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OPTIMIZATION OF PSYCHOPHYSICAL STABILITY OF SCHOOL TEACHERS BY MEANS OF FITNESS TECHNOLOGIES

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SUMMARY

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CONTENT

BASIC PROVISIONS OF THE STUDY

Relevance and importance of the topic under consideration. Modern conditions make many adjustments to the theory and practice of professional activity and increase the requirements for specialists. Along with professional qualities, business and moral qualities, such a personality trait as psychophysical stability is becoming increasingly in demand. Psychophysical stability is becoming especially relevant against the background of the ever-increasing stress of teachers' professional activity. The information overload, daily routine, need for constant professional and personal growth, increased moral responsibility, high social expectations, need to restrain one's emotions, to understand the nature of the professional activity of a teacher [16]. Carrying out pedagogical activity under conditions of constant exposure to negative factors: control of every action, every word spoken, puts both the health of teachers and the success of professional activity at risk [33].

Psychophysical stability is a special basis for the mental and physical health of a teacher, as well as one of the significant factors in professional training and the effectiveness of professional activity.

Unfortunately, to date, psychophysical stability has not attracted the attention of researchers. To a greater extent, the subject of research in specialized literature is psychological stability.

In a large psychological interpretation, under psychological stability is understood "a set of certain qualities and properties of the psyche, thanks to which the body retains the ability to adequately and effectively function under the influence of any unfavourable factors" [27]. P.A. Korchemny and A.P. Eliseev [17] consider psychological stability as a holistic, integral quality of the individual and groups, determining the ability to optimally reflect in difficult and stressful situations. At the same time, the main components of psychological stability and readiness for activity in such situations include *motor skills, will, intellectual abilities, cognitive processes*, *motivation*, and *the emotional* sphere of the individual [29]. Analysing the criteria of emotional stability, L.M. Abolin evaluates it as "a property that characterizes an individual in the process of intense activity, whose individual emotional processes, harmoniously interacting with each other, contribute to the successful achievement of the set goal" [1]. In the interpretation of a number of authors [11, 13, 15], emotional stability is opposed to the concept of tension, which is characterized by a state of temporary decrease in the stability of mental and psychomotor processes, weakening of professional efficiency in an environment of strong emotions.

There is also a trend in the study of psychological stability, considering it as a result of the phylogenetic and ontogenetic development of the individual, reflected in the activity and success of self-realization of the individual [4, 17], the basis of which, according to S.L. Rubinstein [30], is the organization of mental cognitive processes (types of perception and observation, memory, attention).

The problem of psychological stability of teachers in specialized literature is presented by professional stability. Most researchers consider the latter as an integrative quality of personality, as a fundamental component of the professional culture of a teacher, as stability of emotional manifestations, the ability to coordinate an emotional state, as an indicator of effective professional and pedagogical activity in critical situations. Thus, from the standpoint of O.F. Ostoumova, the professional stability of a teacher can be considered as a “stable, characteristic model of consciousness and behavior that are necessary for the successful implementation of pedagogical activity” [26]. O.V. Rzhannikova highlights professional stability as a combination of intellectual, emotional and volitional personal qualities of a teacher [28].

From the point of view of I.B. Svezhentseva [31], professional stability includes the stability of the professional orientation of the teacher, the ability to be effective.

Based on the given above, the professional stability of a teacher represents an indicator of his professional and pedagogical training, a high level of development of emotional and volitional personal qualities, interest in carrying out pedagogical activities, the ability to maintain a state of efficiency and genuine interest in the profession for a long time [20].

At the same time, the physical component of professional stability is not observed in either the presented studies or in others that we had analysed throughout the study. And only in the last year (2024) of our research, in the work of T.I. Bonkalo and O.B. Polyakova "Professional Health" in the section "Methods of preventing professional health disorders", we had found the expression "correction of psychophysical deviations" [9]. In their work, the authors recommend a number of means for preventing professional health disorders: autogenic and ideomotor training, meditation, self-regulation, etc., as well as a list of activities that include health-improving and strengthening physical culture.

Therefore, the relevance of the study is determined by insufficient theoretical substantiation of the issues of developing the psychophysical stability of school teachers, the objective need to use psychophysical resources to ensure professional activity, as well as the need to develop the psychophysical stability of teachers who experience difficulties in implementing various components of pedagogical activity, as well as the lack of significant studies of the characteristics of the development of psychological stability of experienced teachers.

The aim of the study: to improve the process of psychophysical stability of school teachers to professional activities through the implementation of fitness technologies aimed at maintaining a high level of personal health in order to extend professional longevity.

Objectives of the study:

1. To study the current state of the problem of psychophysical stability of school teachers in their professional activities, taking into account the identification of factors of professional stress and the nature of their influence on psychophysical stability.

2. To determine professionally important psychophysical qualities of school teachers and their level of development.

3. To design a conceptual model for the formation of psychophysical stability in the professional activities of school teachers, taking into account the inclusion of fitness technologies.

4. To develop and experimentally substantiate the effectiveness of a program for optimizing the psychophysical stability of school teachers by means of fitness technologies.

Research hypothesis. Optimization of the psychophysical stability of school teachers using fitness technologies will be effective if:

– the conceptual model of formation of psychophysical stability of teachers in application of fitness technologies is conditioned and substantiated;

– the process of education of qualities of psychophysical stability in teachers is really consistent with the program of optimization of psychophysical stability by means of fitness programs;

– optimization of psychophysical stability in school teachers is carried out with application of information, pedagogical, fitness technologies.

The methodological basis of the study is represented by the personal-activity approach to the analysis of personal reflection [5, 21, 30], as well as a number of specific ideas about the psychological stability of the individual [7, 8, 17, 28, 32].

The theoretical basis of the study is presented by: the theory of activity [21, 23, 30]; the theory of professional and pedagogical activity [12, 13, 16, 23], personality psychology [4, 14, 21, 22, 33]; the concept of psychological stability [1, 7, 8, 18, 26]; personal, physical, professional resilience [1, 8, 11, 17, 25]; the theory and methodology of the formation of professional and pedagogical qualities [12, 23, 26, 28]; the concept of professional health of teachers [9, 25, 33], the theory and methodology of health-improving physical culture [19, 24, 34]; the basics of fitness technologies [5, 6, 10].

The following **research methods** were used in the course of the study:

– *theoretical research* methods: analysis of scientific publications; analytical study of specialized scientific sources in the field of psychology, pedagogy, physical education and fitness; generalization, comparison and synthesis of theoretical material to support the theoretical and methodological foundations of the study; modelling aimed at developing a conceptual model of the process of formation of psychophysical stability;

– methods of *empirical research*: sociological survey; methods of psychological testing – Spielberg test, method of self-assessment of mental states according to G. Eysenck, method of "Index of life satisfaction"; methods of psychomotor testing – tapping test, reaction to sound signals, reaction to a moving object, static balance, dynamic balance; methods of morpho-functional testing – heart rate, blood pressure, BMI, Stanke test, Henche test; pedagogical observation; pedagogical experiment – ascertaining and formative;

– methods of *mathematical statistics*: methods of analysis of statistical aggregations, *graphical analysis of data/method of graphical presentation of the obtained results*, *use* of software for administering Google Forms surveys.

The scientific novelty and originality of the study consists in the fact that the psychophysical component of the professional activity/training of a subject teacher was investigated, a model for the formation of psychophysical stability of school teachers was designed and substantiated, which served as a methodological tool for the development and empirical implementation of a program for the formation of psychophysical stability by means of fitness programs/technologies.

Theoretical significance of the study resides in the following:

- the components of psychophysical stability, including cognitive, emotional, volitional, behavioural, biological (physiological, physical aspects) components, have been identified and theoretically substantiated;

- the physical qualities necessary for a subject teacher to successfully carry out professional activities have been determined;

- the importance of mental self-regulation, which optimizes the psychophysical stability of a subject teacher, has been substantiated;

- it has been established fitness technologies that contribute to the consolidation of a teacher's psychophysical stability to ensure his or her professional longevity.

Practical significance of the study. A program for optimizing psychophysical stability by means of fitness technologies has been developed and implemented in the process of psychophysical training of subject teachers; a set of fitness programs has been established and applied, which has allowed increasing the level of psychophysical stability of teachers; there are

presented practical recommendations for teachers for strengthening psychophysical stability in the system of fitness classes.

Implementation of scientific results. The developed program for optimizing psychophysical stability by means of fitness technologies has been implemented in the system of health and recreational training for teachers of the Theoretical Lyceum named after A.S. Pushkin. Methodological developments for the formation of psychophysical stability were offered to the fitness club SRL "Star Studio" Starfit.

The structure of the dissertation: introduction, 3 chapters, general conclusions and recommendations, bibliography of 191 titles, 117 pages of the main text, 6 appendices, 22 figures, 18 tables. The results of the work are published in 16 scientific articles.

