

The health-saving culture formation among the students in the higher pedagogic education

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Abstract

The article considers the new pedagogic model that is aimed at the formation and development of the health-saving culture. To achieve this purpose, a complex of complementary research methods was used that included pedagogical experiment as the most significant one. As a result of the experiment, the new approach to the development of health-saving culture was elaborated. The students became more responsible in the issues that were associated with their health. As a conclusion, under the favorable social-pedagogical conditions, this system is able to become a stable factor that ensures the formation of health-saving culture among the students.

Key words: Health-Saving Culture, Physical Activity.

La formación en cultura de ahorro de salud entre los estudiantes de educación pedagógica superior.

Resume

El artículo considera el nuevo modelo pedagógico que está dirigido a la formación y el desarrollo de la cultura de ahorro de la salud. Para lograr este propósito, se utilizó un complejo de métodos de investigación complementarios que incluyeron el experimento pedagógico como el más significativo. Como resultado del experimento, se elaboró el nuevo enfoque para el desarrollo de una cultura de ahorro de la salud. Los estudiantes se volvieron más responsables en los temas que estaban asociados con su salud. Como conclusión, bajo las condiciones sociales y pedagógicas favorables, este sistema puede convertirse en un factor estable que garantice la formación de una cultura de ahorro de salud entre los estudiantes.

Palabras clave: Cultura para el ahorro de la salud, Actividad física.

1. Introduction

The well-being and future of each society depend on the youth's health in many aspects. During the last decades, a global tendency towards worsening of the population health became evident. The scholars diagnosed "the rejuvenation" of diseases, chronic stress conditions, the threat of the disappearance of a nation's genetic pool. All these factors point to a disastrous decreasing of the indicators of the vitally important parameters of the students' health and require radical measures to be taken in order to preserve and enhance the health. During the last years, Kazakhstan faced the tendency of worsening of the demographic indicators, decreasing of the birth rates and natural population increase, the higher levels of morbidity and mortality. More than 2 millions of children and teens are under regular medical check-up due to their chronic diseases. The researches that were conducted in Kazakh universities showed that 85% of Almaty students suffered from chronic diseases, the "anxiety" state was identified among 67% of the students. It finds its expression in aggressiveness, depression, destructive and other reactions.

This decreases body resistance, negatively impacts the immune system and leads to the increase in the morbidity rates among young people. According to the evaluations of the domestic and foreign specialists, certain factors influence the health condition in the following proportions: the condition of the environment – 20-40%, genetic factors – 15-20%, the work of the public health services – 10%, lifestyle – 25-50%. During the last years, Kazakhstan faced a significant worsening of the students' health. According to the data of modern vale logical researches, only 10% of the university graduates can be viewed as healthy, whereas 40% of the students have various chronic pathologies. The combination of several chronic diseases was diagnosed in each second-year student. During studying at university, the number of the students with musclar-skeleton disorders increases by 1,5-2 times, the number of the students with allergic diseases triples, whereas the number of the students with myopia increases by 5 times (Katrenko, 2013).

It was noted that by the end of the academic year the students experience a double increase in the frequency of hypertonic reactions. The total amount of the unfavorable changes in the arterial blood pressure reaches 90%. Higher levels of narcotization are diagnosed among 55% – 83% of the pedagogic students (Katrenko, 2013; Kostina, 2015; Fedoseenko & Okhlopkova, 2016).

One of the main priorities of the country's long-term program "Kazakhstan-2030" defines "The health, education and well-being of Kazakhstan citizens. A comprehensive analysis of the researches on the problems of the students' healthy lifestyle and its various aspects points to a significant contribution of the scholars into the elaboration of theory and practice of this issue. However, we should mention that currently there are no special researches on the issues of the

health-saving culture formation among the students in the higher pedagogic education under modern conditions. The existing researches are rather speculative in their character. The comprehensive study of the theory and practice of the researched topic allows to make the following conclusion: the students' existing health problems are mainly associated with a low level of the health-saving culture. It is important to note that the current traditional teaching forms of health saving do not reach the established purposes due to the absence of the adequate mechanisms of the system, model, technology.

