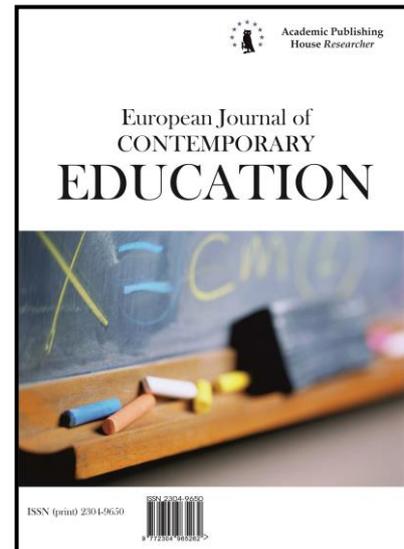




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The Realization of the System Programme “Health Saving Education” in the Pedagogical University

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Abstract

The purpose of the article is to develop a system programme "Health saving education" on the basis of creating a structural model and model of management and ensuring health and preventive activities and experimentally prove the effectiveness of its implementation in the educational process of the university. The solution of research problems was ensured by a set of complementary theoretical methods on the analysis of domestic and foreign pedagogical theory, practice and experience in the field of health of saving education and professional standards. And also general scientific methods such as classification, modeling, comparison, comparison and generalization; experimental methods with the involvement of diagnostic tools based on B. Bloom's classification in the author's modification and expert assessments. The research reveals and scientifically proves that the process of health of the saving education of future teachers in the aspect of implementing the author's system programme becomes more effective while ensuring the systemic nature of provision and management. The practical significance of the research is that using the author's programme will allow us to reach the highest quality level of professional training of teachers, which ensures health saving individual-differentiated development of the student. The proposed patterns, provisions and conclusions create the prerequisites for further study of the phenomenon of realization of the health of saving education in methodological, content and management aspects. The presented practical experience of realization of the programme "Health saving education" can be used at building of professional space, in other educational organizations.

Keywords: programme, health saving education, teacher training, model.

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1. Introduction

The preamble to the statutes of the World Health Organization states: "Health is a state of complete physical, mental and social well-being, and not only the absence of disease and physical defects." Health to a great extent depends on the relationship of man with the environment, society and production activities. Proceeding from this, it is possible to define health as well as the state of the human body (its physical and mental qualities), enabling it to actively live and work under various environmental conditions and to withstand its unfavorable factors.

At the present time, a new attitude to health is forming as the basic value of life activity. However, this process is in the making, and the attitude of Russians (including young people) to their own health is mainly instrumental in nature, serves as a means of realizing various goals (for example, getting a job).

According to theoretical studies, the situation with respect to the awareness of young people studying, about the most common diseases, methods of taking care of their health, the genetic characteristics of their bodies leaves much to be desired, since only one third of the citizens own this information. In various educational organizations, conditions are created to strengthen the health of students and schoolchildren, sanitary and hygienic education in the field of health culture and the formation of a stable need for a healthy lifestyle are realized, and active theoretical and practical measures are taken to prevent socially caused diseases. In this regard, one of the urgent problems in the field of training future teachers is the implementation of the educational process, using the health of saving technologies and preparing students for their subsequent use in school. In the scientific literature, the issues of introducing health technologies into the professional training of teachers have been thoroughly studied, namely:

- research on the theoretical and methodological justification of the process of forming the health of the saving competence of students using different innovations;
- creation of the currently required social and pedagogical conditions for the formation of a physically, intellectually and spiritually developed personality;
- solving the problems of insufficient response of the system of vocational education, the rapidly changing conditions of the life of the society in the aspect of meeting the health of the saving educational needs of modern students.

However, the development of a structured health-preventive environment of a pedagogical university has not been implemented to the present day. Therefore, the goal of the article is to develop a systematic program "Health saving education" in a pedagogical university on the basis of creating a structural and management model and experimentally prove the effectiveness of its implementation in the educational process.

2. Materials and methods

As a methodological substantiation of the author's research, a systematic approach is considered, the implementation of which, in conjunction with competency, activity, personality-oriented and culturological approaches, provides a higher quality level through the integration of various clusters, components and innovative technologies of health-saving education. The solution of research problems was provided by a set of complementary theoretical methods, on the analysis of domestic and foreign pedagogical theory, practice and experience in the field of health-saving education and professional standards; general scientific methods such as classification, modeling, comparison, comparison and generalization; experimental methods with the involvement of diagnostic tools based on B. Bloom's classification in the author's modification and expert assessments.

At the first stage of the 2560 students attending the Institute, a set of willing students was announced for experimental work. As a result, 186 students enrolled in day schools and those in correspondence courses expressed their desire to participate. In the second stage, out of 186 students, 96 students were identified who meet the following criteria:

- age of respondents – 18–25 years;
- on the characteristics of the level of health (basic or preparatory health group);
- on the level of educational training (who scored an average of 60–72 points for entrance examinations to the institute for 1 course of study).

Of the 96 students selected, 2 groups were formed: 46 students enrolled in day schools – the experimental group (EG) and 50 students of those in correspondence courses – control (CG). From all participants in the experiment, informed consent was obtained to participate in this study.

During 2011–2016 years we conducted research work in the Glazov State Pedagogical Institute. In the experimental group (EG), the program "Health Savings Education" was implemented during the three academic years (2012/13, 2013/14, 2014/15). In the control group, during the same years, health-preventive and health-saving activities were implemented, but not according to the author's program.

Based on experimental methods involving diagnostic tools, a criterial-level research apparatus was determined. Three main indicators of quantitative and qualitative assessment were determined on three levels (high, average, low): educational, health and upbringing (Table 1).

