of the studies on the emotional burnout of Siberian Federal University professors (Krasnoyarsk, Russia). With the help of a small sample group the authors of the article reveal peculiarities of emotional burnout in connection with humane or engineering direction of lecturers' work and their type of thinking. The materials of the work allow us specifying and extending scientific ideas on the specificity of emotional burnout development, its reasons and peculiarities. These data can be used in comparative studies of emotional burnout among representatives of related or different professions. The results of the studies allow selecting psychological and pedagogical model of emotional burnout syndrome prevention and correction for university professors.

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### 1. Introduction

The applicability of the topic of the study is determined by the specific character of a higher school teacher's activity. The mentioned group of specialists becomes even more subject to emotional burnout syndrome because of the constant growth of requirements to a higher school teacher's professional qualities on the part of the society, reasonable increase of academic load, intensity of labour, psychological and emotional stress, high loads on the visual, acoustical and voice apparatus, and a large number of contacts during the working day.

On the one hand, contemporary higher school teachers need to be competent in their area of knowledge and pedagogical skills. They also should have high level of psychological knowledge and skills that allow them remain

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professionally competent and perform efficient activity. On the other hand, if psychological knowledge and skills and autocompetence are securely present as personal qualities in a teacher's self-comprehension, they can serve as psychological condition for prevention of professional burnout appearance.

Under the conditions of modern environment scientific studies and researches that aim at prediction, detection, correction and prevention of emotional burnout syndrome become more significant. Depreciation of social, cultural and economic values and significance of intellectual work, constant reforming of educational sphere in the Russian Federation influenced on the mass character of manifestation of emotional and professional burnout in teaching area and other professional spheres.

The interest to the problem of professional burnout syndrome appeared in Russian scientific literature not long ago, although this phenomenon has been revealed under active studies abroad since the second part of the XX century.

Among a number of approaches to emotional burnout researches the concept of V. V. Boyko (2004) attracts attention. It considers not only stages of emotional burnout, but also the degree of these or those symptoms in each stage. According to Boyko's idea professional burnout represents acquired stereotype of emotional or more often professional behaviour. Burnout is to a certain degree a functional stereotype, because it allows a person measuring and economizing his energetic resources. At the same time there can occur its dysfunctional consequences, when burnout has a negative impact on his performance of professional activity and relationship with partners. Professional burnout is a kind of personality's professional deformation.

Scientific and teaching activity of professional school workers is also recently referred to highly stressful professional activity (Aminov, 1997; Borisova, 2005; Mitina, 1997, 2004, 1999). Teachers' aptitude to development of emotional burnout syndrome can be explained by the fact that their professional activity is characterized by high emotional tension. We know a large number of objective and subjective emotive factors that negatively influence on a teacher's work and cause strong emotional tension and stress. It should be also taken into account that this is one of the altruistic professions where probability of emotional burnout occurrence is rather high. Emotive factors cause the increasing feeling of dissatisfaction, accumulation of fatigue, and it leads to crises in work, exhaustion and burnout. These are accompanied by physical symptoms, such as asthenization, often headaches and insomnia. Moreover, there appear psychological and behavioral symptoms, such as boredom and soreness, decrease of enthusiasm, lack of confidence, irritation and disability to take decisions. As a result, efficiency of a teacher's professional activity decreases. Increasing dissatisfaction of the profession brings to the decrease of qualification and determines development of psychological burnout process.

Among many peculiarities and difficulties of teaching its high psychological tension is often pointed out. What is more, ability of empathy and sympathy is recognized as one of the professionally significant qualities of a teacher and tutor. All these peculiarities can cause formation of emotional burnout syndrome.

Thus, works of I. I. Seregina and L. I. Scherbich (2007), N. E. Vodopyanova and E. S. Starchenkova (2008) can be referred to fundamental scientific studies on development of teachers' professional burnout, especially among higher school lecturers. But such works are very few and this fact makes the topic of our research timely.

Issues connected with prevention and correction of burnout were well-studied in the works of M. A. Gavrilenko (2002) and O. P. Gredushko (2009). But it is still necessary to find opportunities to improve the measures of emotional burnout syndrome prevention in the activity of higher school workers.

It is possible to solve this task if we determine psychological principles of burnout that is stipulated by professional activity, if we point out peculiarities of its formation and manifestation among higher school workers. It allows extending the idea of the phenomenon in question and considering the present studies acute from the theoretical and practical point of view.

