



Published by DiscoverSys

Medical pedagogical approach to the development of health-saving environment in educational establishments



CrossMark

Ekaterina Mikhailovna Akishina,* Marina Stanislavovna Krasilnikova

ABSTRACT

Background: The article has been prepared at the intersection of medical and pedagogical approaches to develop a health-saving environment in educational establishments. This focuses on the specific dimensions in the colleges of culture and arts. Specific characteristics of students studying in these educational institutions are revealed. It shows that simulation of health-saving environment includes the quality of individual mental health and sociocultural standards.

Method: The practical part of this article is based on generalizing the data studying the influence of health-saving environment on the somatic, mental and social health and personal development of culture and art college students in Moscow, Krasnodar and Sochi through the long term. The data then presented in a diagram and tables.

Results: The study has revealed that developing health-saving environment of the educational establishment through specific correctional health and mental pedagogical against teachers and student groups give impact on improving changes in all health subsystems.

Conclusions: The article explains the following conditions that ensure purposeful management of the development of health-saving environment and the culture of health in students: organizational, professional, personal and technological. Factors, dimensions and principles of simulating the quality health-saving environment of the educational establishment in the field of culture and art are revealed. Diagnostic methods are explained below.

Keywords: health-saving environment, culture, and art college students, educational establishment.

Cite This Article: Akishina, E.M., Krasilnikova, M.S. 2018. Medical pedagogical approach to the development of health-saving environment in educational establishments. *Bali Medical Journal* 7(3): 668-677. DOI:10.15562/bmj.v7i3.1089

Federal State Budgetary Scientific Institution Institute of Art Education and Cultural studies of the Russian Academy of Education 8/1, Pogodinskaya Ulitsa, Moscow, Russia 11912

INTRODUCTION

The problems of creating health-saving conditions in educational process through preschool, elementary school, high school, college and higher education have been intensively developed in pedagogy recently. This is due to a significant number of health problems in students, including those in colleges for many aspects.

Some studies reveal that “even before being enrolled to the university, the health of young people is weakened by the impact of various unfavorable factors. Moreover, 60-70% of them have chronic diseases”.¹ There is a trend over the past decades which the number of healthy and almost healthy people decreased by 25.9% over the years of study. Otherwise the number of chronically ill patients increased by 12.7%. Furthermore, the diseases of the respiratory organs emerge in the first place as the highest incidence rate disease among students of 50-70%. Then, the following diseases are occupied by nervous system, sensory organs, and gastrointestinal tract problems.² Student examinations confirm the deterioration of health during the study process. Researchers convince that unfavorable trends are mostly associated with a lack of night sleep, excessive self-study duration, low physical activity and poor diet.³

This data indicates the need to pay more attention for health problems of students, which can be helped by using health-saving technologies more in the educational institution. The problem of increasing health quality in the context of modern education is mainly solved through:

1. Involving students in active physical activities routinely;
2. Establishing special disciplines that giving theory and practice to help students take care of their own health (for example, sociology of health, sociology of medicine, ecology, first aid training, etc.);
3. Psychological techniques – the classes that are aimed at improving the mental health and stress resistance of an individual. As has been shown (Zharikov 1990), a person with high-stress resistance has stronger health and is less susceptible to viral diseases;
4. Giving recreational activities to ensure the comfort of students. In this study, it is assumed that the opportunities for creating a socio-cultural environment in the educational organization are provided. Conducting competitions, festivals, exhibitions, familiarizing students with creative activities – all this relieves tension and, as studies prove, significantly increases the

*Correspondence to:
Akishina Ekaterina Mikhailovna,
Federal State Budgetary Scientific
Institution Institute of Art Education
and Cultural studies of the Russian
Academy of Education 8/1,
Pogodinskaya Ulitsa, Moscow, Russia
11912

effectiveness of the health saving in the educational process (Rodomskaya 2009);

5. Creating a health-saving environment in the educational institution.

Moreover, some studies proved that the process of students' adaptation is actively interrelated with their incidence of disease: a higher incidence rate with a temporary disability was revealed in younger students in comparison with undergraduates.^{4,5,6,7} In a health-saving environment, there is a high resistance to a) the negative effects of the day-to-day disturbances, b) the shortcomings in catering, c) the lack of incentives for motor activity, d) bad habits, e) the adverse psychological climate (Nikitin 2009).