Key words: professional training, psychophysical stability, school teachers, fitness technologies.

CONTENT OF THE WORK

1. THEORETICAL ANALYSIS OF THE PROBLEM OF PSYCHOPHYSICAL STABILITY OF SCHOOL TEACHERS

In the scientific literature, there is not found a generally accepted definition of psychophysical stability, but only its components are described and considered separately - mental and physical stability. By analysing scientific literature, psychophysical stability can be defined as the ability of the body to maintain optimal parameters of both physiological and psychological manifestations under the influence of various stimuli of both the external and internal environment [7, 8, 15, 18]. Psychophysical stability is a complex quality that consists of several components: cognitive, emotional, volitional, physical. It is its complexity, as well as the lack of data in the scientific literature and attention of various scientific fields, that makes the problem of studying psychophysical stability so important.

The professional activity of teachers is a complex and multidimensional phenomenon, which consists of many structures and characteristics that are interconnected, without which the implementation of the teaching profession is impossible. In the work of a teacher, not only professionally important qualities and skills are important (specialized knowledge, high level of intelligence, erudition, love for the profession and children, communicative and organizational competencies, etc.), but also the personality of the teacher himself, which is expressed in his level of culture, focus, worldview, level of stress resistance and personal qualities. The teaching profession belongs to the category of intellectual work, which means high psycho-emotional stress during the activity, but, at the same time, it can be characterized by a low level of physical activity,

which leads to depletion of mental resources and deterioration of physical condition [8, 9]. As a result of the mentioned above, teachers may face a number of disorders of the psychophysical state.

During their professional activities, the psychophysical state of teachers is influenced by factors of various origins. The most common factors include: genetic factors, medical care, environmental factors, and lifestyle conditions and ambiance [13, 14]. However, teachers carry out their activities in more specific conditions, which means the presence of special factors of influence, which can be divided into those that influence from the outside (external) and internal (subjective). External factors include the organization of the workplace, its structure and design, physical and chemical and socio-psychological factors. Internal factors are a manifestation of the general health of teachers [25]. Depending on the strength and duration of the influence, various diseases and disorders in the psychophysical state of teachers may occur as a result: diseases of organs and organ systems, chronic fatigue and lack of sleep, increased anxiety and emotionality, burnout and apathy, varying degrees of obesity, etc. [20, 32].

Physical activity represents an important component of human psychophysical well-being, but, however, the level of physical activity is steadily declining. This problem is considered especially relevant for teachers because of the specific nature of their work [36]. The modern, most popular type of physical activity is fitness, which stands out for its wide variety of positive effects on the psychophysical state of a person and programs. Fitness programs are divided according to their impact into: aerobic programs – which have a positive impact on the cardiovascular and respiratory systems, coordination of movements and psycho-emotional state; strength programs – are the most popular type of fitness and are characterized by a targeted impact on the strength component and muscles, which allows you to improve and develop strength qualities, but also ensure the harmonious development of muscles; "The Intelligent Body" or “Mind&body” programs – training in this direction is characterized by a soft and smooth tempo and impact on the body, especially affecting the psychological sphere, reducing its stress and fatigue [35, 37].

2. ORGANIZATIONAL AND METHODOLOGICAL SUPPORT OF THE PROCESS OF FORMING PSYCHOPHYSICAL STABILITY IN TEACHERS

The chosen method of assessing the psychophysical state was based on the complexity of human psychophysiology itself. During the sociological study, it was established what are the states that teachers most often encounter in the course of their professional activities (Figure 1).

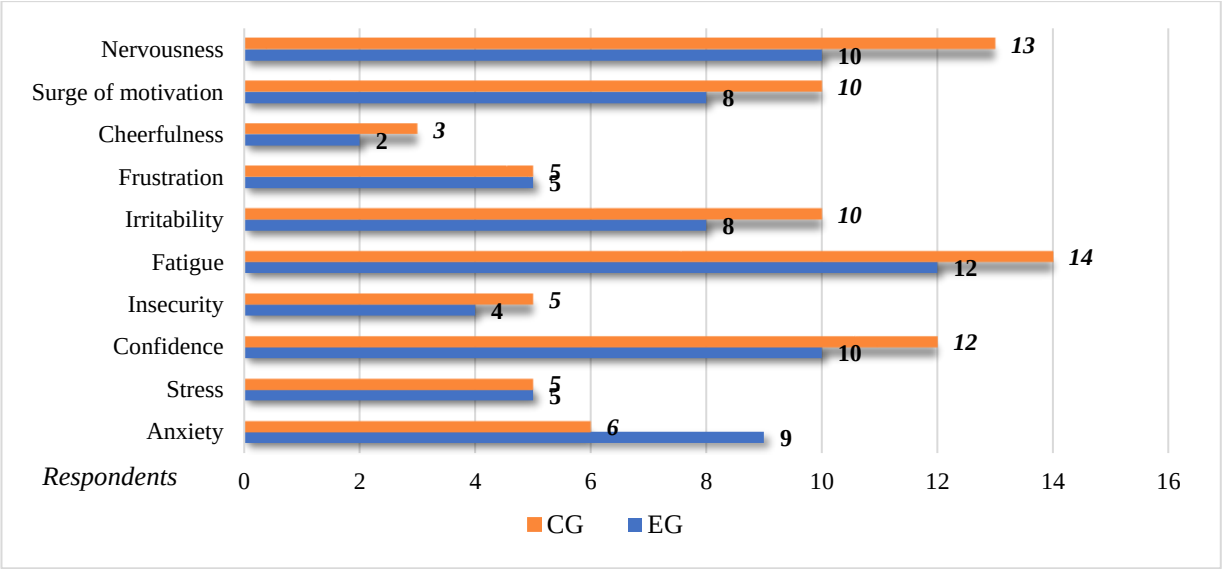

Fig. 1. What conditions do you encounter most often in the process of work??

The state of fatigue, which is predominant among respondents in both groups (85.71% for the EG and 82.35% for the CG), can be explained by increased mental workload and a large amount of work that teachers face. 71.43% of teachers in the EG and 76.47% in the CG face a state of nervousness. Irritability is the third most frequently reported negative state in both groups (57.14% and 58.82%, respectively) and is a consequence of excessive workload, increased fatigue, and a decrease in human resources for self-regulation. 42.86% of respondents in the EG and 52.94% of the CG note anxiety, which takes the form of an illness and negatively affects not only performance and mental health, but also physical health.

During the sociological survey it was identified the ways in which teachers cope with negative situations in the workplace (Figure 2).

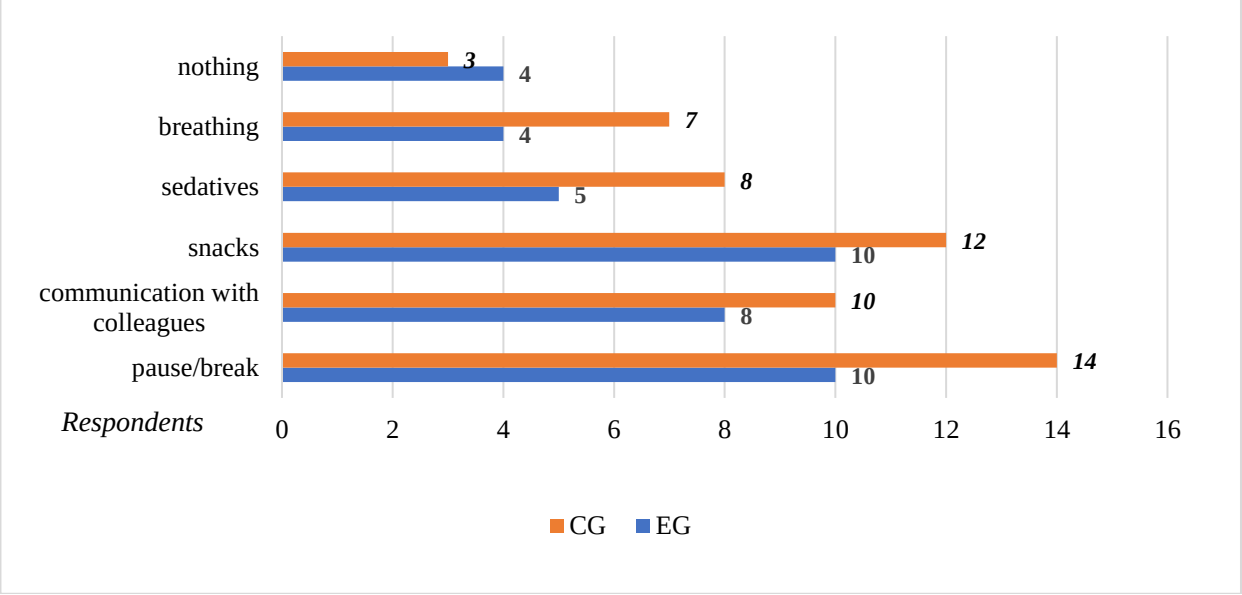

Fig. 2. What helps you reduce negative conditions in the workplace?

