

# Experimental program regulations emotional states students (formative experiment)

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**Abstract.** This article introduces an experimental program designed to regulate students' emotional states and reduce exam stress. The program, involving 120 students from Bukhara State University, comprises the theoretical course "Psychology of Emotional States" and practical training sessions. It addresses psychological health, emotional intelligence, and self-regulation. The "Emotional Balance" program, with its focus on enhancing self-regulation and emotional intelligence, demonstrated significant improvements in emotional well-being and motivation while reducing exam-related anxiety and escapism. Students learned diagnostic and corrective techniques for emotional states and ways to prevent burnout. The use of visualization and group exercises improved their communication skills. The results emphasize the program's effectiveness in reducing exam stress and enhancing the overall emotional state of students, underscoring the need for emotional support and motivational balance in education.

**Keywords.** stress, emotions, academic performance, self-regulation, exam anxiety, motivation, emotional states, adaptability, teaching techniques, coping strategies.

## Introduction

Examination stress is a serious problem for students, causing high levels of tension, anxiety and uncertainty. Stress affects mental and physical well-being, reducing concentration, memory, sleep, eating, and causing fatigue, irritability and depression. The impact of exam stress on students' mental and physical well-being should not be underestimated. This stress can lead to a variety of negative effects, including decreased concentration and memory, difficulty making decisions, disrupted sleep and eating, and decreased overall physical well-being. As a result, students may experience fatigue, irritability, anxiety, depression, and even physical symptoms such as headaches and stomach upsets. It is clear that exam stress can have a negative impact on students' academic productivity. They may experience difficulty learning material, decreased ability to analyze and think critically, and poorer test scores. In addition, stress can distract students from effective learning processes, reducing their motivation and interest in subjects.

Study by Smith, J. et. al. (2018) from the USA confirms the negative impact of stress on academic productivity. Russian research by Kozlova A.N. (2019) shows a decrease in the performance of students under the influence of stress. Uzbekistan research Alieva Sh.M. (2020) reveals a link between stress and lower academic performance.

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## Materials and methods

The study was conducted among 120 students of Bukhara State University. Methods used: Perceptual Stress Scale (PSS) to assess stress levels; analysis of academic performance to assess the impact of stress on academic performance; additional questionnaires and surveys to measure emotional state and motivation.

## Results and its discussion

The program for regulating students' emotions combines a theoretical course "Psychology of Emotional States" and practical training. It covers psychological health, emotional states, their regulation and independent work of students. The Emotional Balance and Motivational Balance programs are aimed at improving emotional intelligence and self-regulation. Students deepen psychological knowledge, study methods of correction and diagnosis of emotional states. The program includes diagnostic and developmental blocks, focusing on correcting the emotional state and developing communication skills. The study found that the program reduced exam stress among students. Teachers should consider the impact of emotional states on the learning process, using visualization and group exercises to improve student interaction and self-knowledge.

**Table 1** Peculiarities interpersonal future relations teachers

Kind's relations	Their characteristics	Examples from my experience
formal	+	+
friendly	+	+
business	+	+

The student emotion regulation program combines a theoretical course and practical exercises. The course covers mental health and emotional states. The Emotional Balance and Motivational Balance programs focus on emotion regulation and independent functioning. The course provides knowledge about the relationship between emotions and personality, methods of studying and managing them. Students study the diagnosis and correction of emotional states, and the prevention of burnout. The program includes diagnostic and developmental blocks aimed at correcting the emotional state. More than 70% of students experience high exam stress. "Motivational balance" improves self-regulation of emotions. The program goes through four stages, each of which solves its own problems. Visualization and group learning exercises improve communication and self-knowledge. At the first stage, motivation is formed, at the second, communication and teamwork develop. Teachers use a variety of group work assignments and discuss different management styles and approaches to teaching. The use of games and visualization promotes team building. Photo training and social media challenges stimulate teamwork and creativity. Trainings under the "Emotional Balance" and "Motivational Balance" programs regulate the emotional state. The results of the study showed differences in emotional states between first-year and senior students.