In this regard, it is important to carry out research that would aim at studying students' lifestyle and the impact of the health-saving environment on the state of their organisms and the formation of valeological values (Medik, Yuriev 2003). The results of such studies could help to improve the development of measures for optimizing the learning conditions and increase the efficiency of students (Bezrukavjy 2013).

Research into the student lifestyle and its impact on the functional state of the organism helps improve the development of measures to optimize study conditions and improve the performance of students.⁸

Methodological and aspects of a health-saving environment that ensures preservation and formation of health in the subjects of educational process are considered in the papers of G.V. Bezyuleva,⁹ E.N. Dzyatkovskaya,¹⁰ G.K. Zaitsev,¹¹ N.A. Krasnoperova,¹² V.N. Yakovlev.¹³ Those researches revealed the conditions for the development of health-saving environment, psychological comfort of the subjects to the educational process,¹⁴ factors shaping the students' value-based attitude to their health,¹⁵ and determined the impact of health-saving environment on the professional and students.¹⁶

However, it must be stated that many aspects of a health-saving environment in educational establishments are still debatable. The main questions are about the practical simulation and diagnostics of the health quality through the educational process, its measurable parameters and formation methods. Unfortunately, the most of the papers have not taken consideration on creating a health-saving environment in the educational institution of culture and art. Whereas, students who study in this field have specific characteristics that require special approaches.

Some of the most significant characteristics for building the health-saving environment are the following:

1. Almost the processes within a the health-saving environment of culture and art colleges are determined by the aesthetic focus, cultural and creative development. The aesthetic principles do not assume just artistic design, but also the use of emotional elements in classes, creation of an atmosphere of creative interaction, and a constant dialogue of cultures. These characteristics must be taken into account since each culture has its own approaches to health saving, certain standards and norms in relation to health and its value;
2. Students who have chosen the field of culture and art as their profession largely have such features as a strong sense of individualism, desire for independence, which brings strong emotional experiences, creates problems in communication and self-determination, desire for creative search, frequent manifestations of distress, depressive symptoms,¹⁷ and unstable self-esteem. It reveals the correlation between the level of self-esteem and the objective state of health.¹⁸ Besides, college students of culture and art are described by a low level of value-based attitude to self-preservation. For example, a survey on the medical activity of culture and art students conducted on a study found out that even with the manifestation of the acute phase of the disease, only 50% of the respondents go the doctor.
3. It is very important to reduce formal things when creating a health-saving environment in the culture and art educational institution. For instance, use a hygienic life program instead of health-saving environment.

Simulation of health-saving environment relies on the concept of "health" as an integral characteristic of a person's state, which includes a combination of qualities and attributes of individual psychosomatic health and sociocultural standards. Accordingly, a healthy person is a person who is described not only by a certain order and harmony in life functions but also by a stable positive mental outlook that promotes the realization of personal and creative potential.

The possibility of improving the health-saving potential of an educational environment could be considered as a scientific problem. In this context, scientists are faced with a number of questions: what conditions are definitely effective in the process of forming students' health-saving competence? what components form the medical-pedagogical approach to creating a health-saving environment for an educational organization? is it possible to create a clear algorithm that would allow us to promote the desire for a healthy lifestyle and a system of valeological values among the modern youth?

MATERIALS AND METHODS

This article presents long-term study (from 2009 to 2016) on simulation and diagnostic of health-saving environment in culture and art college.

The experiment consists of the health-saving environment was conducted in Five culture and art college. They are The Sochi State College of Arts, The Krasnodar Music and Pedagogical College, The College of Music and Theater Arts named after G.P. Vishnevskaya (Moscow), The Moscow State Institute of Culture (choreographic faculty), and The Faculty of Movies and TV at the Academy named after N. Nesterov (Moscow).

Students and teachers of these colleges were involved in the experiment to study the impact of health-saving environment on physical, mental and social health. There are 323 samples involved in the experimental and control groups at the formative stage – the total number of the participants in the experiment. The age of students was between 15 and 20. There are 46 teachers also involved in the experiment. The experts such as teachers, psychologists and doctors were involved in assessing the physical, mental and social health of students, as well as in studying the impact of health-saving environment on the students.

Methodological tools for diagnostics of a health-saving environment

The class behavior was analyzed from the standpoint which reflects the principles of health preservation in order to assess the health-saving environment in an educational institution. The data were assessed from these points in [Table 1](#).

Furthermore, we also assess the health quality in the educational process by analyzing students' work and rest schedules – [Table 2](#).