Breaks between lessons are the most accessible way to relax during working hours (71.43% of respondents in the EG and 82.35% in the CG), as well as snacks (71.43% and 70.59%, respectively) and communication with colleagues (57.14% and 58.82%, respectively). A smaller proportion of respondents (35.71% and 41.18%, respectively) use sedatives to reduce negative conditions in the workplace.

The most commonly used method of relieving fatigue in the experimental group is watching movies/TV series or social networks (44%). In the control group, this method is the second most common (31%), while sleep is in first place (33%). Only 9% of respondents in the EG and 15% of the CG prefer physical activity. At the same time, the majority of respondents (83%) are aware of the role and importance of physical activity in maintaining good physical condition.

At the same time, only 43% of respondents in the experimental group and 41% in the control group are engaged in organized types of fitness. For both groups, muscle strengthening is the highest priority (71.43% and 70.59%, respectively). In turn, 42.86% of respondents in the EG and 85.82% in the CG noted an increase in strength indicators. The flexibility and improved joint mobility represent the third important quality for questioned respondents (50% and 47.06%, respectively).

Among the types of physical activity preferred by respondents of both groups, the most popular are walking (57.14% of respondents in the EG and 58.82% in the CG) and household activities (71.43% and 47%, respectively). Among the types of organized physical activity, respondents prefer power training (28.5% and 29.4%, respectively) and Yoga or Pilates (35.7% and 29.4%, respectively).

The analysis of the results of the conducted survey of school teachers allowed to determine the content of the ascertaining experiment, including the diagnosis of their mental and physical condition. For a comprehensive assessment, 4 groups of tests were selected, each of which assessed different manifestations of human manifestation: psychological tests, psychomotor tests, physical and physiological tests. The obtained results allowed us to identify health problems conditions, lack of physical activity, low indicators of physical development and some negative mental states, such as increased anxiety, increased excitability, low self-esteem, and decreased interest in life. The ascertaining experiment allowed us to identify a number of problems in the psychophysical state of teachers that had a negative impact on their overall well-being. Along with this, the respondents' answers establish a certain dependence of the mental component on the physical one, which guides us to develop an appropriate program for the formation of psychophysical stability of school teachers.

3. JUSTIFICATION OF OPTIMIZATION OF PSYCHOPHYSICAL STABILITY BY MEANS OF FITNESS PROGRAMS

There are many studies devoted to the psychological stability of the individual, but the physical component of the ability under study is not covered in the literature devoted to the professional training of school teachers. In view of this, a ***Conceptual Model for the Formation of Psychophysical Stability of School Teachers*** was developed in accordance with the fundamentals of modelling in pedagogy and psychology (Figure 3).

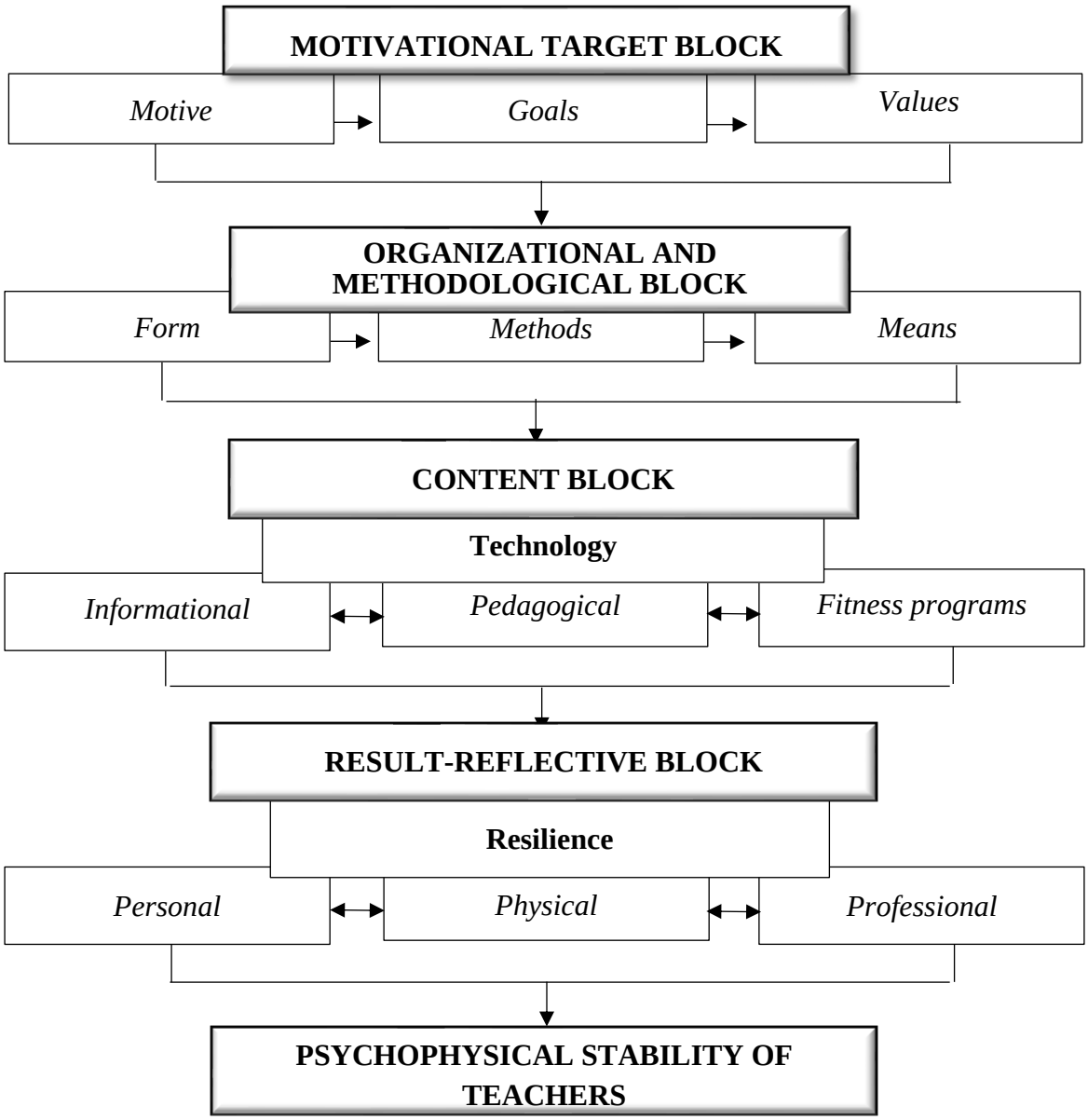

Fig. 3. Conceptual model of the formation of psychophysical stability in the professional activities of teachers

The motivational-target block represents the formative component of any activity, presenting a system of motives, goals and values that direct a person to the implementation of a particular activity, form internal desires, needs and intentions.

Motivation acts as a kind of psycho-emotional background that encourages a person to go towards the desired goal and this is what makes the existence of motivation without a goal impossible. At the same time, the category of Values directs and motivates a person to achieve the set goals. In our case, Values include the following: *Health, Professional achievements and longevity, Healthy lifestyle, Self-confidence.*

The organizational-methodological block includes preparation and creation of conditions for successful research.

The content block is represented by Information, Pedagogical and Fitness technologies.

Information technologies provide enrichment of knowledge and broadening of horizons, with their further use in the relevant areas of life. Such technologies are blog sites, webinars and video conferences.

Pedagogical – aimed at developing cognitive abilities. These include the following: *technologies for developing critical thinking, integrated learning technologies, health-saving technologies.*

Fitness technologies occupy a special place, being the central element of the research done. Aerobic and strength fitness programs, as well as the "Mind&Body" programs, were used for the experiment.

The result-reflective block includes an analysis of the results obtained, which will allow us to evaluate the effectiveness of the experimental program. Along with the calculation of the results, a process of reflection and self-reflection of all the experience gained, accumulated knowledge, acquired skills and abilities was carried out, which allowed teachers to master a number of competencies, such as personal, physical, professional.

In general, ***The Program for Optimizing the Psychophysical Stability of School Teachers*** assumes a step-by-step organization of improving their physical and mental preparation (Table 1). Each stage is distinguished by its content, duration and magnitude of influence.

Preparatory (introductory) stage – aimed at physical and mental preparation of teachers, familiarization with the basic concepts of psychophysical training. The trainings were of a general strengthening nature and included aerobic programs, strength training and Pilates.

The developmental stage (growth stage) is aimed at strengthening the acquired motor skills, gradually complicating the program, improving physical qualities and acquiring new knowledge on the problem under study. Within the framework of this stage, the previous training program

with the same types of fitness programs was maintained, but gradual complications have been introduced in each of them.

