Emotional burnout in psychology students and its correction using cognitive-behavioral therapy

Zhanna Akshalova[1]
Klara Abisheva[2]
Serik Zhantikeyev[3]
Nazilya Irgebayeva[4+]
Marzhan Akosheva[5]

[1]*Department of Graduate School of Education, L.N. Gumilyov Eurasian National University, Astana, Republic of Kazakhstan.*
[1]*Email: akmar2809@mail.ru*
[2,3,4]*Department of Social, Humanitarian Sciences and Linguistic Disciplines, "Turan-Astana" University, Astana, Republic of Kazakhstan.*
[2]*Email: abishevakm@mail.ru*
[3]*Email: saniya.kaparova.69@mail.ru*
[4]*Email: akhmetovab2025@mail.ru*
[5]*Department of Kazakh and Russian Languages, S. Seifullin Kazakh Agrotechnical Research University, Astana, Republic of Kazakhstan.*
[5]*Email: m.akosheva@kazatu.edu.kz*

(+ Corresponding author)

ABSTRACT

Emotional burnout among psychology students has specific characteristics. 1) Background: This condition results from the nature of the profession, which involves constant interaction with people, requiring sociability, empathy, and a strong professional identity. There are also particular features of emotional burnout in junior and senior psychology students. The differences in burnout between students at various academic levels have not been sufficiently studied. Additionally, methods for preventing mental health issues in students using cognitive-behavioral therapy have not been extensively researched. This study aims to examine the specific aspects of emotional burnout in junior and senior students and to correct their mental state through cognitive-behavioral therapy. 2) Methods: The research employed a pedagogical experiment, Spearman correlation analysis, Holland's Vocational Interest Test, cognitive-behavioral therapy, Rational Emotive Behavioral Therapy (REBT), Cognitive Behavioral Art Therapy (CBAT), and cognitive therapy, which focuses on the connection between thoughts, feelings, and behaviors. 3) Results: The study found that emotional burnout in junior students is primarily associated with academic reasons, whereas in senior students, it relates to professional identity and competence in psychological practice. 4) Conclusion: The novelty of this research lies in the comparative analysis of the phases of emotional burnout among psychology students, identifying the causes of their mental states, and applying the latest cognitive-behavioral therapy methods.

Contribution/ Originality: This study contributes to the literature on student burnout. It uses new estimation methodologies: pedagogical experiments, Spearman correlation analysis, Holland's vocational interest test, REBT, CBAT, and cognitive therapy. The article's primary contribution lies in its comparative study of the causes of student burnout and the development of cognitive-behavioral therapy approaches.

1. INTRODUCTION

The problem of professional deformations, in particular emotional burnout, is one of the pressing issues related to the training of teacher psychologists. Researchers classify the future profession as stressful, as it causes emotional tension, which manifests itself in a decrease in the stability of mental functions. Emotional burnout is defined by

scientists as a psychological and behavioral disorder that occurs when students are uninterested in acquiring knowledge and lack motivation to learn. It can manifest itself in the form of emotional exhaustion, refusal to learn, and low personal achievements [1]. Such academic burnout can affect students' academic performance, their physical and mental health. Such burnout is even known as a harbinger of depression [2]. The main factors of emotional burnout include academic adaptation, regulation of learning behavior, internal motivation for learning, satisfaction with the chosen training program, and academic performance, as well as adaptation to the future profession of a psychologist.

A significant increase in emotional burnout syndrome occurs among third-year students, which is associated with factors influencing the transition from the field of study to the professional sphere [3]. Emotional burnout of educational psychologists has its own characteristics. Factors that influence the deterioration of their emotional state include: a large amount of educational information received, a high level of demands from teachers, loss of motivation, lack of free time due to the performance of a large amount of independent work, disappointment in the future profession, low professional competence, underdeveloped professional consciousness, and awareness of inconsistency with the type of socionomic personality. I.V. Kondratenko argues that students of the profession of a psychologist, more often than other people, face depression and emotional burnout [4].

According to T.L., Zueva states that the causes of emotional burnout include a reduction in the social circle, a desire for self-isolation, the acquisition of bad habits, procrastination, and a lack of motivation [5]. In our opinion, all of these listed symptoms leading to emotional burnout can be attributed to the consequences of academic adaptation in the junior years. In the third and fourth years, the deterioration of the emotional state is associated with their inclusion in professional activities. The profession of a psychologist requires awareness of such professional qualities inherent in the specialty as: 1) the student's compliance with the "professional identity," i.e., identifying whether the student has a social personality type; 2) the presence of a formed professional consciousness in senior students; 3) knowledge of the mechanisms of professionalization and competence development; 4) the level of development of professional reflection; 5) the formation of value attitudes.

Researchers note that during the period of professionalization, the level of emotional burnout among senior students increases, since the greatest development in terms of intensity is acquired by "resistance," a phase that contributes to the greatest expenditure of energy and emotional resources of the student [3]. Senior psychology students experience symptoms of anxiety and depression, which indicate experiencing difficult circumstances associated with professional and educational activities. Signs of a crisis state, a decline in self-confidence as psychologists, changes in emotional attitude towards professional activities and training, and a decrease in the professional identity indicator are revealed. Emotional exhaustion is also noted due to the reduction of personal achievements, manifested in a tendency to negatively assess oneself, one's professional achievements, and a decrease in the assessment of one's competence.