Another area of diagnostics of a health-saving environment was the diagnostics of the state of the sociopsychological climate in the student group of that educational establishment – [Table 3](#).

Features and stages of the experiment

The methods of diagnosing health-saving environment discussed above were selected at the first stage of the experiment (2009) – the stage of the theoretical analysis of the existing techniques. The initial indicators to assess the quality of health-saving environment, as well as its impact on the health and personal development of students, were identified and partially tested at the next stage – the stage of the ascertaining experiment (2010). It was established at this stage that the quality indicators of the health-saving environment were statistically expressed through certain indicators of teachers' health and

psychological microclimate of the student group. In particular, the study determined that low neuroticism, low emotional lability, lack of spontaneous aggressiveness and irritability had significant positive impact on a number of indicators of the students' social and mental health (increasing the internality of the control locus, increasing the life values "Self-development", "Active social contacts", etc.). this condition tends to increase the students' physical health. As such, it was expedient to predict the quality of the health-saving environment in a generalized manner, i.e. on indicators of the psychological and social health of teachers ([Table 3](#) with the explanation of the algorithm for obtaining the data for the formulation of the equation) and changes in the psychological microclimate in the student group.

Those resulted in the following regression equations:

$$ps_izm = -0,676 + 0,146*fp_i6_sr_kat + 0,152*kl_iz_kat \quad (p<0.001)$$

$$soc_izm = -0,159 + 0,056*fp_i6_sr_kat + 0,104*kl_iz_kat \quad (p<0.02)$$

Annotation:

- ps_izm, soc_izm : the average change in indicators of, respectively, mental and social health in the student group;
- $fp_i6_sr_kat$: the category of average teachers' tranquility in this student group;
- kl_iz_kat : the category of psychological microclimate change in the student group.

Three experimental groups and one control group were formed on the organizational stage of the experiment (2011) and used at the forming stage of the experiment (see [Table 4](#)).

Then, we found that is practically impossible to completely separate the control and experimental group of the professional, therefore we decided to do not analyze this group.

The next step of the study was forming experiment on simulating a health-saving environment of the culture and art educational institution. The pedagogical experiment was primarily aimed at the formation of a health-saving environment, as well as at finding out its impact on students. Other particular attention was aimed at diagnostic:

1. impact on teachers as subjects of the educational process;
2. impact on the establishment and quality of the educational process;
3. impact on students.

Table 1 Factors and indicators for assessing the educational process from the perspective of the principles of health saving

Factors for assessing	Indicators for assessing
Conditions in the study room	Temperature and the freshness of the air Lighting of the cabinet and board Presence/absence of monotonous, unpleasant sound stimuli
Average duration and frequency of alteration of different types of educational activities	Normal rate is 7-10 minutes
Number of types of educational activities (since frequent changes require additional adaptive efforts)	Student survey Hearing Narration Discussion Visual aids study Answering questions Problem solving Norm is 4-7 types of activities per class
Number of types of teaching	Verbal Visual, audiovisual Independent work Norm is at least 3 types of teaching
Alternation of types of teaching	Norm is the alternation of types of teaching at least every 10-15 minutes
Presence and choice of a place and method that promote activation of initiative and creative self-expression of students	Teaching through action Discussion Role-playing game Methods aimed at self-learning and self-development
Place and duration of use of multimedia (in accordance with hygiene standards)	Teacher's ability to use multimedia as an opportunity to initiate active discussion, search for information
Poses of students	Alternation of poses
Presence of health and healthy lifestyle related issues in the content part of the classes	Demonstration of the connections Formation of the attitude toward a person and his/her health as a value Developing an understanding of the meaning of healthy lifestyle Shaping the need for a healthy lifestyle Development of an individual way of safe behavior Informing the students about the possible consequences of their choices
Psychological climate in class	Positivity, friendliness of communication Intensity of communication Involvement of all participants in communication Opportunity for emotional discharge: jokes, smiles, comments
Intensity of the class, i. e. the amount of time spent on studying	Norm is between 60% and 75-80%
The moment of students' fatigue and the decline in a learning activity	Determined by observing the increase in motor and passive distractions in the process of studying
Pace and features of completion of the lesson	Fast pace, no time for questions, no time for comments Calm ending: the students have a chance to ask the teacher questions, the teacher can comment on the assignment for independent work, say goodbye to the students Students are delayed in the classroom after the call