## **2. Aims, methods and stages of the research**

Analysis of theoretical works that study emotional burnout, as well as the results of our own empiric studies let us reveal a number of objectively existing contradictions that determine the timely character of studies on the present issue: 1) contradiction between the need to increase the quality of higher school professor's labour and objective deformation process which is typical of the professional activity in question; 2) contradiction between the

necessity to research emotional burnout syndrome and insufficient knowledge about the influence of multiple factors on the phenomenon and their connection with personal psychological features.

The mentioned contradictions allowed us to state the problem for the study: what psychological traits of emotional burnout are typical of lecturers of humanitarian and engineering subjects? Do they depend on the type of thinking?

Based on the timely character of the topic we set a goal for the research: study the peculiarities of emotional burnout as a factor of professional deformation of higher school teachers in connection with defining characteristics of their professional activity.

Methodological basis for the research is built by the basic approaches to the studies of emotional burnout syndrome and accompanying psychological processes (Maslach, 1994; Pines, 2002; Boyko, 2004; Orel, 2005).

To solve the stated problems and to check the original suppositions we used diagnostic tests (questionnaire to reveal the emotional burnout degree by V. V. Boyko; questionnaire to measure professional burnout by K. Maslach and S. Jackson (abridged by N. E. Vodopianova); test “Artist or Thinker”. The tests that we selected are all united by common topical direction as well as similar scales to reveal this or that personal trait. Furthermore, particular distribution of the results offers the reasons to speak of the respondent’s burnout level. Also, if we take into account the whole complex of the study’s results, we can use general information on the teachers’ syndrome to give proper recommendations to prevent and cure this “disease”. To estimate the difference between the two independent sample groups according to the level of the characteristic under study we used statistical Mann-Whitney U-test. It helped us reveal the difference of the parameter value between the small sample groups.

The studies were performed during 2013-2014 academic year among 22 lecturers of the Department of Transport in Siberian Federal University. The research included the following stages: 1) stipulation of aims and tasks, selection of diagnostic methods; 2) collection of diagnostic material; 3) processing, analysis and interpretation of the materials of the research.

### 3. Results and discussion

Choice of the technique of personal emotional burnout diagnostics (V. V. Boyko) is determined by the opportunity to reveal the degrees of professional burnout, as well as by the possibility to use it for self-testing as well as in professional work with clients. The present psychodiagnostic method represents information about degree of development of the respondent’s psychological defense in the form of emotional burnout. The technique considers three stages of burnout development: 1) tension; 2) resistance; 3) exhaustion. According to the results of stress development stages – tension, resistance or exhaustion – we can estimate their relative role or influence on the syndrome development. The fact is that the measured phenomena can vary: they are reaction to internal or external factors, models of psychological defense, state of nervous system. Quantitative indices only allow us judging about the level and degree of each stage formation. During the test the respondent has to choose the responses: “regularly”, “often”, “seldom” or “never” – depending on how true or not true for him this or that statement is. In further processing each response is assigned with a particular index number. After summing up the numbers we get the results of each stage. Each stage includes symptoms (Table 1):

Table 1. Symptoms of stress development stages (according to V. V. Boyko)

Stage name	Symptoms
Tension	<ul style="list-style-type: none"> <li>– stressful experience;</li> <li>– dissatisfaction with oneself;</li> <li>– feeling “cornered”;</li> <li>– anxiety and depression.</li> </ul>
Resistance	<ul style="list-style-type: none"> <li>– inadequate emotional specific reaction;</li> <li>– emotional and moral bewilderment;</li> <li>– widening of emotional thriftiness area;</li> <li>– professional duties reduction.</li> </ul>

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Exhaustion	<ul style="list-style-type: none"> <li>– emotional deficit;</li> <li>– emotional distance;</li> <li>– personal distance (depersonalization);</li> <li>– psychosomatic and psychovegetative disturbance.</li> </ul>

With the help of the pointed testing technique we can get complete information on whether the person has limitations in contacting other people and how these limitations are expressed. The proposed technique gives a detailed picture of emotional burnout syndrome. It helps see its main symptoms that can influence the stress formation. When we handle the semantic content and quantitative indices summed up for various stages of burnout syndrome formation we can give rather an extensional description of a personality and, just as important, plan individual measures of prevention and psychological correction (Shrainer, 1993).