There is also a crisis of self-determination in professional activity, manifested in the inability to form a professional thinking of a psychologist, consisting both in the need to understand the internal mechanisms and laws of personality development as a whole, hidden from direct observation, and individual mental processes and states of a person, emotional experiences, relationships, interests, causes of various "psychological problems", insufficient development of psychological competencies.

The structure of the latter includes: 1) knowledge of models of prosocial behavior, which are determinants of the social behavior of an individual. These include substantive (personal) and dynamic, situational characteristics, which together determine the direction of the personality, norms.

Social norms of prosocial behavior include: 1) the norm of social responsibility, the norm of reciprocity, the norm of justice, the norm of cost-reward [6]; 2) psychological knowledge; 3) socionomic knowledge, which involves the manifestation of a deep interest in people, patience in communicating with them, sensitivity to the attitudes and behavior of other people, emotional stability, the ability to inspire trust in others, and respect for the rights of others.

Senior psychology students are also depressed by the loss of significance of factors such as interest in the profession and the decrease in the importance of the value-based "ideological" aspect that influences the choice of a profession aimed at helping people. Students in their 3rd to 5th years more often indicate that their professional choice was random [7].

As we can see, the opinions of scientists regarding the causes and situations of emotional burnout among junior and senior psychology students are considered different, are not systematized, and are not organized. Therefore, our article aims to study the stages of emotional burnout of students in the psychology departments of universities, specifically identifying which are associated with adaptation to academic activities and which are related to insufficient preparation for future professional activities.

The purpose of this article is to conduct a comparative analysis of the emotional burnout of junior and senior students and to recommend measures aimed at reducing the level of emotional burnout during a formative experiment using cognitive behavioral therapy and self-regulation.

Research hypothesis: The experiment will be effective in reducing students' emotional burnout if the level of emotional burnout is identified, the formative experiment corrects the students' emotional state using cognitive behavioral therapy and self-regulation, and a comparison is made of the results of burnout reduction in the control and experimental groups.

To achieve the goal, it is necessary to solve the following tasks: 1) to establish which stages of emotional burnout are typical for junior students; 2) to find out what factors contribute to emotional burnout; 3) to identify methods that can help prevent such psychological states.

The article's originality lies in its first comparative study of emotional burnout among junior and senior psychology students. This study focuses on the causes of academic burnout, including asocial behavior and procrastination. Senior students express concerns about insufficient professional preparation and a low level of professional knowledge. The article's novelty also lies in its attempt to draw educators' attention to the insufficient training of psychologists and to apply combined methods of cognitive behavioral therapy and self-regulation.

2. METHODOLOGY AND METHODS

In the course of the study, we used a pedagogical experiment and a package of diagnostic methods: the questionnaire "Professional-Emotional Burnout" [8] in our adaptation. Methods of prevention and correction of the emotional state of students were also used: REBT (rational-emotional behavioral therapy) [9], CBAT (method of cognitive-behavioral art therapy), the essence of which lies in the use of art objects during the creation of psycho-formations and self-disclosure by students [10], the method of cognitive therapy "from thought to feelings and behavior" [11] the method of self-regulation using cognitive-matrix blocks [12].

The methodological paradigm of the study is integrative. It is based on the principle of interdisciplinarity, where knowledge and methods from various sciences are used to study a complex object. Our work integrates knowledge from sociology, psychology, and cognitive linguistics.

2.1. Sampling Procedure

The study was quasi-experimental in nature, with a between-group comparison of junior (1st–2nd) and senior (3rd–4th) students, as well as a within-group analysis before and after cognitive behavioral therapy. The study was conducted at "Turan-Astana" University in the Republic of Kazakhstan. Participants were recruited using purposive convenience sampling: recruitment announcements were made during classes and in student chat rooms, after which volunteers signed up. The total sample size was 120 participants, including 60 junior and 60 senior students. The sample included 80 females and 40 males, with participants' ages ranging from 17 to 23 years.

Inclusion criteria were: first- to four-year students majoring in psychology and pedagogy, consent to participate and participate in data processing, and the ability to attend all cognitive behavioral therapy sessions and complete

pre- and post-intervention testing. Exclusion criteria were undergoing individual psychotherapy at the time of the study, the presence of acute mental disorders requiring specialized care, as well as refusal to provide informed consent, or missing more than 30 percent of sessions.

The study did not include a control group due to the educational context and ethical constraints: it was deemed undesirable to deprive students of preventive care in the face of identified distress. Therefore, the study was designed as a cohort comparison (years 1–2 versus years 3–4) with additional analysis of changes within each cohort.

2.2. Duration and Frequency of Cognitive-Behavioral Therapy

A rational-emotive behavioral therapy protocol was used for junior students. The intervention lasted six weeks, with sessions held once a week. Each group session lasted 60 minutes and included 30 minutes of cognitive work to identify and challenge irrational beliefs, as well as 30 minutes of behavioral exercises and homework. Homework included maintaining belief charts, completing behavioral experiments, and self-reporting, taking approximately 10-15 minutes per day.

For senior students, cognitive-behavioral art therapy was used in combination with goal-setting coaching techniques. The intervention also lasted six weeks, with sessions held once a week for 60 minutes. Each session included 30 minutes of art therapy using visualization and art materials, as well as 30 minutes of goal setting using the SMARTER model (specific, measurable, attainable, relevant, time-bound, evaluation, and revision). Homework included keeping a goal journal and completing self-regulation and relaxation exercises.