Table 2 Analysis of students' work and rest regimes

Factors of assessing	Observation conditions
Analysis of risks of strain and loss of efficiency	In the process of regulated student learning activities In the process of independent work In the process of extracurricular activities In life in general
Analysis of data on the daily mental load of epy students	On average thy work takes up to 9 hours
Features of the organization of educational process and independent work	Organization and methodology of the educational process Organization of an individual lifestyle
Existence of the circumstances that have an undeniable negative impact on the health of students in the course of educational activities	High intensity required for mastering information The need to maintain the high level of mental activity for a long time Prolonged maintenance of a forced posture and lack of mobility Heavy eye strain Frequent violations of diet and sleep Failure to maintain the everyday regime Lack of optimal conditions for maintaining health in the educational organization

Table 3 Diagnosis of a health-saving environment has become a diagnosis of the state of socio-psychological climate in the student group of the educational organization

Direction of assessing a health-saving environment	Methods of assessing
Assessment of the psychological climate in the student group	The methodology for assessing the microclimate of the student group (Fetiskin, Kozlov, Manuylov 2002: 191-192)
Assessment of students' health	Assessment performed by a group of experts and based on the health scale: 1 poor, 2 below average, 3 medium, 4 above average, 5 good
Diagnostic and monitoring of bad posture among students	Special automated hardware and software complex COT (computer-optical topography) (orthospondylography)
Social and mental health indicators of teachers neuroticism, depression, spontaneous and reactive aggressiveness	Multifactorial personality questionnaire FPI (Freiburg Personality Inventory) (I. Fahrenberg, H. Zarg, R. Gampel) (form B) (Rogov 1999: 259-263) The following aspects were investigated: neuroticism (scale 1), spontaneous aggressiveness (scale 2), depressiveness (scale 3), irritability (scale 4), stress resistance (scale 6), reactive aggressiveness (scale 7), emotional lability (scale 11)
Indicators of mental health of the teachers	The category which allows combining the initial indicators into a relatively small set of groups; for each teacher, this data representing ranks can be summarized. As a result, we get a cumulative estimation.

Table 4 General Characteristics of The Control and Experimental Groups

Group	Impact Condition of Each Group	Number of Students
C	No special impact on the physical and subjective components of the educational environment	2
E1	Without impact on the physical environment, but with an impact on the subject environment	2
E2	With an impact on the physical environment, but without impact on the subject environment	2
E3	With simultaneous impact on both the physical environment and the subject environment	2

The first group of impacts included the special health organization (medical treatment and preventive) measures. The second group of impacts included corresponding effects on teachers and students. Effects on teachers were carried out with the help of specially arranged psychological and

pedagogical seminars. The psychological training is aimed to decrease deviations in mental and social health, prevent and diminish the professional stress; increase the level of health competency; improve the knowledge and skills in relation to health-saving pedagogical conditions and technologies for

organizing the educational process; introduce the promotion of knowledge on health saving in the educational process.

Impacts on students turned out to be as follows: 1) in the experimental groups, small fragments (10-15 minutes sessions) of health-saving technologies of learning and behavior were used, the corresponding knowledge and skills in this field were introduced directly into the content of various academic disciplines, which actually required some revision in some relevant curricula; 2) in the experimental groups, in contrast to the control group, special additional training sessions were arranged to study health-saving technologies of learning and behavior; at the same time, the amount of these activities did not exceed 2 hours per week due to the high load of the curriculum; 3) in the experimental groups, special extra-curricular activities were additionally arranged which aimed to improve the socio-psychological environment in the study groups, developing stress tolerance, interpersonal tolerance, etc.

Those experimental changes introduced into the educational institution also determined the effects on students. However, it must be emphasized that the experimental impacts took place against the background of psychological and pedagogical support of students developed in the college of culture and art itself. Of course, not all of the special impacts applied in the experiment were among those traditionally applied in the educational institution. These following were new attempts for some educational institutions: 1) training for the prevention of emotional burnout conducted among teachers and students; 2) similar training for increasing stress resistance; 3) socio-psychological training aimed to improve the socio-psychological environment in the study groups (team building, interpersonal tolerance, etc.). Individual psychological assistance was not something fundamentally new in this educational institution. However, the additional individual consulting work conducted in the experimental groups of students was very important. Besides, it turned out that teachers of universities and colleges in the field of culture and art needed not only methodological, information and other assistance, but also psychological help, primarily due to the high stress and emotional pressure of their professional activities.