Second technique is a questionnaire to measure professional burnout based on the model by K. Maslach and S. Jackson. The questionnaire contains 22 statements about feelings and emotions that are connected with performance of work. The questionnaire consists of three subscales: 1) emotional exhaustion – feeling wasted and weak; 2) depersonalization – dehumanization of relations with other people (being shallow-hearted, rude and cynical); 3) reduction of personal achievements – underestimation (Vodopianova & Starchenkova, 2008).

Emotional exhaustion shows in feeling emotionally overtensed and wasted, having exhausted personal emotional resources. A person feels that he cannot be devoted to work as strong as before. There appears a sensation of emotional “dimness”, “dullness”, in harder cases – emotional breakdowns. V. V. Boyko’s exhaustion scale can also represent results on the similar topic.

Depersonalization is a tendency to develop negative, heartless, cynical attitude to recipients. Communication becomes impersonal and formal. Appearing negative affirmations can first have latent character and be expressed in inner restricted irritation that comes out with time in the form of irritation outbursts or conflict situations. Personal achievements: reduction of personal achievements manifests as decrease of the sense of competence in work, dissatisfaction with oneself, decrease of the activity value, negative self-perception in professional aspect. Noticing negative feelings or manifestation inside a person blames himself. His professional and personal self-esteem becomes lower. He gets a feeling of inadequacy and indifference to work. High values on subscales of emotional exhaustion and depersonalization and low value on the subscale of personal achievements prove the presence of high level burnout.

With the help of test “Artist or Thinker” it is possible to reveal an individual’s aptitude to image or logic thinking, i.e. this technique determines dominating development of corresponding right or left brain hemisphere. The ratee is offered 10 statements, each of them should be applied to the ratee and according to his “self” rank it from 0 to 10 (Karelin, 2007).

The sample group was divided into 2 equal subgroups according to the specificity of the teachers’ professional activity. The first group included humanitarian subjects lecturers, the second group included engineering subjects lecturers.

Fig. 1 represents the data received with the help of “Artist or Thinker” technique.

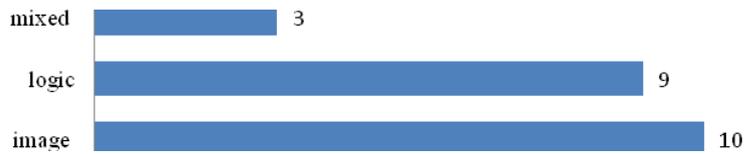


Fig. 1. Types of thinking among teachers of humanitarian subjects and engineering subjects

The figure shows that 19 lecturers have the type of thinking coinciding with the specificity of professional activity. Thus, image way of thinking is typical of humanitarian subjects teachers (10 people), and for teachers of engineering subjects logic thinking is characteristic (9 people). Three more teachers have mixed type of thinking.

The analysis of the results according to V. V. Boyko’s technique showed that among stages of emotional burnout there are forming and already formed stages. All these data are represented in Figs. 2, 3 and 4.

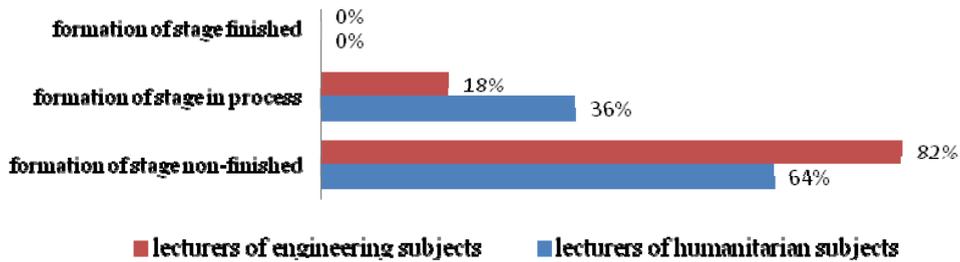


Fig. 2. Stage “Tension” among teachers of humanitarian subjects and engineering subjects