2.3. Statistical Methods

Two additional statistical methods were used to analyze the data.

First, descriptive statistics were used. Means, standard deviations, medians, and interquartile ranges were calculated for all key variables. This provided a general understanding of the distribution of burnout scores among junior and senior students before the intervention.

Second, a cross-group comparison was conducted between junior and senior students at the pre-intervention point. To test differences between two independent samples, a Student's t-test for independent samples was used in cases of normal data distribution. In cases where the distribution was not normal, the nonparametric Mann-Whitney test was used. The significance level was set at 0.05.

2.4. Instrument Reliability

The "Professional (Emotional) Burnout" questionnaire, adapted by N. E. Vodopyanova and E. S. Starchenko, was used to assess emotional burnout [8]. The internal consistency of the scales was tested using Cronbach's α coefficient. In our study, the overall reliability was 0.86, indicating high internal consistency. For individual subscales, α values ranged from 0.78 to 0.82, also indicating an acceptable level of reliability.

2.5. Ethics Certification

The study was approved by the local ethics committee of "Turan-Astana" University. All participants signed informed consent for participation in the study and data processing. Participation was voluntary, without financial incentives, and each student had the right to withdraw at any stage without negative consequences. Data confidentiality was ensured: results are presented in aggregated form, and only the research team had access to the raw data. Therefore, the study utilized a clearly structured sampling procedure and a cognitive-behavioral intervention, described inclusion and exclusion criteria, and confirmed the reliability of the instruments used. Despite the lack of a control group, the design allowed for the identification of differences between junior and senior students and the evaluation of the effectiveness of the methods used. Ethical standards were met, ensuring the validity and reliability of the results.

3. LITERATURE REVIEW

Burnout is defined as physical, emotional, and mental exhaustion caused by prolonged exposure to emotionally stressful situations [13].

And Längle considers emotional burnout as one of the types of depression that occurs without trauma and organic disorders, only due to a partial loss of life values. [14].

V.V. Boyko understands emotional burnout as a mechanism of psychological defense, which consists of the complete or partial exclusion of emotions [15].

Researchers also define symptoms and stages of emotional burnout:

1) Symptoms: emotional exhaustion, depersonalization, dehumanization, negativization of the image of oneself as a person and a professional, and reduction of professional skills [16].

2) Stages of emotional burnout. K. Maslach believes that emotional burnout develops over three stages: emotional (or physical exhaustion); depersonalization (emotional sensation manifests itself in emotional overstrain of emotional resources).

3) Reduction of personal achievements [17].

Vodopyanova and Starchenkova [8] also characterizes these three stages of emotional burnout, defining emotional exhaustion as a stage that manifests itself in emotional tension, a feeling of lack of strength until the end of the working day; depersonalization manifests itself in the appearance of a feeling of irritation towards people around you; a reduction in personal achievements manifests itself as a result of a sharp drop in a person's self-esteem [8].

The study of specialized literature describing the emotional burnout of students during their studies at an educational institution and preparation for professional activity has its own characteristics. In our opinion, the phase of their emotional burnout - "emotional exhaustion" - can be attributed to a later phase. This is due to the fact that many researchers, speaking about the first phase of emotional burnout, associate its first phase with academic burnout of junior students, when negatively colored emotions (anxiety, tension, worries, stress, depression) arise as a result of various educational and psychological problems. Thus, Finnish scientists note the relationship between student burnout and their learning and achievement motivation [18]. Another important factor in academic burnout is procrastination in studies, which increases the likelihood of burnout, emotional disorders, and academic failure [19].

Researchers have proposed effective cognitive-behavioral therapy methods for various disorders. For example, I.V. Ganzin suggests using cognitive-behavioral therapy for obsessive-compulsive disorder, where patients develop compulsive behaviors, obsessive actions.

To eliminate such conditions, cognitive-behavioral therapy should be employed. This requires psychotherapeutic work throughout the illness. In the second stage, typical signs of recovery are identified [20]. K.V. Schneider notes that cognitive-behavioral therapy helps with hypochondria, bulimia, and agoraphobia [21]. Other studies also provide the following point of view: However, it is largely unknown how personality characteristics and work circumstances affect work functioning when facing an affective disorder. Given the high burden of affective disorders on occupational health, we investigate these issues in the context of affective disorders and absenteeism from work [22].

The reasons for the experiences of junior students are problems related to professional identity and disappointment in the chosen profession [23]. Crises in first-year students may be caused by stress associated with an increase in workload and fear of entering the adult world. In senior years, we can observe phases of resistance and emotional exhaustion, when students, during their professional development, discover their unpreparedness for the profession, specifically, insufficient formation of professional self-awareness, underdevelopment of professional competence, and weak communication and sociological skills of a psychologist [24] lack of sustainable motivation for the chosen profession [25] an undeveloped image of a professional, a discrepancy between the student and his professional identity [26].

4. RESULTS AND DISCUSSION

To obtain information about the phases of emotional burnout of junior (1–2) and senior (3–4) year psychology students, as well as to correct this psychological state, we conducted a pedagogical experiment in three stages: ascertaining, formative, and controlling.

The study design includes the objectives, methods, participant composition (male and female), and age. Methods: The purpose of the pedagogical experiment is to identify the level of emotional burnout in junior and senior students studying to become educational psychologists and to address it using cognitive behavioral therapy and self-regulation. The experiment is conducted over three stages. The purpose of the ascertainment experiment is to determine the level of emotional burnout in junior and senior psychology students.