Impacts on students were carried out through specially arranged individual conversations and psychological training aimed to improve the socio-psychological environment in the student groups. The training used for students was conducted by professional psychologists and included the following: a) training for

communicative competence, b) training for stress resistance, c) training for coping strategies, d) training for team building, e) training for increasing tolerance and improving the socio-psychological environment in the team.

For each student group, the health saving indicators were calculated separately, including indicators of the socio-psychological environment in the group and the indicators of teachers working with that particular group.

RESULTS

The study failed to fully implement all potential to form a health-saving environment which associated with the organization of the study. However, the result showed the value of the changes in the experimental groups indicate a significant improvement in the quality of the health-saving environment in the educational institution by various indicators (see [Tables 5-6](#) and [Diagram 1](#)).

The data above proves that it is established during the formation experiment that the complex application of impacts on the development of health-saving environment in the educational establishment through the application of special corrective health and psychological pedagogical impacts on teachers and groups of student groups allowed to improve the changes in all three subsystems of health – physical, mental and social – in students of experimental groups in comparison with students who entered the control group.

Analysis of the factors that influence the improvement in the quality of health-saving environment in the educational establishment in the field of culture and art reveals that the current student rest regime reflects a sharp violation of the life stereotype at the end of the week. It is obviously advisable to suggest students to plan the working week in advance and pre-determine the range of affairs beyond those strictly regulated in time. Therefore, if the student's educational activity is arranged in accordance with the logic of health saving, the risk of overload and feeling unwell drops significantly.

The conducted examinations revealed a high prevalence of statodynamic and psychovegetative disorders in students of colleges and universities in the field of culture and art, which was comparable to the general prevalence of these pathologies in the corresponding age population groups. A widespread violation was the pathology of the musculoskeletal system in the form of postural disorders and motor stereotypes disorders. Meanwhile, these physical disorders were actually closely related to the indicators of mental and social health, as well as personal development. In particular, it was found

Table 5 The Results of Impacts on Health-Saving Environment In the Control and Experimental Groups of Students

Group	fiz_izm	p	ps_izm	p	soc_izm	p
C	-.2415	.012	-.4415	.000	.1171	.164
E1	-.1884	.029	.2977	.013	.4023	.000
E2	.3327	.008	.1510	.047	.1306	.232
E3	.4205	.000	.3636	.000	.3977	.000

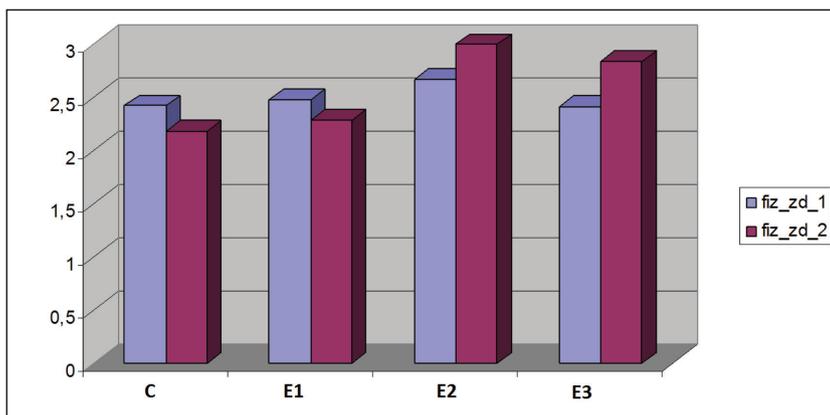
Notation: C is the control group; E1, E2, E3 are the experimental groups; fiz_izm, ps_izm, soc_izm are the average values for groups of changes in indicators of the somatic, mental and social health, respectively; p is the level of statistical significance of changes by Wilcoxon test

Table 6 The Results of Mann-Whitney Test Between Control And Experimental Groups

	Test Statistics ^a								
	Groups C and E1			Groups C and E2			Groups C and E3		
	fiz_izm	ps_izm	soc_izm	fiz_izm	ps_izm	soc_izm	fiz_izm	ps_izm	soc_izm
Mann-Whitney U	845.000	349.000	623.000	507.000	434.500	1002.500	390.500	246.500	681.000
Wilcoxon W	1706.000	1210.000	1484.000	1368.000	1295.500	1863.500	1251.500	1107.500	1542.000
Z	-.345	-4.822	-2.404	-4.197	-4.715	-.017	-4.738	-5.898	-2.020
Asymp. Sig. (2-tailed)	.730	.000	.016	.000	.000	.986	.000	.000	.043
	Groups E1 and E2			Groups E1 and E3			Groups E2 and E3		
	fiz_izm	ps_izm	soc_izm	fiz_izm	ps_izm	soc_izm	fiz_izm	ps_izm	soc_izm
	Mann-Whitney U	556.500	923.500	809.000	422.000	895.500	917.000	1076.000	852.500
Wilcoxon W	1502.500	2148.500	2034.000	1368.000	1841.500	1907.000	2301.000	2077.500	2077.500
Z	-3.990	-1.032	-1.973	-4.596	-.435	-.252	-.016	-1.784	-1.789
Asymp. Sig. (2-tailed)	.000	.302	.048	.000	.663	.801	.987	.074	.074