**Table 2** Indicators emotional states students 1 and 4 courses. %

Kinds emotional states	Stages professional preparation		Professional directions preparation	
	1 course	4th year	«Pedagogy - psychology»	«Special pedagogy»
Calm	15	17	14	16
Anxiety	eleven	10	12	13
Cheerfulness	15	16	15	19
Fatigue	17	18	13	13
Elation	14	16	17	15
Depression	10	6	12	8
Confidence V to myself	13	14	15	10
Helplessness	5	3	2	6

The experimental program for regulating students' emotions includes a theoretical course “Psychology of Emotional States” and practical classes. The program covers psychological health, emotional states and regulation. It is intended for students of pedagogical and psychological fields; it explores the relationship between emotions and personal characteristics and methods of managing emotions. Includes diagnostic and developmental blocks aimed at correcting the emotional state. It showed that most students experience high levels of exam stress. The Motivational Balance program improves self-regulation of emotions. Includes stages: motivational-attitude, productive-activity, creative-transformative and evaluative. Teachers use a variety of techniques, including visualization and games, to improve students' communication and understanding of social roles. The main components of the emotional state are well-being, activity and mood. The study emphasizes the need for psychological support for students and the use of pedagogical technologies to regulate their emotional state. Recommendations for teachers include taking into account factors influencing the emotional states of students in educational activities.

### Key conclusions and recommendations

Teachers need to develop the ability to recognize and respond to students' emotional states.

It is important to teach students self-regulation techniques such as breathing exercises, relaxation and self-hypnosis.

Conducting psychocorrective activities and courses on emotional balance showed positive results in improving the emotional state of students and increasing their resistance to stress.

The results of the study confirmed the effectiveness of the developed program, especially among students of pedagogical and psychological specialties.

These data and recommendations can be useful for improving the quality of the educational process and maintaining the emotional well-being of students.

**Table 3** Comparative indicators stating and formative experiments (N – thirty)

Indicators	CE	FE	T- test Wilcoxon	Meaning differences
Adaptability.	90.62	104.48	0.010	13.86
Acceptance myself.	27.66	34.24	0.028	6.58
Acceptance others.	14.50	20.72	0.014	6.22

Emotional comfort.	15.02	23.02	0.018	8
Interior control.	39.80	43.04	0.041	3.24
Dominance.	8.60	10.78	0.012	2.18
Escapism.	25.24	16.43	- 0.045	-8.81
T <sub>cr</sub> = 5 (p ≤ 0.01) T <sub>cr</sub> = 10 (p ≤ 0.05)				

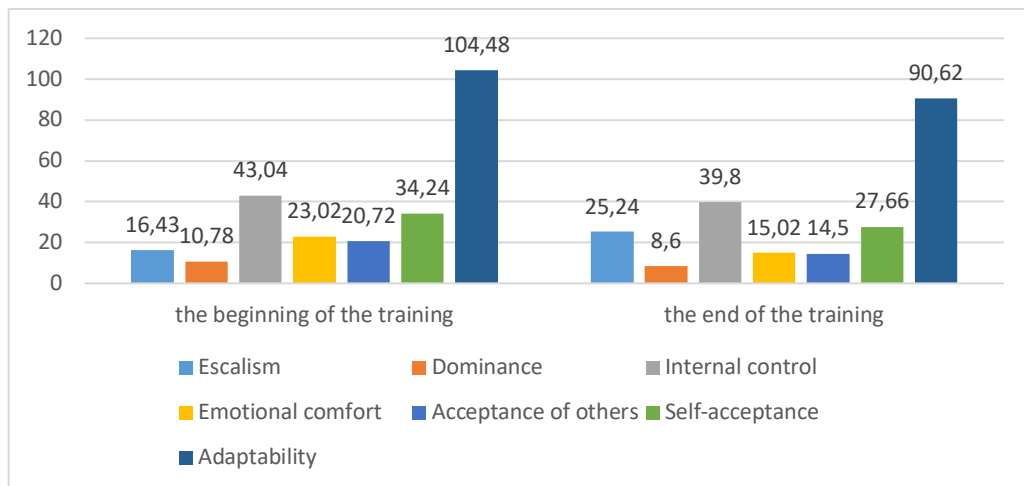
Average values emotional state V group students pedagogical specialties testify about increasing everyone indicators, except indicator "escapism", which shows us negative correlation.