The base for the experiment was the "Turan-Astana" University, Kazakhstan. 120 people took part in the experiment. Of them, 60 are 1–2-year students; 60 are senior students. Of these, 80 are girls, and 40 are boys. The future profession of the respondents is educational psychology. Students were aged 18-19 and 21-22. Research methods included questionnaires, therapy using the technique of challenging irrational thoughts, and integrating behavioral therapy and self-regulation. The formative experiment utilized cognitive, behavioral, and self-regulation therapies aimed at reducing emotional burnout. During the ascertaining experiment, a survey was conducted with 1–2, 3–4 year students. 20 questions were asked; here are some of them. Table 1 presents the research part of the questionnaire. Table 2 presents the phases of emotional burnout in senior students.

Table 1. Research part of the questionnaire.

No.	Questions	Burnout phase (For junior students)											
		1. Voltage phase								2. Phase of emotional instability			
		Anxiety, 8 points		Experiences, 9 points		Frustration, 10 points		Emotional rigidity, 9 points.		Stress, 10 points		Depression, 11 points	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	Do you experience anxiety while studying? What are the reasons?												
	a) Academic workload	+											
	b) A lot of independent work	+											
2.	What is the cause of the stress you experience?												
	a) Perfectionism is the desire to be better than everyone else.			+									
	b) The formation of irrational thoughts (there should be no failures in life)			+									
	c) Cognitive attitudes:												
	1) Resentment			+									
	2) Depression												
	3) Shame												
3.	Do you worry about procrastination? What are the reasons?												
	a) Lack of confidence in success					+							
	б) Putting things off for a long time					+							
4.	Do you experience signs of antisocial behavior?												
	a) Reduction of social circle							+					
	b) Desire for self-isolation							+	-				
	c) Conflict												
5.	Do you meet the characteristics of a socionomics personality?												
	a) Goodwill									+			
	b) Empathy									+		+	
	c) Communication skills									+		+	
6.	Are you motivated to pursue a profession in?												
	a) Psychologist											+	
	b) Teacher												
	c) Educational psychologist											+	

Table 2. Phases of emotional burnout in senior students.

No.	Questions	Resistance phase				Depersonalization phase						Emotional exhaustion phase	
		Depression		Apathy		Dissatisfaction with one's own achievements		Anxiety		Stress		Depression	
		12 p.		10 p.		15 p.		16 p.		14 p.		15 p.	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
1	Do you feel depressed due to a lack of professional identity? What are the reasons?												
	a) Inconsistency with the socionomic personality type												
	b) Emotional instability	+											
	c) Isolation	+											
	d) Indecisiveness	+											
	e) Uncommunicativeness	+											
	k) Lack of empathy for the interlocutor	+											
	l) Showing interest in people			+									
2.	Have you developed professional self-awareness, and how does it manifest itself?												
	a) Awareness of one's professional abilities						+						
	b) Formation of a professional self-image								+				
	c) Formation of professional stereotypes			+			+						
3.	Have you developed your professional competence?												
	a) Possession of professional knowledge										+		
	b) Development of principles, skills, and ethical communication standards			+									
4.	Is professional motivation sustainable?												

	a) Lack of professional motivation							+					
	b) Interest in the profession of psychologist								+				
	c) Professional orientation of a deformed nature							+					
5.	Have you developed into a self-actualizing individual?												
	a) Improving your professional knowledge and skills										+		
	b) Engaged in scientific work										+		
	c) Acquired skills in working with people												
6.	What is the cause of your emotional stress?												
	a) Instability of professional motivation							+					
	b) In the manifestation of a stress reaction to emotional-communicative activity	+						+					
	c) Anxiety about future activity	+											
	d) Emotional stress during the internship											+	
	e) Negative attitude towards the future	+										+	

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The analysis of the results of the survey of junior (1–2) and senior (3–4) students using the method of diagnosing the level of emotional burnout by V.V. Boyko showed a discrepancy between both the phases of emotional burnout and the levels of emotional burnout [15]. V.V. Boyko believes that emotional burnout is achieved at a level of 120 points [15]. The researcher also indicated the assessments of the phases: a score of 36 characterizes an unformed phase, a score of 37–69 characterizes a forming phase, and a score of 61 and above characterizes a formed phase. During the survey, junior and senior students not only correlated the signs of their behavior with their mental and emotional state but also assessed the phases and the level of emotional burnout in points.

The average data obtained from respondents indicates an insufficiently developed level of emotional burnout among junior psychology students, 57 points. Their emotional burnout occurs during two phases: the tension phase and the emotional instability phase. The main causes of occurrence are factors related to educational activities and initial adaptation to the profession of a psychologist: perfectionism, procrastination, association, and conscious or random choice of motivation. In senior years, there is a greater dependence of the students' emotional state on their awareness of the degree of professional preparedness for the specialty. The feeling of unpreparedness for the future profession contributes to a lack of resistance to depression and apathy (the resistance phase). Depersonalization is observed, expressed in dissatisfaction with oneself and the transfer of negative assessments to one's personality. Stress and depression are noted among students due to the awareness of the inadequacy of their personality to their professional identity. Senior students have a higher level of emotional burnout – 88 points.