Table 1. Step-by-step optimization of psychophysical stability of school teachers

Stages	Introductory stage (preparatory)	Growth stage (developmental)	Stabilization Stage (strengthening)	Recovery stage (active recreation)
Duration	*September-October (9 weeks)*	*November-March (21 weeks)*	*April-May (9 weeks)*	*June-August (13 weeks)*
Content	Adaptation to psychophysical activity	Increasing complexity of integrated measures of psychophysical training	Maintaining the achieved level of psychophysical development	Health-improving leisure and reflection

The strengthening stage (stabilization stage) involved maintaining the achieved level of development of physical and psychological fitness by maintaining the intensity and complexity of physical activity.

The recovery stage (active recreation) represents the final stage of the experiment, which coincided with the summer vacation period. Various types of active recreation allow to maintain the physical development of the human body, and also promote the production of endorphins [2], which have a beneficial effect on improving mood and reducing stress levels.

To carry out the pedagogical experiment, it was formed an experimental group (14 people) and a control group (17 people), each of which included teachers from various schools in Chisinau. The homogeneity of the groups was confirmed by the results of the testing of psychophysical abilities.

The mental state of the teachers was assessed using a number of tests that allowed a comprehensive assessment of this component of psychophysical stability (Table 2).

Table 2. Dynamics of development of mental qualities of teachers of the experimental group

Parameters		**№ n/o**	$\bar{X} \pm m$		***t***	***p***
			initial	**final**		
Spielberg's anxiety	Reactive anxiety (RA)	1.	42,928±1,057	39,071±1,057	3,679	< 0,01
	Personal anxiety (PA)	2.	41,142±0,894	37,785±1,057	3,511	< 0,01
Eysenck's test	Anxiety	3.	10,714±0,89	8,642±0,731	2,626	< 0,05
	Frustration	4.	9,642±0,805	7,5±0,650	2,983	< 0,05
	Aggressiveness	5.	7,0±0,406	5,624±0,325	3,822	< 0,01
	Rigidity	6.	10,428±0,569	8,357±0,487	4,013	< 0,001
Life Satisfaction Index (LSI)		7.	24,785±0,731	29,642±0,731	6,821	< 0,001

n = 14(f = 13); p < 0,05, t = 2,1604; p < 0,01, t = 3,1123; p < 0,001, t = 4,220

During the analysis of the obtained results, it can be noted that all 7 parameters demonstrated statistical reliability of the initial and final indicators, 2 of which at the level of $p < 0.001$, which indicates a high degree of their development process. Among these parameters, the

rigidity indicator (t = 5.348) should be highlighted, which showed a decrease in comparison with the initial data, which indicates a decrease in the degree of expression of mental inflexibility and immobility.

Also, special attention should be paid to the Life Satisfaction Index (t = 6.821), which showed significant growth, based on which it can be concluded that the chosen method of psychological support for teachers had a noticeable positive impact on the teachers' interest in life, their general mood towards its growth, led to an increase in self-esteem, the general level of satisfaction with life and the ability to set goals and achieve them.

The parameters of anxiety of the Spielberg test showed their statistical reliability at the level of $p < 0.01$, where *reactive anxiety* (t = 3.679) and *personal anxiety* (t = 3.511) demonstrated a decrease in severity as a result of the experiment, which indicates its effectiveness. *Aggressiveness* (t = 3.822) also has reliability at the level of $p < 0.01$, which indicates the effectiveness of the selected program to reduce the severity of aggression as a mental state among teachers. It can be concluded that the selected psychological support, as well as the physical component of influence, led to a decrease in the severity of this state by increasing awareness, self-control and analysis, as well as the stability of mental states.

Slightly inferior to all of the above are anxiety (t = 2.626) and frustration (t = 2.983), which, however, have reliability at the level of $p < 0.05$. Anxiety, which showed a higher growth in another group of tests, in this case can only indicate a different approach to assessing and describing the degree of expression of this condition in different authors. Frustration, as a condition, may require a more targeted and specific influence for a higher degree of growth.

Speaking about the results of the control group, all three tests showed statistical insignificance, which proves the effectiveness of the experimental program in improving the mental state of teachers (Table 3).

Table 3. Dynamics of development of mental qualities of teachers in the control group

Parameters		**№ n/o**	$\bar{X} \pm m$		***t***	***p***
			initial	**final**		
Spielberg's anxiety	Reactive anxiety (RA)	1.	43,705±0,213	43,529±0,213	0,858	*> 0,05*
	Personal anxiety (PA)	2.	43,882±0,766	43,529±0,766	0,475	*> 0,05*
Eysenck's test	Anxiety	3.	11,176±0,487	11±0,487	0,789	*> 0,05*
	Frustration	4.	9,642±0,805	7,5±0,650	0,194	*> 0,05*
	Aggressiveness	5.	10,0±0,626	9,882±0,626	1,700	*> 0,05*
	Rigidity	6.	9,941±0,487	9,647±0,417	0,666	*> 0,05*
Life Satisfaction Index (LSI)		7.	24,765±0,487	25,411±0,417	1,342	*> 0,05*

n = 17(f = 16); p < 0,05, t = 2,119; p < 0,01, t = 2,92; p < 0,001, t = 4,015

Comparing the data of the experimental and control groups, it can be noted their statistical reliability (Table 4).

Table 4. Comparative analysis of the final data indicators of the parameters of mental qualities of the experimental and control groups

Parameters		№ n/o	$\bar{X} \pm m$ Groups		*t*	*p*
			Experimental	Control		
Spielberg's anxiety	Reactive anxiety (RA)	1.	39,071±1,057	43,529±0,213	4,139	*< 0,001*
	Personal anxiety (PA)	2.	37,785±1,057	43,529±0,766	4,404	*< 0,001*
Eysenck's test	Anxiety	3.	8,642±0,731	11,0±0,487	2,685	*< 0,05*
	Frustration	4.	7,5±0,650	9,882±0,626	2,643	*< 0,05*
	Aggressiveness	5.	5,624±0,325	7,882±0,348	4,753	*< 0,001*
	Rigidity	6.	8,357±0,487	9,647±0,417	2,015	*> 0,05*
Life Satisfaction Index (LSI)		7.	29,642±0,731	25,411±0,417	5,036	*<0,001*

n = 31(f = 30); p < 0,05, t = 2,0423; p < 0,01, t = 2,7500; p < 0,001, t = 3,6460

Therefore, 6 out of 7 parameters are statistically significant. Particular attention should be paid to the indicators of *reactive anxiety* (t = 4.139), *personal anxiety* (t = 4.404), *aggressiveness* (t = 4.753) and *LSI* (t = 5.036), whose reliability is at the level of $p < 0.001$, which indicates the high efficiency of the developed program for reducing anxiety as a personality trait and condition, as well as aggressiveness. Two parameters of the mental state showed a level of statistical reliability of $p < 0.05$, which also indicates the high effectiveness of the influence exerted. And only the rigidity indicator is statistically insignificant, which may indicate the existence of other factors, in addition to the targeted psychophysical influence, that may affect the improvement of this quality.

So that it could be assessed the psychomotor abilities of teachers, a number of tests were selected, which, in our opinion, are the most relevant and in usually used during the activities of teachers (Table 5).

Table 5. Dynamics of development of psychomotor abilities of teachers in the experimental group

Parameters	№ n/o	$\bar{X}$±*m*		*t*	*p*
		initial	final		
Response to sound signals (ms)	1.	396,357±1,382	390,428±1,219	4,668	*p < 0,001*
Response to moving object (mm)	2.	137,214± 1,463	133,285±1,219	2,983	*p < 0,05*
Static equilibrium (s)	3.	29,0±1,057	33,0±1,057	3,921	*p < 0,01*
Dynamic equilibrium (cm)	4.	459,285±1,626	454,857±1,870	2,594	*p < 0,05*

n = 14(f = 13); p < 0,05, t = 2,1604; p < 0,01, t = 3,1123; p < 0,001, t = 4,220

It can be observed that all 4 parameters demonstrated their statistical reliability of the initial and also final indicators, 2 of which at the level of $p < 0.05$, *static equilibrium* (t = 3.921), which is equivalent to the level of statistical reliability of $p < 0.01$, and the greatest increase was shown

by the test of assessing *the reaction to sound signals* (t = 4.668) at the level of reliability of $p < 0.001$.

Furthermore, observing the results of the control group, it can be found that there is no improvement in the parameters studied, where all 4 are not significant ($p > 0.05$: Table 6), which confirms the need for physical exercise.