Students specialties "Pedagogy-psychology" demonstrated after applications experimental programs positive adaptability And presence internal control emotions. IN That same time All indicators endured changes: All values increased, a escapism (escape V world dreams decreased).

Detection of somewhat inflated scores on the "escapism" scale in the beginning of the program was unexpected for us, since future teachers constantly are V process solutions pedagogical tasks, such How planning classes, organization, motivation, control, which, it would seem that, exclude inclination to escape from problems.

On drawing 1 We graphically presented positive changes indicators of adaptability, acceptance of oneself and others, state of emotional and inner comfort and dominance. There is also a negative correlation in positions escapism.

**Fig. 1** Indicators changes adaptation V process implementation experimental programs (N – thirty)



Participation in the experimental program for future teachers turned out to be useful, how admitted themselves students, such characteristics How acceptance myself and acceptance others of people are important qualities for future professions, and their promotion Maybe be regarded How favorable sign V plan forecast their emotional condition.

Table 4 shows an analysis of the changes that occurred under influence correctional programs "Emotional balance" V plan improvements and development motivational and emotional balance V group students psychological specialties.

**Table 4** Indicators changes background emotional state V group students’ psychological specialties (N – 48)

Indicators	At first programs	At the end programs	T- test Wilcoxon	Absolute . meaning differences
Adaptability.	83.83	90.87	0.050	7.04 10
Acceptance myself.	23.03	26.72	0.030	3.69 7
Acceptance others.	12.18	15.29	0.012	3.11 5
Emotional comfort.	17.46	19.59	0.015	2.13 4
Interior control.	30.26	34.27	0.040	4.01 9
Dominance.	9.44	9.55	0.010	1.11 1
Escapism	18.77	14.79	-0.048	3.98 8

**T cr = 5 (p ≤ 0.01) T cr = 10 (p ≤ 0.05)**

Students specialties "Psychology" Very actively participated V work correctional programs And us was received positive results By everyone indicators, except indicators dominance And escapism.

Indicators adaptability, acceptance myself and others, emotional and internal comfort showed a high degree of significance after experimental programs.

Escapism at students- future psychologists was declining V process their active participation V correctional program.

Fig. 2 reflects analysis changes, happened under influence correctional programs motivational and emotional balance V group students – psychologists.

**Fig. 2** Changes emotional state V process corrections (N-48)

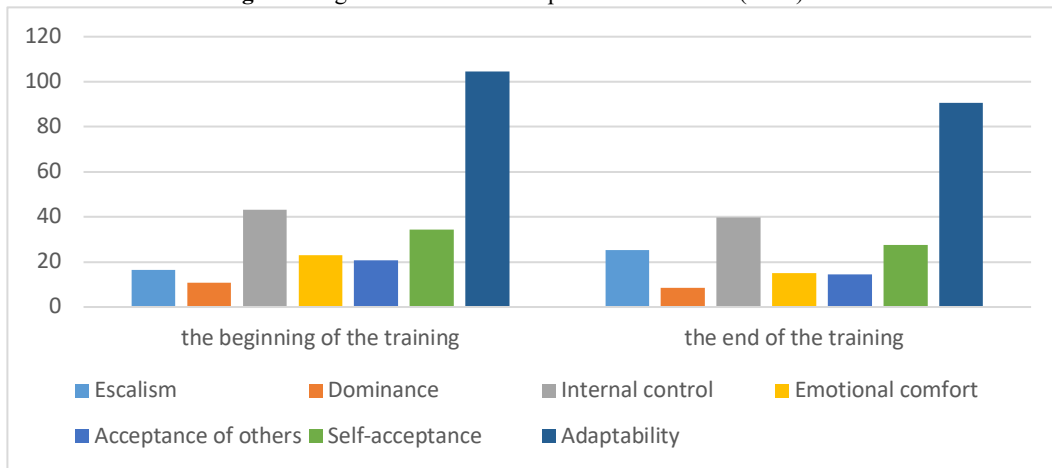


Figure 4 shows the results of the program for developing emotional and motivational balance in students. It is especially noticeable that, except for the dominance indicator, which remained almost unchanged (9.44 versus 9.55), all other indicators have improved. In particular, the level of escapism decreased significantly from 18.77 to 14.79.