Correlation analysis of emotional burnout and factors leading to such mental states in junior (1–2) and senior (3–4) years showed a positive correlation between these variables. In junior years, the factors of emotional burnout include: perfectionism, procrastination, asociality, professional motivation/lack of motivation. These factors contribute to the emergence of symptoms of emotional burnout.

4.1. Interpretation of the Spearman Coefficient

The Spearman coefficient (designated as Rs) is an indicator of the strength and direction of the relationship between two ranked (ordinal) variables. It measures how much one variable monotonically increases or decreases with the other. Table 3 presents data on the relationship between pairs of the studied characteristics (emotional burnout, causes) of junior psychology students using the Spearman rank correlation method, Rs.

Table 3. Data on the relationship between pairs of the studied characteristics (emotional burnout, its causes) of junior psychology students using the Spearman rank correlation method, Rs.

Meaning Rs	Interpretation of the connection
+1.00	Completely positive (Direct) relationship
+0.70 — +0.99	Strong positive relationship
+0.40 — +0.69	Moderate positive relationship
+0.10 — +0.39	Weak positive relationship
-	No relationship
–0.10 — –0.39	Weak negative relationship
–0.40 — –0.69	Moderate Negative Relationship
–0.70 — –0.99	Strong Negative Relationship
-1.00	Completely Negative (Inverse) Relationship

For example, in students, the level of burnout increases along with the level of depression; then, the higher the score for one feature, the higher for the other, and Rs will be positive and close to 1.0. If, with the growth of burnout, empathy decreased, for example, this would give a negative Rs.

The survey involved 60 respondents, junior psychology students. A total of 120 answers were received for the first question, "yes"; 120 for the second question, "yes"; 60 for the third question, "yes"; 120 for the fourth question, "yes"; 180 for the fifth question, "no"; and 120 for the sixth question, "yes." A total of 720 answers were received. Of these, 500 answers were from girls and 220 from boys.

Table 4. Changes in burnout levels with increasing depression levels.

No.	Sign 1	Sign 2	The presence of a relationship	Rs*
1	Emotional burnout	Academic workload / Anxiety	Weak	0.42
2	Emotional burnout	Perfectionism / Worries	Moderate	0.55
3	Emotional burnout	Procrastination / Frustration	Moderate	0.50
4	Emotional burnout	Asociality/Emotional rigidity	Moderate	0.58
5	Emotional burnout	Motivation/Lack of motivation, stress	Weak	0.40
6	Emotional burnout	Empathy, sociability / Depression	Moderate	0.53

According to Table 4, the correlation analysis shows that emotional burnout in junior students does not yet have a profound destructive impact, but is already associated with signs of loss of energy, fatigue, and stress. This indicates that it is important to promptly identify and support students in the early stages.

A general relationship between signs 1 and 2 was also established, which is Rs ≈ 0.5 (moderate relationship). Table 5 presents data on the relationship between pairs of studied characteristics (emotional burnout, causes) of senior psychology students using the Spearman rank correlation method.

Table 5. Data on the relationship between pairs of studied characteristics (Emotional burnout and its causes) of senior psychology students using the Spearman rank correlation method.

No.	Sign 1	Sign 2	The presence of a relationship	Rs
1	Emotional burnout	Depression	High	0.85
2	Emotional burnout	Apathy	High	0.78
3	Emotional burnout	Reduction in personal achievements	High	0.75
4	Emotional burnout	Stress	High	0.81
5	Emotional burnout	Crisis	High	0.83

The survey involved 60 respondents, senior psychology students.

A total of 240 "yes" answers were received to the first question, and 120 "no" answers.

180 "no" answers to the second question, 120 "no" answers to the third question, 120 "no" answers to the fourth question, 180 "yes" answers to the fifth question, 120 "no" answers to the sixth question, 240 "yes" answers to the sixth question, 60 "no" answers to the sixth question.

A total of 1,260 answers were received.

The "no" answers to the questions were also positive statements. Of these, 800 answers were given by girls, and 460 by boys.

According to Table 4, the correlation analysis shows that senior students have a very high positive correlation between emotional burnout and states of psychological stress. This reflects the formed stage of burnout, which is dominated by:

- A feeling of oppression and depression; - apathy, decreased motivation.
- Reduction of personal achievements (Professional crisis).
- High stress level.
- Awareness of personal inadequacy and low professional suitability.

The overall coefficient of the relationship between emotional burnout (sign 1) and causes (sign 2) Rs is approximately 0.82, indicating a high relationship.

Systemic measures of psychological support, career guidance support, and supervision at the final stages of training are recommended.

At the second stage of the pedagogical experiment, we used the REBT method (technique of refuting irrational thoughts) [9] to eliminate perfectionism and procrastination. Psychology students were asked to fill out a table to identify their irrational beliefs.

Table 6. Irrational beliefs of psychology students and their reasons.

Causes of worry, frustration, and stress	Negative cognitive attitudes, mental states
Perfectionism: I must be the best in my studies and in my personal qualities	"I should...", "I'm owed...", "Life should..."
Procrastination: I'm not confident in my success; I lack the strength to succeed	I can't do anything, I'm a loser, frustrated
Asociality: I can't communicate with people; I'm withdrawn, unsociable, and don't feel friendly toward others.	I shouldn't make friends; I'm emotionally rigid.
I chose a poor profession.	My choice of profession is random; I can't be a psychologist.
I don't fit the socionomic personality type; I have no empathy for others and am not sociable.	I shouldn't be sociable and friendly.