Table 6. Dynamics of development of psychomotor abilities of teachers of the control group

Parameters	№ n/o	$\bar{X}\pm m$		*t*	*p*
		initial	final		
Response to sound signals (ms)	1.	395,823±1,253	395,411±1,392	0,319	$p > 0,05$
Response to moving object (mm)	2.	136,882±1,183	136,647±1,183	0,204	$p > 0,05$
Static equilibrium (s)	3.	28,941±0,905	29,0±0,905	0,059	$p > 0,05$
Dynamic equilibrium (cm)	4.	458,588±1,462	458,647±1,532	0,038	$p > 0,05$

n = 17(f = 16); p < 0,05, t = 2,119; p < 0,01, t = 2,92; p < 0,001, t = 4,015

Comparing the final data of the experimental and control groups, a difference in the dynamics of the development of psychomotor abilities is noticeable (Table 7). *The reaction to sound signals* (t = 2.694) has statistical reliability at the level of $p < 0.05$, *static equilibrium* (t = 2.875) – at the level of $p < 0.01$, which indicates a higher degree of development of this parameter. The other two indicators are unreliable (p > 0.05), which confirms the need for a more specific and targeted influence on the growth of these parameters.

Table 7. Comparative analysis of the final data indicators of psychomotor abilities of the experimental and control groups

Parameters	№ n/o	$\bar{X}\pm m$		*t*	*p*
		Groups			
		experimental	control		
Response to sound signals (ms)	1.	390,428±1,219	395,411±1,392	2,694	$p < 0,05$
Response to moving object (mm)	2.	133,285±1,219	136,647±1,183	1,979	$p > 0,05$
Static equilibrium (s)	3.	33,0±1,057	29,0±0,905	2,875	$p < 0,01$
Dynamic equilibrium (cm)	4.	454,857±1,870	458,647±1,532	1,568	$p > 0,05$

n = 31(f = 30); p < 0,05, t = 2,0423; p < 0,01, t = 2,7500; p < 0,001, t = 3,6460

The analysis of the psychomotor sphere also included an assessment of the type of nervous system strength using a tapping test. The strength of the nervous system is understood as the speed and magnitude of the nervous system's reaction to a stimulus, as well as the ability to maintain the reaction at a certain level. The more active and higher the reaction rate, as well as the greater its decrease, the weaker the nervous system. Analysing the initial tapping test values in the

experimental group, it can be found that the predominant types of nervous system are convex (42.86%) and descending (35.71%: Figure 4).

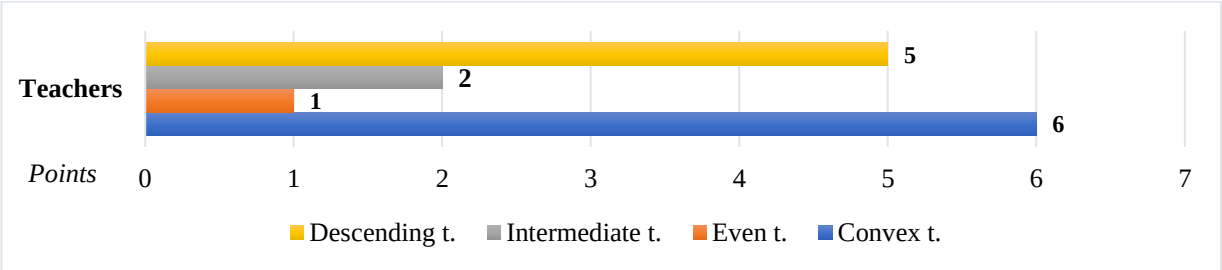

Fig. 4. Initial indicators of the tapping test in the experimental group

Consequently, there is quite a large gap within the group itself, where about half have diametrically opposed types of nervous system. Such a difference can be explained by the innate characteristics of the psychophysical sphere, as well as the specifics of the subject in which the teachers specialize.

In the case of the control group, the data were distributed as follows (Figure 5): the majority (35.29%) are distinguished by the convex type of the nervous system, and 23.53% each are of the descending and even type. Therefore, in the ranks of the control group, the convex type of the nervous system also predominates, and there is a greater variety and more uniform distribution of the types of strength/power of the nervous system.

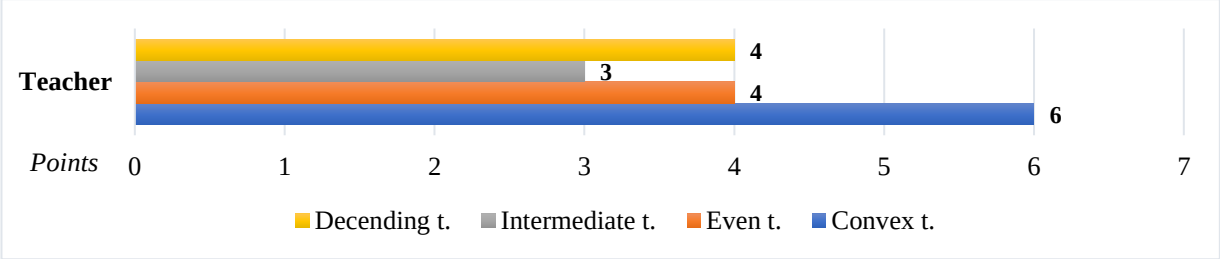

Fig. 5. Initial indicators of the tapping test in the control group

Comparing the final data of the experimental and control groups, it is worth paying attention to the lack of dynamics towards growth or decrease in the ranks of the subjects of the control group. Their initial and final indicators are equal (Figure 6).

In relation to the experimental group, we can see an increase in the number of participants with a convex type of nervous system – 57.14%, a decrease in the severity of the descending type – 14.29%, and an overall equal distribution between the descending, intermediate and even types of nervous system – 14.29% in each group. Based on these data, we can conclude that during the experiment, the nervous system of the respondents underwent a number of changes, which is expressed in a decrease in its instability, an increase in strength and the ability to maintain a stable reaction force.

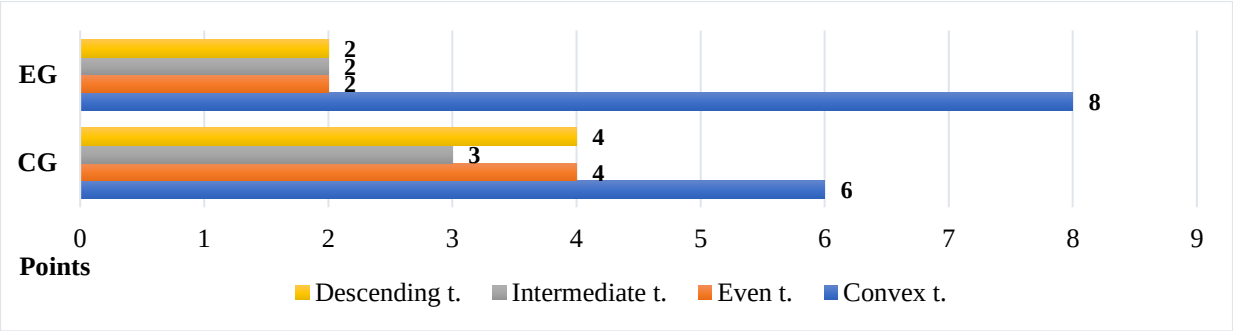

Fig. 6. Comparative analysis of the final indicators of the tapping test in the experimental and control groups

The group of *physical tests* allowed for a comprehensive assessment of the level of physical fitness of the teachers participating in the scientific study, as well as for tracking the dynamics of changes in the parameters under study during the application of the given experimental methodology. Analysing the data of the control group, it can be noticed some minor changes in physical abilities, which may be considered unreliable, being at the level of statistical reliability *p> 0.05* (Table 8).

Table 8. Dynamics of development of physical abilities of teachers of the control group

Parameters		**№ n/o**	$\bar{X}\pm m$		***t***	***p***
			initial	**final**		
Muscle strength endurance (SE)	Upper extremities (q-ty)	1.	9,823±0,417	10,588±0,487	1,734	*p > 0,05*
	Abdominal (q-ty)	2.	19,823±0,487	20,352±0,417	1,199	*p > 0,05*
	Back (q-ty)	3.	21,176±0,487	21,647±0,417	1,811	*p > 0,05*
	lower extremities (q-ty)	4.	31,352±0,696	31,764±0,626	1,555	*p > 0,05*
Flexibility (cm)		5.	8,529±0,557	9,176±0,696	1,060	*p > 0,05*

n = 17(f = 16); p < 0,05, t = 2,119; p < 0,01, t = 2,92; p < 0,001, t = 4,015

The upward changes can be explained by the fact that among the teachers in the control group there were those who independently engaged in physical activity. Also, the results of the initial and final data could be directly influenced by the state of health at the time of the tests: insomnia, a recent illness, increased stress or good general health directly affect the manifestation of physical abilities.

In the case of the experimental group, the results observed are quite different (Table 9).