Table 4 reflects the results of testing the effectiveness of the program among students of pedagogical and psychological specialties. A significant increase in values by the end of the program was observed mainly in the “Values and Time Orientation” indicator.

The results presented in Table 5 confirm this trend: a significant improvement in both scales by the end of the program, with a stronger improvement in the “value” scale according to the Wilcoxon test .

In the group of psychology students, changes were also observed on the “time orientation” scale, similar to those observed in students of pedagogical specialties. An increase in initially low values and a decrease in values that are too high towards the end of the program indicate success in achieving a more balanced perception of time and values among program participants.

**Table 5** Indicators of changes in aspirations for self-development and self-actualization V group students everyone specialties (N – 78)

Indicators	CE	FE	T- test Wilcoxon	Meaning differences
Orientation in time	9.46	9.62	0.550	0.582
Values	7.14	9.06	5.169	0.000
N=78				

At the end of the experimental program, during the conversation It revealed, what students remained satisfied V participation work correctional events.

Reviews confirmed What students both specialties harmonized yours emotional state, become better understand myself And others, increased motivation more work above yourself And to help to others.

Data V table 6 demonstrate results motivation achievements and motivation avoidance failures.

**Table 6** Indicators changes motivation achievements V student sample V process stating (CE) And formative experiments (FE)

Group	CE	FE	z a	Significance Z
Future teachers	168.78	171.46	2.379 <sup>b</sup>	0.017
Future psychologists	165.64	170.63	4.076 <sup>b</sup>	0.015

How we see at students pedagogical and psychological specialties revealed increase indicator motivation achievements, which is important indicator in improvement emotional states, aspirations to improvement quality life.

Should Mark, What V group students under influence programs development motivational balance are happening changes two types:

increase low indicators;

and a decrease to normatively high values, somewhat inflated indicators. We Can do conclusion O increase motivational focus V group students. IN in general, by everyone groups experimental samples should Mark statistically significant promotion level motivation achievements, which confirms the effectiveness of the motivational and emotional balance.

Control slice, carried out after formative experiment showed following. Us received and processed results experimental groups research. IN process interpretations All The participants’ results were distributed according to severity levels (Table 7).

**Table 7** Average values by level severity variables scales after formative experiment

Scale	Short level	Average level	High level
Neuroticism	15	40	45
Courage	10	25	65
Sensitivity	8	26	66
Tendency to feeling guilt	thirty	13	57
Tension	24	31	45

Received results testify O volume, what majority indicators on the scale “Courage”, “Sensitivity” are high in the zone values. Indicators of such scales as “Neuroticism”, “Propensity to feel guilt”, "Tension" were V range low values.

Changed interest indicators levels.

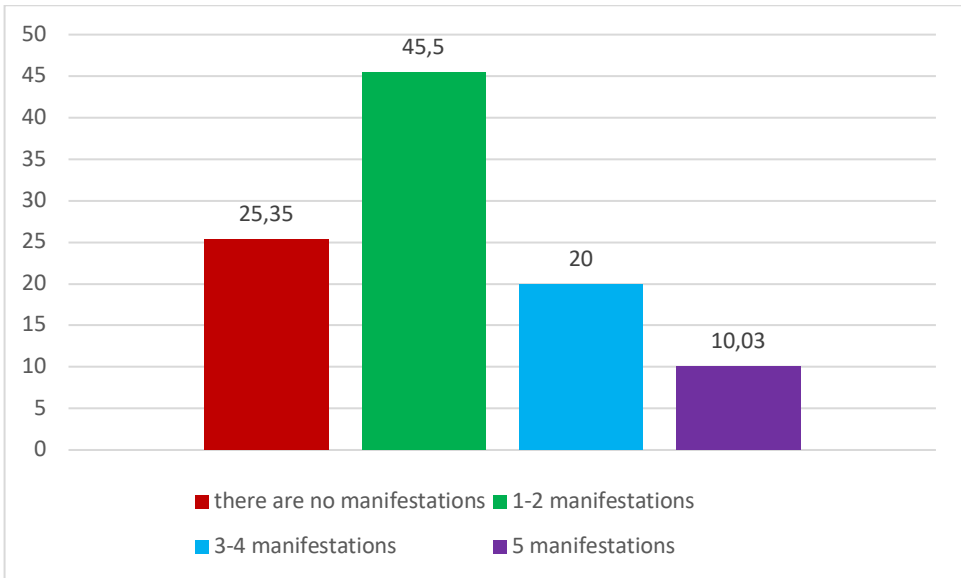
TO example: quantity students with low (critical) level negative emotional state decreased significantly (20%), this fact is for us favorable fact So how warns emotional overvoltage, average (valid) – showed dynamics formation positive background emotional state (25%);