The realities of the twenty first century lead to the shift in the traditional notions of society, education and nurturing. The increasing global, social, military and ecological problems actualize the problems of ensuring the health of the Kazakhstan population in a specific way. The youth is viewed as a factor of the state's security in the modern world (Kudryavtsev et al., 2016; Kopylov et al., 2015; McLeskey et al., 2017). The World Health Organization (WHO) defines the health in the following way: "The health is a complete physical, mental and social well-being and not merely the absence of disease. In other words, this is a physical, social, psychological harmony of a person, the benevolent relations with people, nature and oneself" (Langford et al., 2014). In order to maintain the health of the younger generation, the educational institutions use health-saving technologies. The health-saving technology is a pedagogical activity that re-shapes the relations between education and teaching, transfers education into the context of a person-formative and life-saving process that is aimed at maintaining and enhancing of a child's health.

The health-formative and health-saving technologies are distinguished. The health-formative educational technologies include all psychological-pedagogical technologies, programs and methods that are aimed at teaching the culture of health, personal qualities that favor its saving and enhancing, the formation of the notion of health as a value, the motivation to live in a healthy way (Fedorov & Tretyakova, 2015; Webb et al., 2016).

The health-saving technologies include the following factors:

Learning environment within a college (the absence of stress, the adequacy of the requirements and teaching and educational methods);

Rational organization of the learning process (in accordance with age, sex and individual features and hygienic requirements);

Correspondence of the learning and physical load to a student's age abilities;

Necessary, sufficient and rationally organized motion regime.

The researches in the field of health-saving technologies play a significant role. A health-saving technology is an organizational form of the learning process within which saving, formation and enhancing of a student's health is oriented towards the teachers' awareness of their responsibility for the unfavorable condition of their health (Turunen et al., 2014).

All pedagogic health-saving technologies are divided into two groups: the technologies that are targeted at an individual (as the subject of educational process) and the technologies that are targeted at the environment that surrounds an individual (Wang et al., 2014).

The technologies that are targeted at individual favors the formation of healthy behavior that will provide significant benefits and will not require great costs (material, time, physical). The technologies that are targeted at the environment must account for the balance between the benefits and costs and orient to the following criteria: the importance of the sphere that is planned to be influenced; the possibility of achieving the effective results, i.e. the number of individuals who will be influenced by these measures; inevitable disadvantages or side-effect of the program; the ethical and political considerations, the amount of financial costs and the resources that are need for the formation of the communicative, problem-solving skills and abilities to cope with stress (Iermakov

et al., 2015). The health-saving technologies that are targeted at the environment favor the strengthening of an individual's health and influence the ecological, legal, social, cultural environment and its responsible representatives. This equally applies to the further psychological-pedagogical training of the teachers and management representatives of the educational institutions, to the development of the sanitary institutions, to the observation of the sanitary-hygienic norms and organization of the educational-teaching process, etc. (Korepanova & Panachev, 2014).

The following two conditions should be observed in planning and implementation of the health-saving technologies within educational institutions: firstly, the factors that favor or cause unfavorable condition need to be known; secondly, the practical actions that may help to enhance or eliminate them. We can conclude that the existing health-saving technologies are not fully researched in the pedagogical science. However, they possess a high pedagogical potential in the realization of the healthy lifestyle program and have a real perspective of becoming a crucial direction in the formation of healthy lifestyle within the educational system (Drogomeretsky et al., 2017). A comprehensive analysis of the researches on the issues of the students' healthy lifestyle and its various aspects points to a significant contribution of the scholars into the development of the theory and practice of this question. However, we should note that today there are no special researches on the issues of the health-saving culture formation among the pedagogic students under modern conditions. The existing researches are rather speculative in their character.