All 5 parameters under study demonstrated their statistical reliability at different levels. *The strength endurance of the lower limb muscles* has a reliability level of *p < 0.001*, 4 parameters are at the reliability level of *p < 0.01*. The high degree of development of *the lower limb muscle strength endurance* (t = 5.426) can be explained by the strength impact on this muscle group during

training, as well as a more targeted impact using various isolation exercises, especially on the gluteal muscles, biceps and adductor muscles of the thigh.

Table 9. Dynamics of development of physical abilities of teachers in the experimental group

Parameters		№ n/o	$\bar{X}\pm m$		*t*	*p*
			initial	final		
Strength Endurance (SE)	upper extremities (q-ty)	1.	10,5±0,486	12,642±0,650	3,764	*p < 0,01*
	abdominal (q-ty)	2.	19,785±0,650	22,5±0,569	4,176	*p < 0,01*
	Back (q-ty)	3.	22,071±0,731	24,428±0,813	3,138	*p < 0,01*
	lower extremities (q-ty)	4.	31,0±0,569	34,5±0,731	5,426	*p < 0,001*
Flexibility (cm)		5.	8,214±0,894	11,5±0,813	3,956	*p < 0,01*

n = 14(f = 13); p < 0,05, t = 2,1604; p < 0,01, t = 3,1123; p < 0,001, t = 4,220

The growth of indicators at the level of *p < 0.01* can be observed in the series of strength endurance of *the muscles of the upper limbs* (t = 3.764), *the abdominal area* (t = 4.176) and *the back* (t = 3.138), which is the result of the force impact on the specified muscle groups with additional equipment (dumbbells, expanders), as well as a consequence of the specificity of Pilates training, where the emphasis was on strengthening the muscles of the back and abdomen. The level of growth of *p < 0.01* also has the indicator of flexibility (t = 3.956), which developed along with other abilities during of Pilates training, as well as during cooldowns of more dynamic training.

Comparing the dynamics of growth of physical abilities in the studied groups, it can be established that all 5 studied parameters demonstrated the advantage of the experimental group indicators in relation to the control group indicators (Table 10): three indicators at the reliability level of *p < 0.05*, the other two – at the level of *p < 0.01*.

Table 10. Comparative analysis of the final data indicators of physical abilities of the experimental and control groups

Parameters		№ n/o	$\bar{X}\pm m$		*t*	*p*
			Groups			
			experimental	control		
Strength Endurance (SE)	upper extremities (q-ty)	1.	12,642±0,650	10,588±0,487	2,532	*p < 0,05*
	abdominals (q-ty)	2.	22,5±0,569	20,352±0,417	3,089	*p < 0,01*
	back (q-ty)	3.	24,428±0,813	21,647±0,417	3,049	*p < 0,01*
	Lower extremities (q-ty)	4.	34,5±0,731	31,764±0,626	2,669	*p < 0,05*
Flexibility (cm)		5.	11,5±0,813	9,176±0,696	2,173	*p < 0,05*

n = 31(f = 30); p < 0,05, t = 2,0423; p < 0,01, t = 2,7500; p < 0,001, t = 3,6460

Higher dynamics of growth of strength endurance of the abdominal muscles (t = 3.089) and back muscles (t = 3.049) is the result of the inclusion of Pilates training in the experimental program and the targeted development of these muscle groups during other types of training.

A really important part of testing the physical condition of teachers was the assessment of their conditions at the level of functional systems and anthropometric studies, which presented objective data regarding the internal state of the body. Of all the parameters studied, 7 are within the limits of statistical reliability at $p < 0.05$-0.001. Only 2 parameters, height (t = 0.0) and weight (t = 1.807), are considered unreliable (Table 11).

Table 11. Dynamics of changes in morpho- functional indicators of teachers in the experimental group

Parameters		**№ n/o**	$\bar{X}\pm m$		***t***	***p***
			initial	**final**		
Anthropometry (cm)	Height	1.	166,4±0,894	166,4±0,894	0,0	*p > 0,05*
	Weight	2.	75,928±0,813	74,428±0,894	1,807	*p > 0,05*
	Waist	3.	82,0±1,544	78,857±1,301	2,329	*p < 0,05*
	Buttock girth	4.	112,214±0,894	109,857±0,894	2,776	*p < 0,05*
	Hip circumference	5.	61,214±0,650	58,785±0,731	3,609	*p < 0,01*
Body Mass Index (BMI) (points)		6.	27,571±0,536	25,142±0,479	4,926	*p < 0,001*
Heart rate (HR) (bpm)		7.	78,571±1,626	72,142±0,813	4,662	*p < 0,001*
Stange test (s)		8.	46,428±1,219	49,642± 0,975	2,964	*p < 0,05*
Genchi's test (s)		9.	24,571±0,894	27,214± 0,894	3,051	*p < 0,05*

n = 14(f = 13); p < 0,05, t = 2,1604; p < 0,01, t= 3,1123; p < 0,001, t = 4,220

The greatest changes are observed in *the body mass index* (t = 4.926) and *heart rate* (t = 4.662). If before the start of the experiment the average BMI in the experimental group was 27.571, which belongs to the category of pre-obesity, then after the experiment this indicator decreased to 25.142, which is closer to the norm. Heart rate, which was slightly increased before the experiment (78.571 beats/min), after the experiment, it decreased significantly – 72.142 beats/min, therefore, the selected experimental program had a positive effect on the normalization of heart rate and body weight-to-weight ratio. There is also an improvement in the state of the respiratory system. Here, the Stange (t = 2.964) and Genchi (t = 3.051) tests have a confidence level of $p < 0.05$, which indicates an effective development of lung function, as can be assumed due to the inclusion of aerobic exercises in the program.

Anthropometric data such as *waist circumference* (t = 2.329), *buttock circumference* (t = 2.776) and *hip circumference* (t = 3.609) also showed a significant increase. The only parameter that turned out to be lower than expected was the dynamics of weight change. Before the experiment, the average weight in the group was 75.928 kg and after the experiment – 74.428 kg, therefore, the difference between the initial and final results was only 1.5 kg. Such a slight decrease in weight among the group can be explained by several reasons:

1. Among all participants in the experimental group, there were teachers with body weight within the normal range, which increased slightly over time and participation in the experimental program, but remained within the normal body weight range. This weight gain may be a consequence of the inclusion of strength training and external weights in the exercises, which leads to muscle hypertrophy.

2. The experimental program did not emphasize mandatory weight loss. Although maintaining optimal body weight is an important criterion for good physical health, there were no teachers in the group who suffered from excessive excess weight that required urgent resolution. The weight loss was, rather, an effect of all the work done.

3. Individual features of the body structure and proportions, as well as age-related changes, have a direct impact on the dynamics and success of weight loss. The older a person is, the slower the metabolic processes in the body are, the easier it is for adverse effects to accumulate, and respectively, the more difficult it is to get rid of them. With age, especially for women who may be experiencing pre-menopause or even menopause itself, weight loss becomes a particularly difficult process.

The unreliability of the growth indicator (t = 0.0) can be explained by the fact that the age of the teachers being tested is already beyond the period of life development of the mentioned indicator.

Concerning the control group, all 9 parameters under study showed their unreliability at the end of the experiment (Table 12).

Table 12. Dynamics of development of morphofunctional indicators of teachers in the control group

Parameters		**№ n/o**	$\bar{X}\pm m$		***t***	***p***
			initial	**final**		
Anthropometry (cm)	Height	1.	167,7±0,905	167,7±0,905	0,0	
	Weight	2.	76,588±0,905	75,941±0,696	0,811	*p > 0,05*
	Waist	3.	82,3±1,671	81,8±1,601	0,315	*p > 0,05*
	Buttock girth	4.	101,1±1,532	111,294±0,766	0,485	*p > 0,05*
	Hip circumference	5.	56,882±0,835	60,235±0,417	0,119	*p > 0,05*
Body Mass Index (BMI) (points)		6.	27,305±0,571	27,064±0,522	0,453	*p > 0,05*
Heart rate (HR) (bpm)		7.	76,470±1,392	75,294±1,392	0,817	*p > 0,05*
Stange test (s)		8.	46,352±1,044	46,705±0,974	0,989	*p > 0,05*
Genchi's test (s)		9.	24,058±0,766	24,411±0,696	0,342	*p >0,05*

n = 17(f = 16); p < 0,05, t = 2,119; p < 0,01, t = 2,92; p < 0,001, t = 4,015

A comparative analysis of the indicators of the final data of the studied groups revealed that 3 parameters out of 8 have a level of reliability of *p < 0.05 – BMI* and *Stange* and *Genchi tests*, proving the effectiveness of the developed program for improving the function of the respiratory system and body weight (Table 13). The insufficient dynamics in the remaining 5

indicators can be explained by the fact that for ourthe study, the weight and volume reduction did not was central, therefore, it was not given a directed influence precisely for the purpose of reduction.