a. Grouping Variable: gr

Notation: C is the control group; E1, E2, E3 are the experimental groups; Asymp. Sig. (2-tailed) is the asymptotic significance (two-tailed); Z is Z-statistics



Notation: C, E1, E2, E3 are the control and experimental groups, respectively; fiz_zd_1, fiz_zd_2 are the indicators of physical health (in conditional scores of the expert evaluation) at the beginning and end of the experiment, respectively

Diagram 1 Change in the indicators of somatic health during the experiment in the control and experimental groups

that students with postural disorders developed social disadaptation and increased neuroticism, a drop in educational motivation was observed. It must be specially noted that these negative processes were more pronounced in students of

choreographic faculties and college departments due to the specificity of the future profession, since postural disorders limited the possibilities of creative realization of such students, reduced the efficiency of their professional training and professional adaptation.

Due to this, it is advisable to include training on the basis of special physical exercises that stimulate tonic muscle activity in the conditions ensuring high quality of a health-saving environment in universities and colleges in the field of culture and art.

DISCUSSION

The study identified conditions ensuring the targeted management of the development of health-saving environment and fostering health culture in students in the field of culture and art. The *organizational* conditions include the creation of a favorable psychoemotional climate of study; availability of efficient psychological pedagogical assistance for all subjects to the educational process; coordination and construction of optimal interaction between all subjects to the educational process.

Professional personal conditions include: 1) expanding the knowledge of teachers and students about health, healthy lifestyle, factors that affect health, information on ways to maintain physical, mental and moral health; sanitary and medical knowledge; knowledge of regulatory legal documents in the field of health saving; 2) introduction of modern health-saving technologies based on efficient methods, techniques and forms of organization of education of students' health culture in the educational process; 3) psychological pedagogical support of the students' conscious value-based attitude to their health, understanding the significance of the process of fostering health culture; aspiration for self-development.

Technological conditions assume functioning of a health-saving environment through the creation of situations that encourage the initiative and independent inclusion of students in various activities aimed at fostering health culture.

Overall, the content of improving the quality of health-saving environment in the educational establishment in the field of culture and art includes: 1) encouraging students to use healthcare services; 2) existence of a pedagogical program for the formation of a healthy lifestyle for young people in the context of educational activities and recreation, based on a combination of principles of organization and self-organization; 3) integration of the activities of medical, educational, cultural, leisure and law enforcement organizations in the formation of health-saving environment that opens up possibilities for preserving and improving the basic health components of not only students but also teachers, and contributes to fostering conscious need for a healthy lifestyle; 4) conducting diagnostics of the real state of students' health by the main components of health and the disclosure of social, psychological and pedagogical reasons for its deterioration; 5) introduction of specialized courses on the organization of health-improving activities of young people, taking age and individual and personal characteristics into account, in the curriculum of educational establishments; 6) formation of a system of hygienic skills and abilities necessary for the normal functioning of the body, as well as an exercise system aimed at improving the skills and abilities to take care of oneself, clothing, place of residence and the environment. A special role in this component is assigned to adherence to the regime of the day, diet and alternation of work and rest, which helps prevent the formation of harmful habits, functional disorders, includes

psychohygiene and psychoprevention of the educational process, use of environmental health factors and a number of specific ways of improving the students' health.

It is advisable to apply a number of special pedagogical conditions and psychological pedagogical impacts, which have been tested and proved their efficiency in the course of the experiment, to improve the quality of a health-saving environment in the educational establishment in the field of culture and art.

CONCLUSION

Health-saving environment in educational establishments in the field of culture and art represents the interrelationship of factors that contribute to the formation of the personality of students, formation of their need for a healthy lifestyle through the organization of space for study and leisure time, fostering the values of health, legal and psychological protection of the physical, mental, social and spiritual health of students, prevention of antisocial conditions, which develop the students' inner need for mastering the means and methods of using the capabilities of their body to maintain, preserve and strengthen personal health and acquire professionally relevant knowledge and skills.