A comprehensive study of the theory and practice of the researched problem allows us to make the following conclusion: the students' existing problems with health and healthy lifestyle are mainly associated with a low level of health-saving culture in university. In order to change this situation, the change in priorities is needed: health instead of learning; individual moral, mental, physical and social well-being and a healthy lifestyle must become the priority of the integral pedagogic process of university. The change in priorities will not occur until the whole teaching and educational activity of university that is aimed at the formation of the students' health-saving culture is not based on the innovative and health-saving principles: the principle of humanistic and valeological orientation, the principle of conformity to natural laws, the principle of the development of the students' need-motivational sphere, the principle of accounting for the innovative pedagogical technologies. All the above-mentioned allowed us to define the objective contradiction between the society's need for a healthy generation and the absence of the adequate students' awareness of the significance of health, healthy lifestyle as a value and of the need to follow it. The purpose of the research is to theoretically ground and test the conditions of the health-saving culture formation among pedagogic students.

2. Methodology

During the course of the research, the following methods were used: the analysis of the special psychological-pedagogical and scientific-methodical literature on the research problem, the analysis of the teaching and methodical documentation, modelling, content-analysis, observation and analysis of the students' practical activity, testing, questioning, conversation, pedagogic experiment on the basis of the teaching program that was developed, the methods of mathematical statistics and psychological analysis. The research lasted 4 years (2015-2018) and consisted of 3 stages that were united by the common purpose, task and logic of its realization.

The results that were obtained in the course of the empirical-experimental work were tested in Abai Kazakh National Pedagogic University. 286 students study at full-time department of the Institute of Pedagogy and Psychology within Abai University: 114 first-year students, 100 second-year students, 32 third-year students, 25 fourth-year students and 15 fifth-year students. There are 188 girls and 98 young men among them. According to the established sanitary-hygienic norms and rules, there are the following facilities in the Institute: a library, reading hall, athletic gymnastics hall, events hall and lecture-halls for theoretical and practical classes with the students and chambers for administration and workers.

The management of both physical education and mass sporting work among the students and the organization of the observation of their health condition was carried out by the director of the Institute. The factual carrying out of these functions is realized by the health-improving physical culture department. It is responsible for the organization and implementation of the teaching and educational process of the students' physical education in accordance to the actual curriculum. The medical examination and observation of the students' health condition throughout academic year is carried out by the Institute small hospital and by the clinic at the place of residence of the students. The physical education within the Institute is carried out throughout the whole period of studying and is realized in various and multiple forms. They are interrelated, complement each other and represent an integral process of the students' physical education.

3. Results

Learning sessions serve as a main form of the physical education in the university. They are planned in curricula for all pedagogic specialties. The self-study of the students' improves their learning of the material, allows to increase the general time of the sessions through physical exercises, speeds up the process of physical improvement and serves as one of the ways to implement physical culture and sport into the students' everyday life and their leisure time. Combined with learning sessions, rightfully organized, the self-study ensures optimal continuity and effectiveness of the physical education. These exercises take place in extra-curricular time by the task of a teacher or within the sport sections.

In our opinion, the formation of the students' health-saving culture in pedagogical university is a focused process of a future teacher's gradual integration into health-saving activity on the basis of the complex of principles. These principles ensure the motivation for the acceptance of the healthy lifestyle conception, the integration of the students' intellectual, physical and spiritual-moral activity, the development of their general culture, the formation of the future specialists' readiness to live and propagate healthy lifestyle. A gradual integration of the future teachers into a health-saving activity implied four stages: The first, adaptive, stage implied the integration of the first-year students into the integral educational process of the university, their adaptation to the new conditions of their life activities: an increased learning load, new communicative relations with students and teachers, socio-cultural environment of the university, etc. (these elements characterize the activity of the first-year students). The second, stabilizing, stage implied stabilization, entering of a student into a state of the life activity that is characterized as stable (moving away from the tension in expectation of a failure, stress) (characteristic features of the second-year students' life). The third, creative, stage implied the students' move towards the creative and diverse activity within the socio-cultural environment of the university and outside it (characteristic features of the third-year students' life). The fourth, "final", stage implied the future teachers' readiness for a