The teacher, looking through the tables, is convinced that the junior students have already formed irrational beliefs. Therefore, he convinces the students to change their negative thoughts to positive ones. The students are asked to fill in Table 6 using the REBT technique (the technique of refuting irrational beliefs, adapted by us). Table 7 presents the methodology for refuting irrational beliefs and forming rational beliefs in junior students.

Table 7. Method of refuting irrational beliefs and forming rational beliefs of junior students.

Irrational beliefs	Refutation and irrational beliefs	Forming rational beliefs
I should be better than everyone else; others should envy me.	Why should I be better than others? I don't need to be envied. Envy is evil.	I don't necessarily have to be better than others. Others are no worse than me. I should be no different from others.
Even though I am not confident in my success, I will achieve something.	I must overcome my doubts that I won't succeed. I can handle my insecurity.	I should be confident in my success if I work on myself.
I must be the best among my friends, and have authority among them.	Because of my isolation and conflict, I avoided friends, but I will overcome these traits.	Don't have a hundred rubles, have a hundred friends. That's right.
I will become a social person, I must become a professional, the best psychologist.	I will become a recognized psychologist, although I did not have the signs of a professional identity, but I will master them.	I'm convinced of my calling as a psychologist, and I will strive for professional knowledge and learn the skills of a psychologist.

REBT (rational-emotional behavioral therapy) [8] CBAT (method of cognitive-behavioral art therapy)

One of the methods of cognitive behavioral therapy is CBAT, characterized as "the integration of the creation and/or use of art objects with the ideas of *cognitive behavioral art therapy* to help clients improve and maintain their mental health" [10].

The use of CBAT promotes rethinking and visualization of maladaptive thoughts and the emotions they generate, and expands the set of adaptive knowledge and skills about oneself and the world around.

P.V. Galigabarov suggests combining CBAT with coaching. In this case, the SMARTER coaching technique and the "value orientations" technique of M. Rokeach are used. In our work, the CBAT technique is adapted for psychological education and the self-disclosure of students. For this, they are offered to use list making and applications as a form of CBAT [10]. They need this to identify life and professional values, clarify a significant goal, increase motivation, correction, and prevention of emotional burnout. CBAT technology is implemented over two stages. In the first stage, students (60) answered the questions:

What are your life values?

a) Terminal.

b) Instrumental.

Values are defined as objects, phenomena, and their properties that are needed by an individual as a means of satisfying their needs and interests, are significant for us, and serve as criteria when evaluating an object. Researchers include the following in instrumental professional values: personality (i.e., friendliness, openness, responsiveness), responsibility (sense of duty), sociability, professional competence, and the desire to help people. Terminal (vital) values include: health, love, family, friends, work, and leisure.

4.2. Technology of Implementation

Part one, 30 minutes.

1. Students are briefly informed about cognitive-behavioral art therapy, including instrumental (professional) and terminal (life) values.

2. The teacher-psychologist can provide students with an understanding of these values, offer examples from professional activity, discuss cases and situations where instrumental values were significant for him and others, serve as value guidelines, and assist in entering into value relationships.

The teacher can also give an idea of the life values that are significant to him, for example, the value of "health." This value motivated him to change his physical activity schedule and to give up bad habits.

Then the teacher asks the students to take two sheets of paper and make a list of professional values of a psychologist that are significant in future professional activity, then supplement them with applications taken from various journals of these specialists.

In this case, the list of professional values that are important for students is supplemented with illustrations, visual images that provide a clear idea of the future profession, demonstrating that a psychologist needs to help others, support them, and be responsive.

Students also focus on life values: health, study, friends, and rest. The value "health" is important for students at different stages of emotional burnout. Therefore, by selecting applications related to this value (from medical journals demonstrating mental states of crisis, depression, and stress), students are convinced of the need to prevent such conditions. Thus, for depression, students are offered the method of cognitive therapy, which involves addressing thoughts, feelings, and behavior [11]. According to [11], with a depressive way of thinking, cognitive work should be carried out, which is the core of therapy for depression. This work is conducted during a Socratic conversation, which is performed in four steps.

Step one: Understand negative thoughts.

Step two: Differentiate between a thought-assumption and reality.

Step three: Differentiate between thought-assumptions and find assumption-options.

Step four: Test assumptions with reality. Thanks to targeted questions, students can come to their own conclusions and gradually change the depressive style of thinking.

Part two (20 minutes).

Participants are asked to choose two goals: 1) instrumental, 2) terminal.

The slogan is "I see the goal, I act!" To achieve these goals, psychological education is conducted using the SMARTER coaching technique. To do this, first of all, students provide an explanation of the abbreviation with examples of self-disclosure. At the same time, they do not use a collage. Table 8 presents actions for a specific goal.

Table 8. Actions for a specific goal.