Diagnostics of the quality of the health-saving environment of the educational establishment allows not only to objectively assess its parameters, but also to predict its impact on the basis of a survey of teachers and teams of student groups. The appropriate regression equations can be used for this. The experiment revealed that the indicators of changes in the mental and social health of students for health-saving environment in educational establishments in the field of culture and art were determined through the tranquility of teachers and the indicators of the psychological microclimate in student groups.

Simulation of the health-saving environment in the educational organization:

1. Includes, aside from organizational, personal professional and technological conditions, building an individual health-saving educational trajectory for each student, taking into account their psychophysiological, personal and ethnocultural specifics;
2. The following serves as the basis for creating health-saving environment: 1) understanding of its systemic nature, close functional connections between all conditions; 2) idea of health as the physical, psychological, moral and social

well-being of all subjects to the educational process; 3) vision of a healthy lifestyle as a goal of educational activities in health-saving environment in the educational establishment in the field of culture and art; 4) continuous nature of health-saving activities, the skills of which are formed in the educational space, formation of sociocultural patterns, standards for a healthy lifestyle;

3. Relies on the principles of objective diagnostics of psychophysiological conditions of all subjects to the educational process; unity of personal psychological needs in a healthy way of life and professional training of subjects to the educational process; social responsibility for the own health and for the health of others.

Factors that influence simulation of the health-saving environment are:

- a) support of the guidelines on the priority of a healthy lifestyle by all subjects of the educational process;
- b) financial and logistical support of the introduction of health-saving technologies in the educational process of the organization;
- c) comprehensive qualitative monitoring of the state of subjects to the educational process;
- d) regular systematic work on preserving and strengthening the health of students and teachers;
- e) creation of scientifically justified sanitary and hygienic conditions for the educational establishment operation.

ACKNOWLEDGEMENTS

The study has been performed as part of the project of the Federal State Budget Scientific Institution “The Institute of Art Education and Cultural Studies of the Russian Academy of Education” “Development of artistic endowments of children and youth through information and communication technologies”, state assignment No. 27.8719.2017/8.9.

The author expresses gratitude for consultations during the preparation of the article to the Candidate of Medicine S.B. Kazakovtseva.