constant observation and propagating of healthy lifestyle (characteristic features of the fourth-years students' activity). Thus, we consider health-saving activity in its inseparable connection with all diverse types of activity of the integral educational process of the university, in the integration of the students' intellectual, physical and spiritual-moral activity. The basis of the university system of the health-saving culture formation is the complex of principles that ensure the motivation for accepting of the healthy lifestyle conception: the conformity to natural laws and culture, correspondence to the social conditions, systematic and scientific character, person-oriented approach, openness, agency, complexity, independence, continuity. The structural components of the health-saving culture formation among pedagogic students include the following: moral-value, motivational-need, cognitive, activity-related, and reflexive.

The socio-cultural component of the essence of the pedagogic students' health-saving culture formation includes the interiorization of the professional and social culture, the formation of the system of social, professional and personal values. The socio-cultural component of the essence of the pedagogic students' health-saving culture formation includes the interiorization of the professional and social culture within the university educational process. The interiorization implies the formation of the mental actions and internal plan of the students' consciousness through the learning of external actions that are realized via teaching and educational process and diverse forms of communication. The theoretical elaboration of the problem of health-saving culture formation among the students of the higher pedagogical education allowed us to define the main directions of the experimental work that was aimed at solving the following tasks:

To identify the main social-pedagogical conditions of the students' health-saving culture formation system.

To realize the model of the students' health-saving culture formation through pedagogic mechanisms and technologies.

To develop methodical recommendations on the optimization of the activity that is associated with the formation of the students' health-saving culture.

Nearly 280 first-fourth year students and 22 teachers of Abai Kazakh National Pedagogic University took part in the empirical-experimental work.

The experiment revealed a huge amount of factors that influenced the health of the younger generation.

The learning-organizational factors include:

The degree of learning load, its correspondence to the age and individual abilities of a student;

Class schedule, the distribution of the load by days and weeks within an academic year;

Organizational-pedagogical environment of the classes (the concentration, alternating of the learning activity types, etc.);

The degree of physical load – per a day, week, month (during physical culture classes, breaks, in extracurricular time);

The features of the university statute and life standards;

The medical and psychological support within the university;

The management style of the university administration, the character of the “vertical” relations;

Psychological climate among the pedagogic staff, the character of the “horizontal” relations;

The university interestedness into the surrounding society, the influence of the region administration and other institutions upon the university's life;

The presence/absence of the work on the formation of the students' health culture and healthy lifestyle;

The attitude and competence level of the administration in the issues that are associated with saving and enhancing of the students' health.

The psychological-pedagogical factors (that mainly depend on a teacher) include:

Psychological climate within a group, during the classes;

Teacher's pedagogical style in communication with students;

The character of the questioning and examinations that are conducted, the problem of ratings;

The degree of the realization of the individual approach to the students on the part of a teacher (especially, in relation to the risk groups);

The correspondence of the teaching methods and technologies to the age and functional abilities of the students;

The degree of the restriction of the students' freedom in their natural body, emotional and mental expression during the classes (and, generally, during staying at university);

Personal, psychological features of a teacher, his or her character, emotional expressions;

Teacher's health condition, lifestyle and attitude to his or her own health;

Teacher's embarrassment with his or her own problems, the skill of a psycho-emotional shifting;

The degree of a teacher's pedagogic independence and the potential for his or her innovative activity;

Teacher's professional competence in the field of health-saving educational technologies.

The sanitary-hygienic factors include the following:

Noise

Illumination

Air environment

Room space

Cubic measurement

Design, color of the walls (video-ecological factors)

Building materials and paints that are used

Furniture: its sizes, location within a room

Video-screen means: computers, TV sets

Nutrition unit: the assortment, quality of the products, organization of feeding

Ecological condition of the territory that surrounds the university

Condition of the plumbing equipment.