I see the goal – I act! (Sheet 1)	I see a goal – I act (sheet 2)
S (Specific) – become a psychologist. Attach with drawings of a famous psychologist.	S (Specific) – take care of your health (engage in self-regulation of behavior, psychologist training). Attach a drawing of your profession.
M (Measurable) – measurable. Develop professional self-awareness and understand all its levels. Attach. Professional self-awareness diagram.	**M** (Measurable) – get rid of irrational thoughts (4-5). Attach a table of irrational thoughts.
R (Relevant) – significant. Necessary for a cognitive shift: understanding one's own instrumental goals allows one to achieve the goal. Achievable goal – become a competent socionomic individual. Attach: a drawing of a psychologist in a conversation, during a consultation.	**R** (Relevant) – significant. Necessary for a cognitive shift: understanding the value of health as a life goal will help relieve stress. Achieving the goal – relief from stress. Attachment: a drawing of a person under stress.
T (Time-bounded) – time-limited (April 30th of the graduating class). Attach: a drawing of a psychologist in a professional environment.	**T** (Time-bounded) – time-limited (December 31, before professional internship). Attachment: a drawing of a healthy person.

After psychoeducation and a personal example (a collage of a specialist and a sick/healthy person), students are asked to describe both of these goals (instrumental and terminal) as specific actions linked to professional activities and life situations. For visualization, it is suggested to supplement the sheet with three applications symbolizing the achieved goals (instrumental - achieving professional identity, life - maintaining health). We believe that the self-regulation method proposed by V.V. Bogachkov is effective, understanding the matrix as a system represented in the mind of each person by a set of worldview templates (self-identification, beliefs, values, goals, desires, needs, behavior, activity, action) [12].

The author refers to these templates as cognitive-matrix elements. They form the cognitive-matrix blocks of the model.

1) Conceptual, includes self-identification, beliefs, and values.

2) Strategic cognitive-matrix block, includes goals, desires, and needs.

3) Tactical cognitive-matrix block, includes behavior, activity, and action.

Let's consider how these cognitive-matrix mental blocks can be used in the process of self-regulation by students of their beliefs, emotional states, and behaviors.

Students should remember that each cognitive matrix model consists of various combinations of contradictory matrix elements that form a particular state of a person. Let's say a combination of matrix elements contributes to the formation of a stressful state due to the emergence of irrational beliefs in a student. In this case, the student tries to see and realize the contradictions in his thinking at the first level of self-regulation, which consists of the formation of negative beliefs. He uses the method of refuting negative thoughts, as well as the method of self-hypnosis aimed at the assimilation of positive thoughts, using the formulations "I must tune myself to the formation of rational beliefs," "They will help eliminate stress," "It is rational thoughts that will allow me to fill my day with joyful events." Then, based on the awareness of the harmfulness of irrational beliefs and the usefulness of forming positive thoughts, the student eliminates the contradictions and realizes their incompatibility at the level of consciousness. In this case, negative views and beliefs are rethought in his consciousness. These negative beliefs, thoughts about oneself and others, are then cognitively restructured, analyzed, and evaluated. It is concluded that these thoughts are based on prejudices. After rethinking and reconstructing, the student can practice new positive thoughts and beliefs in his life, consolidating them in his consciousness.

At the next level of self-regulation, the contradiction in the emotional state of students (anxiety, fear, aggression in relationships with others, and emotional experiences) is also realized. The student must realize that he should move to a higher level of consciousness, recreate models of positive emotions, and accept these models using self-regulation methods. The following techniques can be used for this: keeping a "behavior diary", self-reward (when you manage to achieve your goal), relaxation using self-hypnosis, and internal verbalization for self-regulation of behavior. Table 9 presents the results of the control stage of the pedagogical experiment.

Table 9. Results of the control stage of the pedagogical experiment.

Students, courses	Results of the ascertaining experiment	Results of the formative experiment after the application of CBT	Shift in burnout scores
Junior years (1-2)	57 points	38 points	19 points
Senior years (3-4)	88 points	58 points	30 points

To test the significance of differences between pre- and post-intervention scores, a paired Student's t-test (for normally distributed data) was conducted.

The statistical analysis revealed that the differences in burnout scores before and after cognitive behavioral therapy were statistically significant. Among junior students, the average burnout score decreased by 19 points (from 57 to 38), and this decrease was significant: $t(59) = 8.21$, $p < 0.001$. The 95% confidence interval for the difference

ranged from 14.2 to 23.8 points, and the effect size according to Cohen's d was 1.06, indicating a large effect size. Among senior students, the decrease was 30 points (from 88 to 58), which was also statistically significant: t(59) = 11.34, p < 0.001. The confidence interval for the difference ranged from 24.6 to 35.4 points, and the Cohen's d effect size was 1.46, indicating a very large effect.

Note: Numbers in parentheses in statistical descriptions are a standard way to indicate additional characteristics of the result. They typically mean the following:

- t (59) = 8.21 — where "59" in parentheses indicates the number of degrees of freedom for the Student's t-test. It depends on the sample size and the type of test. In this case, it is 60 participants minus 1.
- p < 0.001 is the level of statistical significance. It indicates the probability that the obtained result could have occurred by chance. The lower the p-value, the more reliable the result.
- The 95% confidence interval (14.2; 23.8) is the range of values that contains the true difference between the pre- and post-test scores with 95% probability. The brackets here indicate the interval boundaries.
- Cohen's d = 1.06 is the effect size. It indicates the strength of the therapy effect. A value greater than 0.8 is considered a large effect.

Thus, the obtained results convincingly confirm the effectiveness of cognitive-behavioral therapy in reducing burnout in both junior and senior students.

In addition to correlation analysis, other statistical methods were used in this study. Descriptive Statistics We calculated the mean scores for the burnout scales before the intervention (Table 10).

Table 10. Descriptive statistics for the burnout scales (Before the intervention).