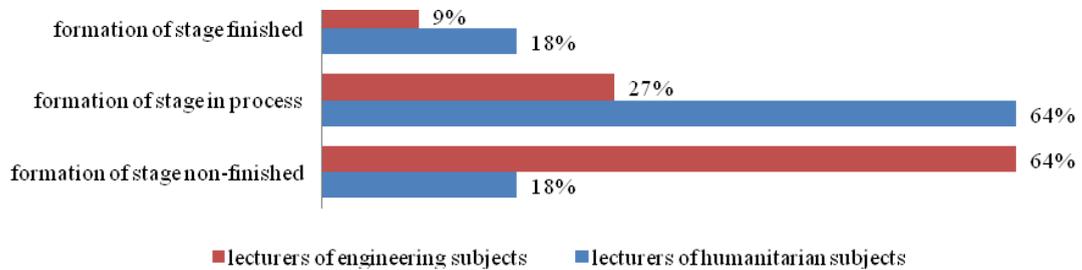


Fig. 3. Stage “Resistance” among teachers of humanitarian subjects and engineering subjects

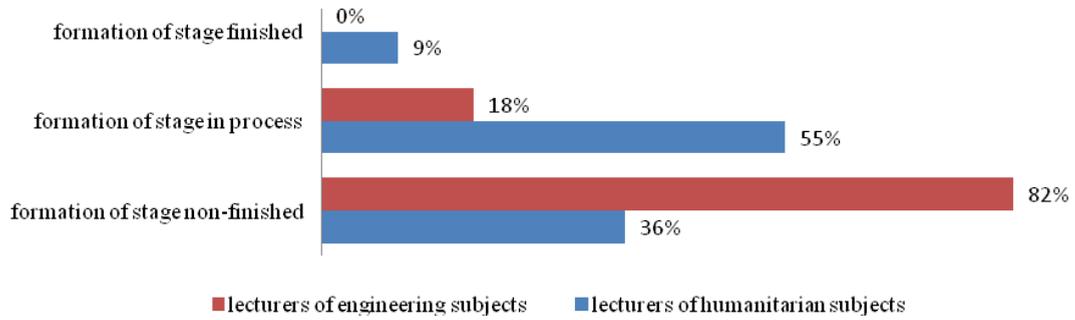


Fig. 4. Stage “Exhaustion” among teachers of humanitarian subjects and engineering subjects

The above given diagrams show that 36% of lecturers of humanitarian subjects and 18% of lecturers of engineering subjects have the stage “Tension” in process of formation. 18% of lecturers of humanitarian subjects have the stage “Resistance” formed and 64% more have this stage in process of formation. This stage is also formed in 9% of lecturers of engineering subjects, and 27% more have this stage in process of formation. The stage “Exhaustion” is formed in 9% of lecturers of humanitarian subjects, 55% more have it in process of formation. 55% of lecturers of engineering subjects also have this stage in process of formation.

The received data allow making a conclusion that lecturers of humanitarian subjects are more subject to emotional burnout than lecturers of engineering subjects. It is connected with the fact that people with logic type of thinking react in a more mobile way to various situations. They first try to analyze everything, build some chronology, establish control over life situations. People with image way of thinking, vice versa, are more emotionally sensible, they try to feel everything deeply, imagine, put themselves in the other person’s place.

To estimate the credibility of differences we used Mann-Whitney U-test, because one scale is nominal, another scale is quantitative and the data inside the compared subgroups were abnormally distributed. The factor is specificity of professional activity of the subjects. The response is emotional burnout. Level of significance 0.009 is less than 0.05 which means that the factor influences the response, i.e. the specificity of professional activity of the subjects has an impact on the development of emotional burnout.

It was curious to compare the representatives of the both subgroups with emotional burnout symptoms expressed to maximum extent (Fig. 5).