The following principles form the basis of the health-saving culture formation among the students of the higher pedagogical education (table 1):

Table 1. The principles that form the basis of the health-saving culture formation among the students of the pedagogical universities.

№	Principles	Characteristic feature of the principles
1	Conformity to natural laws	It means the conformity of the pedagogic students' health-saving culture model to natural laws. The education within the system must correspond to the students' abilities, must be understandable. The measures must not overload the students. It should be coordinated with natural rhythms and cycles. As a rule, the attempts to force an individual of the modern society to learn physical, psycho-physiological, social and spiritual-moral values that must be transformed into personal socially significant qualities are counterproductive.
2	Conformity to the culture	It means the conformity of the components of the pedagogic students' health-saving culture formation system to the culture. This is proved by the experience of the Chinese, Islamic and Israeli educational systems, by the ancient philosophy and Japanese traditions of Giri and Ritsu-rio. In this case, the essence and the form of the education system are predetermined by the long-lasting ethnic experience.

3	Correspondence to the social conditions	It means the adequacy of the components of the health-saving culture formation among pedagogic students to the current socio-cultural context.
4	Systemic character	The system of the health-saving culture formation among pedagogic students, its functioning is viewed as a system that can't be reduced to the sum of its elements. It possesses a structure, whereas the features of an element are determined by its place within this structure. The systemic approach implies the diversity of the sources and driving forces in the development of all system elements that is being managed.
5	Scientific character	The quality parameter of the professional education; it implies that the science is treated as a source of knowledge that reflects the regularities of the surrounding world, influences mental development, allows to master modern science, technique, production, culture, art.
6	Person-oriented	It implies a teacher's consistent attitude towards a student as a personality, as a self-conscious subject of the educational and teaching interaction. According to the person-oriented approach, a student should be assisted in becoming aware of himself as a personality, in revealing and discovering his potential, in developing of self-awareness, in realizing of personally significant and socially accepted forms and ways of self-defining, self-realization and self-assertion.
7	Openness	It means the dependence of the educational-teaching potential in its ability to self-organize within the changing environment. The openness implies an active interaction with the surrounding social space, its values and meanings that enrich the educational-teaching system.
8	Agency	It implies a student's active attitude to all types of the educational-cognitive activity. It is expressed in the creativity, communication, acts of will. It is formed as a person's active life attitude that manifested in his principality, consistency, in the unity of the word and action.
9	Complexity	It means the realization of all development principles of the pedagogic students' health-saving culture system in their integral unity.
10	Independence	It is expressed in a student's ability to set a certain goal and to be persistent in its achievement on his own, to be responsible for his activity, to act in a conscious way and to take initiative both in familiar situations and under new conditions that require creative solutions.

Taking into account the specificity of our research and in order to form the experimental and control groups, we distinguished the indicators of the readiness for health saving during different periods. The levels of readiness for health saving were structured according to the study courses at university. 142 first-fourth year students of Abai Kazakh National Pedagogic University formed the experimental group, whereas 138 first-fourth year students of the Kazakh State Female Pedagogical University formed the control group.

The experiment was preceded by the social-pedagogical research within which the methods of interview, conversation and survey were used (preparatory stage):

As a result, the main student groups were identified:

Students with motivation to actively maintain health and a healthy lifestyle;

Students with weak motivation;

Students with no motivation to actively maintain health and a healthy lifestyle.

The empirical-experimental work allowed to identify the following aspects:

The influence of the content of certain components of the students' health-saving culture formation upon its effectiveness;

The dynamics in the students' value orientation level;

The effectiveness of the author model of the students' health-saving culture formation.