Table 13. Comparative analysis of the final data indicators of morphofunctional parameters of the experimental and control groups

Parameters		№ n/o	$\bar{X}\pm m$ Groups		*t*	*p*
			experimental	control		
Anthropometry (cm)	Height	1.	166,4±0,894	167,7±0,905	0,0	
	Weight	2.	74,428±0,894	75,941±0,696	1,179	*p > 0,05*
	Waist	3.	78,857±1,301	81,8±1,601	1,427	*p > 0,05*
	Buttock girth	4.	109,857±0,894	111,294±0,766	1,221	*p > 0,05*
	Hip circumference	5.	58,785±0,731	60,235±0,417	2,488	*p < 0,05*
Body Mass Index (BMI) (points)		6.	25,142±0,479	27,064±0,522	2,714	*p < 0,05*
Heart rate (HR) (bpm)		7.	72,142±0,813	75,294±1,392	1,956	*p > 0,05*
Stange test (s)		8.	49,642± 0,975	46,705±0,974	2,964	*p < 0,05*
Genchi's test (s)		9.	27,214± 0,894	24,411±0,696	2,476	*p < 0,05*

n = 31(f = 30); p < 0,05, t = 2,0423; p < 0,01, t = 2,7500; p < 0,001, t = 3,6460

Also, due to the fact that throughout the experiment in both groups there were those who gained weight, while remaining within the normal body weight, since the BMI indicator is reliably confirmed, this was reflected in the final comparative result. In order to detect more visible improvements in lagging parameters, it is necessary to review and have a more targeted impact on them.

This way, the experimental program we developed turned out to be quite effective in improving the psychophysical stability of teachers, some aspects of which, however, require more specific and targeted influence to achieve a scientifically reliable result, which motivates us to further study in the given direction.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

1. Currently, it can be considered relevant to pay attention to the issue of maintaining the professional health of teaching staff. The specifics of pedagogical work involve a significant load in terms of interaction with people of different ages and social status, familiarization with their experience, and therefore has always been stressful, since it is often associated with conflicts, which is the cause of emotional tension and subsequently leads to professional burnout. In turn, the stress experienced in pedagogical activity in most cases negatively affects not only the mental state of the teacher, but also his somatic health. All this leads to the fact that it is important for a teacher today to maintain his health at a high psychophysical level, learn to resist stress.

2. Psychophysical stability implies stability in the mental and physical state, in our case, of the teacher. However, the concept of "psychophysiological stability" is more common in the literature. Our research is inclined to believe that the formation of psychophysical stability is determined by the inclusion of various forms of motor/physical activity in everyday life. And today, such a popular form is fitness. The fitness programs that exist at the moment can cover a wide range of health-improving areas, including both the physical/physiological aspect and the psychological one.

3. In the process of an organized survey of school teachers, mental states that arise in the process of professional and pedagogical activity were noted. From the category of negative states, teachers singled out fatigue (85.71% of EG respondents and 82.35% of CG respondents) and nervousness (71.43% and 76.47%, respectively). In the group of positive mental states, respondents noted confidence to a greater extent (71.43% and 70.79%, respectively). In second place was a surge of motivation (57.14% and 58.82%, respectively).

4. A review of specialized materials, as well as a sociological survey of teachers, gave us the opportunity to determine the professionally important psychophysical qualities of teachers. The highest priority for teachers is muscle strengthening (71.43% of respondents in the EG and 70.59% in the CG), suggesting strengthening muscle tone, forming a muscle corset, which represents a guarantee of good health and reducing the risk of injury in everyday life. The teacher respondents ranked strength indicators in second place (42.86% and 85.82%, respectively). The third important physical quality for respondents is flexibility (50% and 47.06%, respectively). Its development reduces the likelihood of diseases of the musculoskeletal system, improves the manifestation of other physical qualities.

5. The conceptual model of formation of psychophysical stability of school teachers includes four blocks: motivational-target, organizational-methodological, content, and result-reflexive. The system of blocks represents a certain algorithm of the process of formation of psychophysical stability, as a result of which teachers acquire a number of competencies: personal, physical, professional, allowing to strengthen the general state of health, affecting the duration and effectiveness of pedagogical activity.

6. Optimization of psychophysical stability involves a step-by-step implementation of the process of training teachers, which determines the consequent improvement of their psychophysical state according to the following scheme: a preparatory stage, focused on adaptation to the upcoming activity; a developmental stage, implying a gradual complication of motor activity and an increase in physical activity; a strengthening stage, aimed at maintaining the achieved level of mental stability

and physical development; a recovery stage, representing active recreation activities, solving the problems of the mental, physical and intellectual health of the teacher.

7. Summarizing the results obtained during the formative experiment, we state the positive influence of the fitness programs used on the formation of psychological stability in subject teachers. All indicators of psychological qualities, except rigidity ($p > 0.05$), showed statistical reliability of the initial and final data of the experimental group. With regard to rigidity, it can be noted that teachers participating in the experiment should take this personality trait more seriously, which involves human adaptation to the created situational conditions, learn to accept compromises and change their beliefs.

8. Analysis of the results of the physical condition of teachers, obtained thanks to the indicators of psychomotor, physical and morphofunctional parameters, revealed heterogeneity in the dynamics of development. Within the framework of morphofunctional development, it is possible to note the dominance of the experimental group ($p < 0.05$) relative to the control group in terms of vital parameters – BMI, Stange test, Genche test, as well as hip circumference. Physical improvement of the experimental group is statistically significant at the level of $p < 0.05$-0.01 relative to the control group. At the same time, in the block of psychomotor development parameters, two out of four, reaction to a moving object and dynamic balance, are not significant in their development ($p > 0.05$). Probably, it is necessary to pay more attention to these parameters in order to develop them more purposefully.

The obtained results, which contribute to the solution of an important scientific problem, consist of a scientific and methodological substantiation of the optimization of the process of psychophysical training of a subject teacher in the system of classes of various fitness programs aimed at strengthening mental and physical health to ensure the effectiveness and duration of professional activity.

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To the teachers of gymnasiums, lyceums, as well as teachers of secondary and higher educational institutions.

Nowadays, the concept of professional burnout, developing as a result of psychological stress of the educational process, is relevant. A large number of studies are devoted to a set of ideas and scientific developments aimed at studying methods for preventing professional burnout of teaching staff. One of them is physical exercise. In this regard, teachers of educational institutions are recommended the following:

- devote ten to fifteen minutes for morning gymnastics;

- include minutes of active rest in the regime of the working day, which involve the performance of physical exercises of office fitness, which do not require a change of scenery and special equipment;

- before going to bed, perform evening gymnastics for five to seven minutes, using fitness programs of a rehabilitation and relaxing nature, such as yoga, stretching, qigong, pilates, bodyflex, breathing practices, etc.

In addition, fitness programs are widely used for health and rehabilitation purposes, which can be offered after various illnesses to restore the body for future professional activities.

To the heads of courses for advanced training of teaching staff.

To include in the content of training courses a discipline that includes fitness practices that have the potential for psychological and physical recovery, and teaches methods for their application. At the same time, classes should provide not only theoretical information in the field of psychology, physiology, theory and methods of physical education, but also practical application of the acquired knowledge. At the same time, it will be important to invite psychologists, as well as specialists in the field of fitness and physical education to teach this discipline.

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ANNOTATION

Shablova Svetlana, *Optimization of psychophysical stability of school teachers by means of fitness technologies*, Doctoral thesis in the field of pedagogical sciences, Chisinau, 2025

Dissertation structure: introduction, 3 chapters, general conclusions and recommendations, bibliography of 191 titles, 117 pages of main text, 6 appendices, 22 figures, 18 tables. The results of the work were published in 16 scientific articles.

Keywords: professional training, psychophysical stability, school teachers, fitness technologies.

The purpose of the work: improving the process of psychophysical stability of school teachers to professional activities through the implementation of fitness technologies aimed at maintaining a high level of personal health in order to prolong professional longevity.

Research objectives: 1. To study the current state of the problem of psychophysical stability of school teachers in professional activities, taking into account the identification of factors of professional stress and the nature of their influence on psychophysical stability. 2. To determine professionally important psychophysical qualities of school teachers and the level of their development. 3. To design a conceptual model for the formation of psychophysical stability in the professional activities of school teachers, taking into account the inclusion of fitness technologies. 4. To develop and experimentally substantiate the effectiveness of the program for optimizing the psychophysical stability of school teachers by means of fitness technologies.

The scientific novelty and originality of the study consists in the fact that the psychophysical component of the professional activity/training of a subject teacher was investigated, a model for the formation of psychophysical stability of school teachers was designed and substantiated, which served as a methodological tool for the development and empirical implementation of a program for optimizing psychophysical stability by means of fitness programs/technologies.