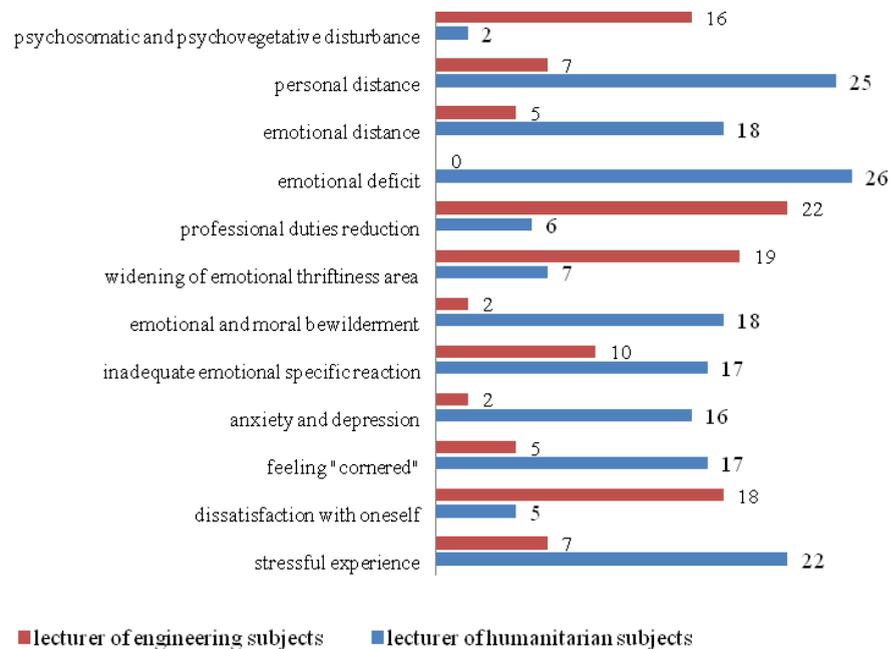


Fig. 5. Comparison of emotional burnout symptoms expressed to maximum extent among teachers of humanitarian subjects and engineering subjects

As it follows from Fig. 5, emotional burnout symptoms among representatives of humanitarian and engineering directions are distributed in different ways. Dominating emotional burnout symptoms in the humanitarian subgroup at the "tension" stage are stressful experience, feeling "cornered", anxiety and depression. At the "resistance" stage such symptoms dominate as inadequate emotional specific reaction and emotional and moral bewilderment. Emotional deficit, emotional and personal distance are prevalent at the "exhaustion" stage. All the above mentioned symptoms are characterized by growing realization of stressful factors as well as exclusion of emotions from professional activity. A professional inadequately hides emotions, restrains emotional give-back on the account of selective reaction during communication at work. He understands that he cannot help the subjects of his activity in an emotional way, he cannot show understanding, sympathize or empathize them, respond to situations that must touch, provoke, increase intellectual, moral or cognitive give-back. There appears the need for self-justification, disappointment in oneself, in profession or place of work. And it causes energetic tension in the form of survival through contextual and personal anxiety.

The distribution of emotional burnout symptoms in engineering subgroup is as follows: at the "tension" stage dissatisfaction with oneself dominates; at the "resistance" stage widening of emotional thriftiness area and professional duties reduction prevail; at the "exhaustion" stage psychosomatic and psychovegetative disturbances dominate. The above mentioned symptoms show on the level of physical and mental condition. Due to failures or disability to influence the stressful circumstances a person usually feels dissatisfied with oneself, with his profession or occupied position, particular circumstances; his energy is not directed outside, but on himself. Consequently, the person may try to ease or cut down the duties that require emotional expenditure beyond professional activity: in communication with family or friends.

It was revealed that among the symptoms of the above mentioned stages there are forming, formed or non-formed symptoms as well as symptoms that dominate at some stage or in the whole emotional burnout syndrome.

In general these data can be represented in the form of tables:

Table 2. Distribution of emotional burnout symptoms among teachers of humanitarian subjects and engineering subjects at the "Tension" stage

Experience of stressful circumstances	Non-formed	73%	91%
	In process of formation	18%	9%
	Formed	9%	0%
<b>Symptoms of the "Tension" stage</b>		<b>Lecturers of humanitarian subjects</b>	<b>Lecturers of engineering subjects</b>
Dissatisfaction with oneself	Non-formed	91%	82%
	In process of formation	9%	0%
	Formed	0%	18%
Feeling "cornered"	Non-formed	64%	82%
	In process of formation	9%	9%
	Formed	27%	9%
Anxiety and depression	Non-formed	55%	91%
	In process of formation	27%	9%
	Formed	18%	9%

Table 3. Distribution of emotional burnout symptoms among teachers of humanitarian subjects and engineering subjects at the "Resistance" stage