REFERENCES

1. Maltsev, S.V., Faizullina, R.A., Arkhipova, N.N., Zaripova, R.T. (2005). Aktualnyye problemy podrostkovoy meditsiny [Urgent problems of adolescent medicine]. *Kazan Medical Journal*, No. 2, pp.154-156.
2. Zdorovye studentov: sotsiologicheskii analiz [Students' health: sociological analysis]. Collection of academic articles (2012). Moscow, RAS Institute of Sociology.
3. Usova, E.V., Kachalova, L.M. (2004). Razrabotka i vnedreniye programmy po ukrepleniyu zdorovya studentov. Zdorovye, obucheniye, vospitaniye detey i molodezhi v XXI veke [Development and implementation of a program to strengthen the health of students. Health, education, fostering of children and youth in the XXIst century]: proceedings of the international congress, part III, pp. 217-219.
4. Efimova, I.V. (2004). Psikhofiziologicheskiye osnovy zdorovya studentov [Psychophysiological fundamentals of students' health]. Irkutsk, Irkutsk University Publishing House.
5. Egorychev, A.O., Pentsik, B.N. (2003). Zdorovye studentov s pozitsii professionalizma [Health of students from the standpoint of professionalism]. *Theory and practice of physical culture*, No. 2, p. 15.
6. Ishmukhametov, I.B. (2000). Issledovaniye urovnya zabolevayemosti studentov, prozhivayushchikh v neblagopriyatnykh ekologicheskikh usloviyakh [Research into the incidence rate of students living in unfavorable ecological conditions]. *Birsk, Urgent problems of population health*, pp. 129-130.
7. Adda, J., Chandola, T., Marmot M. (2002) Socio-economic Status and Health. *Journal of Econometrics Pathways*, No.4, pp. 208-310.
8. Medik, V.A., Yuryev, V.K. (2010). Kurs lektsiy po Obshchestvennomu zdoroviyu i zdravookhraneniyu [Course of lectures on Public Health and Healthcare]. Moscow, GEOTAR-Media.
9. Bezyuleva, G.V. (2008). Psikhologo-pedagogicheskoye soprovozhdeniye professionalnoy adaptatsii uchashchikhsya i studentov [Psychological pedagogical support of professional adaptation of students]. Moscow, Moscow Psychological and Social Institute.
10. Dzyatkovskaya, E.N. (2000). Kontseptsiya vospitaniya v zdorovyeberegayushchem obrazovatelnom prostranstve [Concept of education in health-saving educational space]. Irkutsk, Irkutsk Institute for Advanced Training of Educators.
11. Zaitsev, G.K. (2004). Valeologiya vzrosleniya: pedagogicheskiye osnovy obespecheniya zdorovya podrostkov i molodezhi [Valeology of adulting: pedagogical basis for supporting the health of teenagers and youth]. St. Petersburg, Russian Academy of Education, Institute for Adult Education.
12. Krasnoperova, N.A. (2005). Pedagogicheskoye obespecheniye zdorovogo obraza zhizni studenta [Pedagogical support of a student's healthy lifestyle]. *Theory and practice of physical culture*, No. 6, pp. 12-14.
13. Yakovlev, V.N. (2010). Formirovaniye zdorovyeberegayushchey sredy dlya studentov vysshikh uchebnykh zavedeniy [Formation of health-saving environment for students of higher educational institutions]. Tambov, Publishing House of the Tambov State University named after G.R. Derzhavin.
14. Borisova, M.V. (2005). Psikhologicheskiye determinanty fenomena emotsionalnogo vygoraniya u pedagogov [Psychological determinants of the phenomenon of emotional burnout in educators]. *Issues of psychology*, No. 2, pp. 96-103.
15. Kudashev, R.K. (2012). Formirovaniye kultury zdorovya studentov v zdorovyeberegayushchey obrazovatelnoy srede vuza [Forming a culture of students' health in health-saving educational environment of the university]. *Pedagogical and psychological sciences*, No. 5, pp. 117-123.
16. Novikov, V.N. (2012) Educational environment of universities as a professionally and personally stimulating factor. Online journal «Psychological science and education». 2012. № 1. www.psyedu.ru (Accessed 25.09.2017).
17. Wells, K., Stewart, A., Hays, R.D., Burnam, M.A., Rogers, W, Daniels, M., Berry, S., Greenfield, S., Ware, J. (1989). The Functioning and Well-Being of Depressed Patients: Results from the Medical Outcomes Study// *Journal of the American Medical Association*, 262, pp. 914-919.
18. Rusinova, N.L., Panova, L.V., Safronov, V.V. (2008). Sotsialnaya stratifikatsiya zdorovya v Sankt-Peterburge: izmeneniya v period transformatsiy [Social stratification of health in St. Petersburg: changes in the period of transformations]. *Journal of Sociology and Social Anthropology*, No. 4, pp. 102-121.
19. Fetiskin, N.P., Kozlov, V.V., Manuilov, G.M. (2002). Sotsialno-psikhologicheskaya diagnostika razvitiya lichnosti i malyykh grupp [Sociopsychological diagnostics of developing personality and small groups]. Moscow, Publishing House of the Institute of Psychotherapy.

20. Rogov, E.I. *Nastolnaya kniga prakticheskogo psikhologa* [Handbook of a practicing psychologist]. Moscow, Humanitarian Publishing Center VLADOS, 1999.
21. Zharikov, E.S. (1990) Psychological means of stress resistance. Moscow: Nauka.
22. Bezrukavij, R.V. (2013) Health-saving environment of higher educational organizations as a condition of forming health-saving competence in students. *Personality, family and society: issues of pedagogy and psychology: Materials of the XXXIII International scientific-practical conference. № 10(34)*. Novosibirsk, SybAK.
23. Radomskaya, O.I. (2009) Social psychology in the system of art education. Multi-level integration of the subjects of the humanitarian and artistic cycle in the education of children and youth. *Materials of the All-Russian Conference. Moscow, Institute of Art Education, Arzamas, State Pedagogical Institute named after A.P. Gaidar. P. 114-118.*
24. Nikitin, O.D. (2009) Psychological components of development of creativity of students of pedagogical universities. Multi-level integration of the subjects of the humanitarian and artistic cycle in the education of children and youth. *Materials of the All-Russian Conference. Moscow, Institute of Art Education, Arzamas, State Pedagogical Institute named after A.P. Gaidar. P.234-237.*



This work is licensed under a Creative Commons Attribution