The ascertaining experiment on the first stage revealed a low level of the indicators of the students' health-saving culture formation (physical, psychological, psychological-social). The results pointed to the low potential of the conditions that are based on the actual educational standards to form the students' health-saving culture in a modern university.

We faced the necessity to improve this direction within the educational process of the university.

This allowed us to become aware of the necessary preconditions and to define the basic parameters

of the health-saving culture formation system that was designed by us in 2015-2106. The formative experiment lasted during 2016-2018 academic years. The beginning of 2017 was the final stage of the formative experiment within which the results of the pedagogic experiment were summed up and analyzed, its outcomes were generalized.

The empirical indicators that reflect the dynamics in the health-saving culture formation during the formative experiment are listed below:

1. Statistic data on the health condition of the university students (first-fourth year students).
2. The dynamics in the changes of their health condition.
3. The data on the students' value orientations, motives and attitudes in the context of health-saving problem.
4. The data on the degree of the students' participation in various sports and health structures of the university and outside it.
5. The efficiency of their participation in various health-saving events of the university, city, region.
6. The data on the students who continued to participate in the health-saving system after graduating from the university.

During the experiment, the levels of the students' main psychological-physiological and physical indicators were measured and the following information was registered:

- a) The data on the students' health condition;
- b) Physiological characteristics: weight, arm strength, pulse, spirometry, chest volume, flexibility;
- c) The indicators of absence from classes due to illness;
- d) The main motivation to observe a healthy lifestyle;
- e) The data on the rank of the health-saving orientation in the life-purpose values hierarchy;
- f) The attitude towards the indicators that characterize healthy lifestyle: smoking, alcohol, physical activity, sports, sleeping, eating.

As a result, the data were obtained that ascertained the quality of the students' health and health-saving orientation by the beginning of the formative experiment (table 2).

Table 2. The comparison of the indicators of the students' health-saving qualities (2015-2018).

	The main health-saving indicators	Participants of the experiment: the results by years							
		Experimental group				Control group			
		2014-2015	2015-2016	2016-2017	2017-2018	2014-2015	2015-2016	2016-2017	2017-2018
1	Stable interest to healthy lifestyle	105 75%	112 79,4%	114 80,2%	120 86,3%	100 72,4%	102 72,8%	104 74,8%	108 77,6%
2	Complete rejection of bad habits	89 63,5%	96 68%	108 76%	110 79,1%	88 63,7%	87 62,1%	80 57,4%	77 55,3%
3	The knowledge of one's organism and its capabilities	95 67,8%	97 68,7%	99 69,7%	102 73,3%	94 68,1%	93 66,4%	94 67,6%	96 69%
4	Fully formed skills and abilities of healthy lifestyle	62 44,2%	68 48,2%	79 55,6%	89 64%	60 43,4%	54 38,5%	47 33,8%	45 32^%
5	Optimal physical activity	68 48,5%	72 51%	89 62,6%	109 78,4%	62 44,9%	60 42,8%	62 44,6%	63 45,3%
6	Observation of healthy lifestyle principles	81 57,8%	89 63,1%	98 69%	110 79,1%	78 56,5%	76 54,2%	79 56,8%	78 56,1%
7	Quest for excellence	90 64,2%	96 68%	100 70,4%	101 72,6%	85 61,5%	83 59,2%	85 61,1%	82 58,9%
8	Propaganda of healthy lifestyle	57 40,7%	68 48,2%	92 64,7%	109 78,4%	43 31,1%	40 28,5%	41 29,4%	42 30,2%

The number of respondents	140	141	142	139	138	140	139	139
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The formative experiment lasted 4 years and formed 5 complete functioning cycles of the system that was researched. The data in the table evidence that during the course of the experiment and in the process of the health-saving culture formation, the experimental group students demonstrated significant positive changes. Table 2 shows the indicators that characterize the students' health condition and their attitude towards a healthy lifestyle. It is evident that, in comparison to the control group, the students of the experimental group demonstrated significant positive changes during 4 years. The rate of the chronic diseases within the experimental group equaled 58,2%, whereas within the control group this rate was 77,6%. The attitude towards smoking was as following: "I smoke" – 30,2% (experimental group), 66,1% (control group). Other indicators, such as the attitude towards sleeping and eating, also speak well for the experimental group.