The results obtained, which contribute to the solution of an important scientific problem, consist of a scientific and methodological substantiation of the optimization of the process of psychophysical training of a subject teacher in the system of classes of various fitness programs aimed at strengthening mental and physical health to ensure the effectiveness and duration of professional activity.

The theoretical significance is as follows: the components of psychophysical stability, including cognitive, emotional, volitional, behavioral, biological (physiological, physical aspects) components, have been identified and theoretically substantiated; the physical qualities necessary for a subject teacher to successfully carry out professional activities have been determined; the importance of mental self-regulation, which optimizes the psychophysical stability of a subject teacher, has been substantiated; fitness technologies have been established that contribute to the consolidation of a teacher's psychophysical stability to ensure his professional longevity.

The practical significance of the study. A program for optimizing psychophysical stability using fitness technologies has been developed and implemented in the process of psychophysical training of subject teachers; a set of fitness programs has been established and applied, which has made it possible to increase the level of psychophysical stability of teachers; practical recommendations for teachers to strengthen psychophysical stability in the fitness system have been presented.

Implementation of scientific results. The developed program for optimizing psychophysical stability by means of fitness technologies has been implemented in the system of health and recreational training for teachers of the Theoretical Lyceum named after A.S. Pushkin. Methodological developments for the formation of psychophysical stability were offered to the fitness club SRL "Star Studio" Starfit.

АННОТАЦИЯ

Шаблова Светлана, *Оптимизация психофизической устойчивости учителей школ средствами фитнесс технологий,* докторская диссертация в области педагогических наук, Кишинев, 2025

Структура диссертации: введение, 3 главы, общие выводы и рекомендации, библиография из 191 наименований, 117 страниц основного текста, 6 приложений, 22 рисунков, 18 таблиц. Результаты работы опубликованы в 16 научных статьях.

Ключевые слова: профессиональная подготовка, психофизическая устойчивость, учителя школ, фитнесс технологии.

Цель работы: совершенствование процессса психофизической устойчивости учителей школ к профессиональной деятельности посредством реализации фитнес-технологий, ориентированных на поддержание высокого уровня личностного здоровья в целях продления профессионального долголетия.

Задачи исследования: 1. Изучить современное состояние проблемы психофизической устойчивости учителей школ в профессиональной деятельности с учетом выявления факторов профессионального стресса и характера их влияния на психофизическую устойчивость. 2. Определить профессионально важные психофизические качества учителей школ и уровня их развития. 3. Спроектировать концептуальную модель формирования психофизической устойчивости в профессиональной деятельности учителей школ с учетом включения фитнес-технологий. 4. Разработать и экспериментально обосновать эффективность программы оптимизации психофизической устойчивости учителей школ средствами фитнес-технологий.

Научная новизна и оригинальность изыскания состоит в том, что исследована психофизическая составляющая профессиональной деятельности/подготовки учителя предметника, спроектирована и аргументирована модель формирования психофизической устойчивости учителей школ, послужившей обеспечением методического инструментария для разработки и эмпирической реализации программы оптимизации психофизической устойчивости средствами фитнес-программ/технологий.

Полученные результаты, способствующие решению важной научной проблемы, заключаются в научно-методическом обосновании оптимизации процесса психофизической подготовки учителя предметника в системе занятий различных фитнесс программ, ориентированных на укрепление психического и физического здоровья для обеспечения эффективности и продолжительности профессиональной деятельности.

Теоретическая значимость заключается в следующем: выявлены и теоретически аргументированы компоненты психофизической устойчивости, включающие когнитивную, эмоциональную, волевую, поведенческую, биологическую (физиологический, физический аспекты) составляющие; определены физические качества, необходимые учителю предметнику для успешного осуществления профессиональной деятельности; обосновано значение психической саморегуляции, оптимизирующей психофизическую устойчивость учителя предметника; установлены фитнес-технологии, содействующие консолидации психофизической устойчивости учителя для обеспечения его профессионального долголетия.

Практическая значимость исследования. Разработана и внедрена в процесс психофизической подготовки учителей предметников программа оптимизации психофизической устойчивости средствами фитнес-технологий; установлен и применен комплекс фитнес-программ, позволивший повысить уровень психофизической устойчивости учителей; изложены практические рекомендации учителям для укрепления психофизической устойчивости в системе занятий фитнесом.

Внедрение научных результатов. Разработанная программа оптимизации психофизической устойчивости средствами фитнес-технологий внедрена в систему оздоровительно-рекреативных тренировок учителей Теоретического лицея им. А.С. Пушкина. Методические разработки по формированию психофизической устойчивости были предложены фитнесс клубу SRL "Star Studio" Starfit.

ADNOTARE

Șablova Svetlana*, Optimizarea stabilității psihofizice a cadrelor didactice din școală prin intermediul tehnologiilor de fitness*, Teză de doctorat în domeniul științelor pedagogice, Chișinău, 2025

Structura disertației: introducere, 3 capitole, concluzii generale și recomandări, bibliografie de 191 titluri, 117 pagini de text principal, 6 anexe, 22 figuri, 18 tabele. Rezultatele lucrării au fost publicate în 16 de articole științifice.

Cuvinte cheie: pregătire profesională, stabilitate psihofizică, cadre didactice, tehnologii de fitness.

Scopul lucrării: perfecționarea procesului de stabilitate psihofizică a cadrelor didactice din școală pentru activități profesionale prin implementarea tehnologiilor de fitness axate pe menținerea unui nivel ridicat de sănătate personală în vederea extinderii longevității profesionale.

Obiectivele cercetării: 1. Studierea stării actuale a problemei stabilității psihofizice a cadrelor didactice din școală în activități profesionale, ținând cont de identificarea factorilor de stres profesional și de natura influenței acestora asupra stabilității psihofizice. 2. Determinarea calităților psihofizice importante din punct de vedere profesional ale profesorilor școlii și nivelul lor de dezvoltare. 3. Proiectarea unui model conceptual de formare a stabilității psihofizice în activitățile profesionale ale cadrelor didactice din școală, ținând cont de includerea tehnologiilor de fitness. 4. Dezvoltarea și argumentarea experimentală a eficacității unui program de optimizare a stabilității psihofizice a cadrelor didactice din școală folosind tehnologii de fitness.

Noutatea și originalitatea științifică a tezei constă în faptul că s-a studiat componenta psihofizică a activității/formarii profesionale a unui profesor de disciplină, s-a conceput și argumentat un model de formare a stabilității psihofizice a cadrelor didactice, care a servit ca furnizare de instrumente metodologice pentru dezvoltarea și implementarea empirică a unui program de optimizare a stabilității psihofizice folosind programe/tehnologii de fitness.

Rezultatele obținute contribuie la rezolvarea unei probleme științifice importante constau într-o justificare științifică și metodologică pentru optimizarea procesului de pregătire psihofizică a unui profesor de disciplină în sistemul de clase ale diferitelor programe de fitness care vizează întărirea sănătății psihice și fizice pentru asigura eficacitatea si durata activității profesionale.

Semnificația teoretică este după cum urmează: au fost identificate și argumentate teoretic componentele stabilității psihofizice, inclusiv componentele cognitive, emoționale, volitionale, comportamentale, biologice (aspecte fiziologice, fizice); au fost identificate calitățile fizice necesare unui profesor de disciplină pentru a desfășura cu succes activități profesionale; este fundamentată importanța autoreglării mentale, care optimizează stabilitatea psihofizică a unui profesor de disciplină; au fost instalate tehnologii de fitness pentru a ajuta la consolidarea stabilității psihofizice a profesorului pentru a-i asigura longevitatea profesională.

Semnificația practică a cercetării. Un program de optimizare a stabilității psihofizice folosind tehnologii de fitness a fost dezvoltat și implementat în procesul de pregătire psihofizică a profesorilor de discipline; a fost instalat și aplicat un set de programe de fitness, care au făcut posibilă creșterea nivelului de stabilitate psihofizică a profesorilor; Sunt prezentate recomandări practice pentru profesori pentru a consolida stabilitatea psihofizică în sistemul lecțiilor de fitness.

Implementarea rezultatelor științifice. Programul elaborat pentru optimizarea stabilității psihofizice cu ajutorul tehnologiilor de fitness a fost introdus în sistemul antrenamentelor recreative pentru profesorii Liceului Teoretic „A.S. Pușkin”. Elaborările metodologice privind formarea stabilității psihofizice au fost propuse clubului de fitness SRL „Star Studio” Starfit.

SHABLOVA SVETLANA

OPTIMIZATION OF PSYCHOPHYSICAL STABILITY OF SCHOOL TEACHERS BY MEANS OF FITNESS TECHNOLOGIES

Specialty: 533.04 – Physical education, sports, kinetotherapy and recreation

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