<b>Symptoms of the "Resistance" stage</b>		<b>Lecturers of humanitarian subjects</b>	<b>Lecturers of engineering subjects</b>
Inadequate emotional reaction	Non-formed	37%	55%
	In process of formation	18%	18%
	Formed	46%	27%
Emotional and moral bewilderment	Non-formed	27%	82%
	In process of formation	18%	9%
	Formed	55%	9%
Widening of emotional thriftiness area	Non-formed	82%	64%
	In process of formation	9%	18%
	Formed	9%	18%
Professional duties reduction	Non-formed	55%	36%
	In process of formation	0%	9%
	Formed	45%	55%

Table 4. Distribution of emotional burnout symptoms among teachers of humanitarian subjects and engineering subjects at the "Exhaustion" stage

<b>Symptoms of the "Exhaustion" stage</b>		<b>Lecturers of humanitarian subjects</b>	<b>Lecturers of engineering subjects</b>
Emotional deficit	Non-formed	45%	73%
	In process of formation	37%	9%

Emotional distance	Formed	18%	18%
	Non-formed	18%	55%
	In process of formation	64%	45%
Personal distance	Formed	18%	0%
	Non-formed	45%	82%
Psychosomatic and psychovegetative disturbances	In process of formation	37%	18%
	Formed	18%	0%
	Non-formed	82%	45%
	In process of formation	9%	18%
	Formed	9%	37%

To maintain the research integrity we used the questionnaire by K. Maslach and S. Jackson abridged by N. E. Vodopianova. The data received with the help of this questionnaire are represented in Fig. 6.

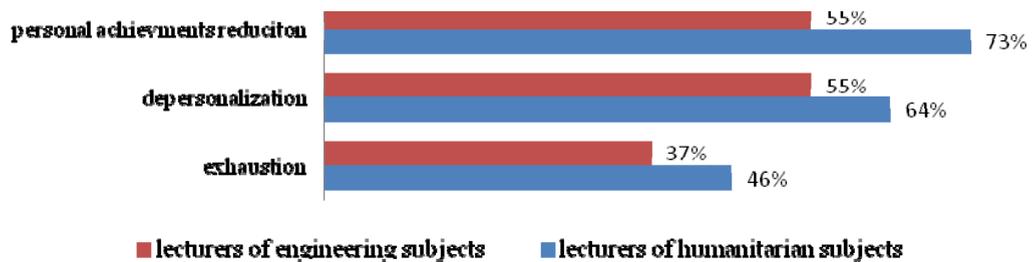


Fig. 6. Distribution of emotional burnout stages among teachers of humanitarian subjects and engineering subjects

The figure shows that humanitarian lecturers are more subject to emotional burnout than engineering subjects lecturers. 46% of humanitarian subjects teachers are subject to exhaustion, 54% - to depersonalization and 73% - to personal achievements reduction. Engineering subjects teachers have lower indices: 37% of them are subject to exhaustion and 55% - to depersonalization and personal achievements reduction

To estimate the credibility of differences we used Mann-Whitney U-test, because one scale is nominal, another scale is quantitative and the data inside the compared subgroups were abnormally distributed. The factor is specificity of professional activity of the subjects. The response is emotional burnout. Level of significance 0.005 is less than 0.05 which means that the factor influences the response, i.e. the specificity of professional activity of the subjects has an impact on the development of emotional burnout.

The research showed that the emotional burnout syndrome is on the high level; each stage has dominating symptoms (with a value higher than 20 points). Each stage of emotional burnout is either in process of formation or it is already formed. The teachers cut down the duties that require emotional expenditure, they try to economize their emotions and react to various situations in a selective way. The lecturers also economize their emotions outside professional activity. The analysis of the teachers' emotional burnout level showed that the humanitarian subjects lecturers have higher indices of emotional burnout, than the engineering subjects lecturers. Humanitarian teachers realize stronger the stressful factors of professional activity. They get more tense, irritated, get in despair and indignation. They suppress complete or partial loss of interest to the subject of professional activity more often. Among teachers of engineering subject oversaturation with working contacts prevails. So, they tend to economize the emotions not only in the professional area, but also outside work. Their physical and mental health changes to a larger degree. This proves that psychological defense does not cope with its functions and emotional energy is redistributing between other subsystems of an individual.

To conclude, the studies that we performed extended the existing ideas of the problem of "emotional burnout" syndrome development in the pedagogical sphere. The materials of the research create opportunities to work out

differential complex programmes of correction and prevention of "emotional burnout" syndrome among higher school teachers, taking into account humanitarian and engineering type of their activity.

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