Table 3. The indicators that characterize the students' health condition.

№	Indicators	Participants of the experiment			
		Experimental group		Control group	
		2014	2018	2014	2018
1	Chronic diseases:				
	present	96 67,6%	81 58,2%	98 71%	108 77,6%
	absent	46 32,3%	58 41,7%	40 28,9%	31 22,3%
2	Attitude towards smoking:				
	I smoke	30 21,1%	85 61,1%	28 20,1%	32 23%
	I smoke from time to time.	22 15,4%	12 8,6%	23 16,6%	15 10,7%
	I smoke all the time.	90 63,3%	42 30,2%	87 63%	92 66,1%
3	Attitude towards sleeping:				
	I sleep at least 9-10 hours a day.	72 50,71%	74 53,2%	69 50%	71 51%
	I sleep not more than 7-8 hours a day.	66 46,4%	62 44,6%	66 47,8%	64 46%
	I sleep not more than 6 hours a day.	4 2,8%	3 2,1%	3 2,1%	4 2,8%
	The number of respondents	Σ=142	Σ = 139	Σ=138	Σ=139

Table 4. The generalized results of the "Self-attitude" survey among the students of Abai Kazakh National Pedagogic University and the Kazakh State Female Pedagogic University.

№	Questions	Participants of the experiment			
		Experimental group		Experimental group	
		2014	2018	2014	2018
1	Are you satisfied with your health condition?				
	Completely satisfied.	46 32%	82 58%	44 31%	43 30%
	Partially satisfied.	39 27%	40 28%	38 27%	37 26%
	Completely dissatisfied.	57 40%	17 12%	56 40%	59 42%
2	Do you feel fatigue, headache and weakness after the classes?				

	Always.	50 35%	25 17%	46 33%	46 33%
	Often.	36 25%	15 10%	34 24%	38 27%
	From time to time.	12 8%	31 22%	8 5%	14 10%
	Never.	44 31%	68 48%	40 28%	41 28%
3	Do you think that the chance to be healthy depends on you?				
	Yes, it fully depends on me.	50 35%	80 57%	49 35%	51 36%
	It depends on me in many aspects.	11 7%	18 13%	12 8%	16 11%
	It depends on my only partially.	5 3%	145 10%	6 4%	10 7%
	It doesn't depend on me at all.	76 53%	26 18%	71 51%	62 44%
4	Are you able to manage your organism today?				
	Completely able.	30 21%	44 31%	29 21%	26 18%
	Mainly able.	13 9%	38 27%	12 8%	10 7%
	Partially able.	22 15%	28 20%	20 144%	19 14%
	Completely unable.	11 53%	29 21%	11 55%	84 60%
5	Are you satisfied with your life?				
	Completely satisfied.	60 42%	68 48%	59 42%	65 46%
	Mainly satisfied.	21 14%	31 22%	20 14%	18 13%
	Partially satisfied.	11 7%	16 11%	12 8%	12 8%
	Completely dissatisfied.	49 35%	24 16%	47 34%	44 31%
6	Do you experience the following feelings: fear, despair, anxiety, tension?...				
	I always experience them.	51 36%	20 14%	49 35%	41 28%
	I experience them almost constantly.	30 21%	22 15%	30 21%	30 21%
	I experience them from time to time.	10 6%	18 13%	9 6%	12 8%
	I never experience them.	51 36%	79 56%	50 36%	56 40%
7	Do you view yourself as a well-tempered person?				
	Yes, I do.	80 56%	87 62%	80 57%	82 58%
	Not exactly.	12 8%	29 21%	11 7%	21 15%
	No, I don't.	50 35%	22 15%	47 34%	36 25%
	The number of respondents	$\Sigma=142$	$\Sigma = 139$	$\Sigma=138$	$\Sigma=139$

Table 4 shows the indicators that characterize the students' self-attitude. The significant changes in the experimental group students' psycho-physiological condition took place during the 4 years.