high (optimal) level – most favorable by possibilities self-regulation negative emotional manifestations, maintaining emotional health rose, what amounts to (55%)

Quantitative indicators manifestations negative emotional states at first-year students decreased significantly after carrying out formative experiment

**Table 8** Quantitative indicators of the manifestation of negative emotional states

Number of negative manifestations emotional state	Qty participants	%
Not available manifestations	38	25.35
1-2 manifestations	42	45.50
3-4 manifestations	14	20.00
5 manifestations	6	10.03



**Fig 3.** Quantitative indicators of the manifestation of negative emotional states as a percentage

At interpretations experimental results high degrees distribution values us were analyzed quality indicators, located V range average or low values. Partial consideration results allowed do conclusion, what already 38 respondents of the study do not have negative manifestations of emotional imbalance, uncertainty, excessive sensitivity, inclinations to feeling guilt and tension.

Received results By methodology Scale reduced mood - subdepression, based on questionnaire IN. Zunga And adapted T.N. Balashova are presented in Figure 4, which show a decrease in the level low mood before thirty points.



**Fig 4** Index level reduced mood at students up to 30 points



Received experimental results after carried out formative experiment showed What average level reduced mood at subjects equals thirty points, what indicates on significant decreased mood, many students show signs low mood were absent.

Using Kendall's tau -b test , correlations between adaptability, degree reduced mood And level personal And situational anxiety. Received results presented V table 9.

IN table 9 shown control experimental results, obtained using the Beck Emotional Inventory (BDI) test students with highlighting factors.

**Table 9** Correlation values factors And parameters questionnaire BDI

Options BDI	Factors			
	Guilt	Frustration	Mood	Anxiety
Feeling guilt	0.416	0.000	0.231	0.017
Disgust To himself to myself	0.347	-0.003	0.085	0.267
Self-recrimination	0.407	0.133	0.042	-0.034
Fatigue	0.190	0.99	0.092	-0.57
Indecisiveness	0.111	0.085	0.143	0.122
Tearfulness	0.109	0.816	-0.008	0.034
Social communications	0.101	-0.011	0.804	0.125
Mood	0.129	-0.008	0.778	-0.009
Pessimism	0.018	0.063	0.023	0.341
General dispersion	2,004	1,597	1.632	1.004

Control slice By methodology TO. Zamfir V modifications A. Reana (table 10), showed that students' needs to achieve social prestige, monetary earnings and avoidance of failure possible troubles, after formative experiment

**Table 10** Indicators motivational complex students ' personalities bachelor's degree

Motivational complex personalities	A		t- test Student's test	P
	n	%		
VM>VPM>PTO	41	55.2	142.84	<0.05
VM=VPM>PTO	88	40.9	24.04	<0.05
PTO>VPM>VM	64	9.21	166.88	<0.05
Total	193	100		

VM – internal motivation, ILM – internal positive motivation, PTO – internal negative motivation.

As we can see from the data shown in Table 10 after passing experimental programs much increased: internal educational educational motivation, motives achievements goals, need V productive functioning V situations emotional overloads, value attitude to his emotional health. Improved knowledge about main negative emotional components, methods diagnostics, correction negative emotional states. Increased level adequate self-esteem, reduced level anxiety. Positive dynamics such indicators how general positive emotional background, expressed self-control high organization showed that the effectiveness of the experimental program indisputable.

So, way, implementation developed us programs development motivational and emotional balance helps to uncover possibilities mental and socio-psychological adaptation, a also extension personal resources emotional states, self-development And self-actualization future teachers and psychologists.

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