Student group	Emotional exhaustion (M ± SD)	Depersonalization (M ± SD)	Reduction in personal achievement (M ± SD)	General burnout index (M ± SD)
Junior years (n=60)	22.4 ± 6.1	18.7 ± 5.4	20.1 ± 5.9	61.2 ± 12.3
Senior years (n=60)	27.8 ± 6.5	22.9 ± 5.7	24.3 ± 6.2	75.0 ± 13.1

Note: M is the mean, SD is the standard deviation.

Table 10 shows that senior students have higher scores on emotional exhaustion, depersonalization, and reduced personal achievement than junior students. This reflects the more pronounced manifestations of emotional burnout in senior years.

4.3. Intergroup Comparison (Pre-Intervention)

To test for differences between junior and senior students before the intervention, an independent samples t-test was conducted.

For the emotional exhaustion scale, the differences were statistically significant: t (118) = −4.47, p < 0.001.

For the depersonalization scale, significant differences were also found: t (118) = −3.89, p < 0.001.

For the reduced personal achievement scale, the differences were significant: t (118) = −3.64, p < 0.001.

Differences in the overall burnout index are significant: t (118) = −5.23, p < 0.001.

Intergroup comparisons show that senior students exhibit higher levels of emotional burnout across all key indicators compared to junior students.

4.4. Post-Intervention Dynamics of Indicators

After six weeks of cognitive-behavioral therapy, repeated measures of emotional burnout were conducted in junior and senior students (Table 11).

Table 11. Average burnout scores before and after the intervention.

Student Group	Emotional exhaustion (Before/After)	Depersonalization (Before/After)	Reduction in personal achievement (Before/After)	General burnout index (Before/After)
Junior years (n=60)	$22.4 \pm 6.1 \rightarrow$ 17.6 ± 5.4	$18.7 \pm 5.4 \rightarrow$ 14.9 ± 4.8	$20.1 \pm 5.9 \rightarrow$ 16.8 ± 5.2	$61.2 \pm 12.3 \rightarrow$ 49.3 ± 11.0
Senior years (n=60)	$27.8 \pm 6.5 \rightarrow$ 22.1 ± 6.0	$22.9 \pm 5.7 \rightarrow$ 18.5 ± 5.1	$24.3 \pm 6.2 \rightarrow$ 20.2 ± 5.6	$75.0 \pm 13.1 \rightarrow$ 60.8 ± 12.5

Note: The "→" arrow indicates the change in the score before and after the intervention.

4.5. Analysis of Changes

Undergraduate students demonstrated significant reductions in anxiety, procrastination, and perfectionism, which were reflected in decreased emotional exhaustion and depersonalization scores. The overall burnout index decreased by an average of 11.9 points.

Senior students also demonstrated reductions in all scores, particularly in the personal achievement and emotional exhaustion scales. The overall burnout index decreased by an average of 14.2 points.

In both groups, the intervention effect was statistically significant ($p < 0.01$), confirming the effectiveness of cognitive-behavioral methods.

5. CONCLUSION

During the study of the phases of emotional burnout among junior students, it was found that their mental state manifests in two phases: the phase of tension and the phase of emotional instability. These are characterized by anxiety, worries, frustration, emotional rigidity, stress, and depression. The main reasons are related to studies, perfectionism, procrastination, asociality, incorrect motivation, and compliance or non-compliance with the socionomic personality type.

Emotional burnout of senior students is associated with depression, apathy, reduction of their own achievements, stress, crisis, depression due to the lack of formation of their professional self-awareness, incomplete compliance with professional identity, insufficient degree of professional competence, and incomplete compliance with the type of socionomic personality in their profession. Their emotional burnout also develops over two phases.

The use of cognitive-behavioral therapy REBT for junior students allowed them to eliminate their irrational beliefs, the causes of which are perfectionism, procrastination, asociality, and doubts about professional suitability. In the course of working with the REBT technique, irrational beliefs were replaced by rational ones.

The use of CBAT for senior students helped to focus the attention of psychology students on instrumental (professional) and life goals (health). The application of these goals in the college facilitated students' self-disclosure through psychological images and contributed to the development of professional self-awareness. A comparative analysis of the emotional burnout scores of junior and senior students after cognitive behavioral therapy indicated a decrease in emotional burnout scores among students in these courses.

The analysis revealed that the level of emotional burnout among psychology students varies significantly depending on their year of study. Among junior students, emotional burnout is primarily associated with academic difficulties, such as heavy coursework, procrastination, and perfectionism. Senior students exhibit more pronounced symptoms related to professional identity, self-identity crises, and decreased self-confidence.

A pre-intervention intergroup comparison confirmed statistically significant differences between junior and senior students across all key burnout scales. This suggests that the process of professionalization is accompanied by increased emotional stress and exhaustion.

After cognitive behavioral therapy, both groups showed a significant reduction in burnout scores. Junior students showed improvements in anxiety and academic stress, while senior students demonstrated a strengthening of their

professional identity and increased self-confidence. The overall burnout index decreased in both groups, and these changes were statistically significant.

Thus, the study results confirm that cognitive-behavioral methods are an effective tool for preventing and treating emotional burnout in psychology students. Their use allows for tailoring to the specific needs of different stages of study: in the junior years, the emphasis is on overcoming academic difficulties, while in the senior years, it focuses on supporting professional self-determination and developing competence.

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