Almost all questions relate to the effectiveness of the activity that was aimed at the health-saving culture formation among the students of Abai Kazakh National Pedagogic University. For example, the question “Do you think that the chance to be healthy depends on you? Was positively answered by 36% of the students in the control group, whereas in the experimental group 57% of the students answered yes to this question. The question Are you satisfied with your life? Was negatively answered by 31% of the control group students, whereas in the experimental group only 16% of the students were not satisfied with their life. Thus, the data proved the effectiveness of the students’ health-saving culture formation system. The formative experiment that was aimed at the implementation of the author system lasted 5 years (2014-2018) and led to the positive results:

The students’ health condition profoundly improved;

The students’ vision of the healthy lifestyle changed;

The level of their academic progress substantially improved;

The level of discipline and moral-psychological climate among the students improved.

4. Discussion

The students’ physical education implies the unity of the somatic, intellectual and worldview components in the formation of a person’s health culture. They condition educational, methodical and activity-practical orientation of the educational process. This is proved by the ideas of Leontiev, Vygotsky and other scholars according to which a person’s psycho-physical development is realized both through acquiring of the social-practical experience and the formation of a person’s worldview and enhancing of the knowledge system (Katrenko, 2013). Our research was aimed at the elaboration of the approach that modeled the teaching and educational process with orientation to a person’s integral development and self-determination during the process of creative mastering of the sport and recreational activity. The basis of this process is formed, first of all, by the material of such humanitarian disciplines as the history of physical culture, theory and method of physical education and hygiene. The pedagogic activity of the students’ health-saving culture formation was carried out through the use of the most various teaching and learning forms in combination with intellectual games and training. The important social-economic issues that relate to bad habits and various illnesses were discussed (Kostina, 2015; Fedoseenko & Okhlopkova, 2016).

The generalized results of the empirical-experimental work in the realization and evaluation of the effectiveness of the students’ health-saving culture formation model allow to make the following conclusion. Under the favorable social-pedagogical conditions, this system is able to become a stable factor that ensures the formation of health-saving culture among the students of the modern higher professional education. The experiment showed that the effectiveness of the health-saving culture formation among the students of the higher professional education is substantially influenced by the following factors:

The real condition of the society and its institutions;

The negative environmental influence that can’t be programmed;

the inconsistency between educational and teaching efforts of the higher education and society’s systems that are supposed to engage in teaching of health-saving skills;

The activity of the modern media that is aimed at the destruction of healthy lifestyle values.

We can conclude that modern socio-cultural situation in Kazakhstan defines the formation of the health-saving culture among young people as a national strategic vector of the society’s sustainable development, as a real educational form that is oriented towards the formation of a healthy lifestyle.

5. Conclusions

1. During the last decade, the education level of the young people that is aimed at maintaining of healthy lifestyle reached its lowest dangerous point and threatens the national security of Kazakhstan in general. The increase in the young people's awareness of the importance of a healthy lifestyle is possible through the creation of the health-saving culture, through its implementation into the integral educational and teaching process of the university.
2. Ensuring of the effectiveness of the students' health-saving culture formation requires to take into account all the factors that function within the field of the integral educational process and to create favorable social-pedagogic conditions.
3. Health saving is the state's basic and significant value; it is a systemic-complex personal quality that a future teacher needs to possess.

The effectiveness of the students' health-saving culture formation is determined by the system of the favorable social-pedagogic conditions (the presence of the statewide ideologies and values that are oriented towards healthy lifestyle; the pedagogic practice that accounts for social conditions; the humanization of the relationships within the university educational system; the effective management of the students' health-saving culture formation process).

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