Table 1. Criterial-level research apparatus

Low	Average	High
Upbringing indicator		
<p><u>Purpose:</u> to determine the presence of a culture-oriented belief, the need for a physical and healthy image and lifestyle.</p> <p><u>Method:</u> the author's method of determining the physical culture and health outlook on the analysis of data in the social network "In contact".</p> <p><u>Contents of the diagnostic:</u> the respondent needs to answer 14 questions:</p> <ol style="list-style-type: none"> 1. Is (there) present at you physical culture and health topics in the "status" on your page. 2. The presence of photographs and videos (your personal) on the physical culture and health topics on your page. 3. The presence of photographs and videos on the physical culture and health topics on your page 4. Is there (was present) you have physical culture and health in the "lichke" on your page. 5. Is there (was present) whether you have a health and fitness theme "on the wall" and in the "news" on your page. 6. Do you leave the health information on other pages (bookmarks, meetings, applications, subscriptions, etc.). 7. Do you leave comments on the physical culture and health topics on other pages. 8. Do you use the content laid out in the social network for physical training and sports. 9. Athletic and health information, laid out on the pages of people you do not know, leaves you indifferent. 10. Do you put "Laiki" on the physical culture and health information on other pages. 11. Do you participate in "groups" (discussions) on physical culture and health topics. 12. Are you positive about the spread of physical culture in social networks. 13. Did you distribute the fitness and health information to other pages (videos, photos, etc.). 14. Do you use the social network to search for sports and health information. <p><u>The diagnostic key:</u> the evaluation is based on the summation of all points scored by the subject on the following scale: "Yes" – 3 points, "More Yes, No" – 2 points, "No more than Yes" – 1 point, "No" – 0 points (except 9 questions – "Yes" – (-2) points, "More Yes than No" – (- 1) point, "No more than Yes" – 0 point, "No" – 3 points).</p>		
<p>Less than 10 points: the student does not show a value need for physical culture and health activities and, in general, the process of forming a physical and healthy image and lifestyle.</p>	<p>From 10 to 20 points: the student shows interest and need, realizes the social importance and necessity of forming a physical and healthy image and lifestyle, actively participates in discussions and discussions on physical culture and health topics.</p>	<p>Over 20 points: the respondent reveals an active physical culture and wellness outlook through conviction in the idea of the impossibility of normal vital activity and effective professional activity without maintaining a physical and healthy image and lifestyle</p>

Health indicator		
<p>Purpose: to determine the level of physical health, based on the evaluation of the indicator of functional characteristics.</p> <p>Method: Diagnosis of the level of somatic health.</p> <p>Contents of the diagnostic: monitoring the number of students who have hospital sheets or certificates for hospitalization or exemption from training for health reasons, including physical education classes or a sports section.</p> <p>The diagnostic key: Low level – the student missed for health reasons over three academic years more than 60 hours (inclusive). The average level – the student missed for health reasons over three academic years more than 30, but less than 60 hours. High level – the subject missed for health reasons for three school years not more than 30 hours (inclusive).</p>		
<p>Characterized by a low level of physical health based on a low assessment of the adaptive potential as a quantitative indicator of health.</p>	<p>It is characterized by an average level of somatic health based on an average assessment of the adaptive potential as a quantitative indicator of health.</p>	<p>It is characterized by a high level of physical health based on a high assessment of the adaptive potential as a quantitative indicator health.</p>
Educational indicator		
<p>Purpose: to reveal physical culture and health knowledge, to define understanding and possession of physical culture and health knowledge and skills of their application in practical activities.</p> <p>Method: a modified system of levels of training in the taxonomy of B. Bloom in terms of levels of physical fitness and health competence (knowledge, understanding, application).</p> <p>Contents of the diagnostic: Level 1 – knowledge (testing with the choice of the correct answer): the memorization and reproduction of the studied material by the students in the context of different types of content was verified, from concrete facts to holistic theories. Level 2 – understanding or comprehension (testing with the suggestion of the answer or with a substantiation of the chosen answer): the ability of learners to transform a material from one form of expression into another – its "translation" from one "language" to another was defined. Level 3 – application (practical demonstration of the acquired knowledge): the ability of students to use the studied material in specific conditions and in new situations was revealed on the basis of the application of rules, methods, concepts, laws, principles, theories.</p> <p>The diagnostic key: testing consisted of three parts: one level – 60 questions (choosing the right answer from 3 to 4 options); on the 2nd level – 30 questions (suggesting your answer or choosing the correct answer from 3 to 4 options with the obligatory justification of the chosen answer); on 3 levels – 15 questions (practical demonstration of the acquired knowledge). Processing of the results: summing up the scores obtained as a result of the testing according to the following scheme: $X = A + B * 2 + C * 4$, where "A" is the number of correct answers for 1 level, "B" – the number of correct answers for level 2, "C" – the number of correct answers on level 3.</p>		
<p>Less than 84 points: the student remembers and reproduces in the context of various types of content – from concrete facts to basic concepts and holistic theories studied material in the field:</p>	<p>More than 85, but less than 144 points: the learner is able to transform material from one form of expression in the other. As an indicator of understanding is the ability to interpret the material (explanation, summary) or the assumption of a further course of events and events. Understands the facts, rules and principles of the formation of physical culture, describes the future consequences arising from the available data in the context:</p>	<p>More than 145 points: the respondent manifests the ability to use the material studied in new situations based on the application of rules, methods, concepts, laws, principles, theories. The learner is able to use in practice and applies in specific practical situations knowledge in the aspect:</p>

- methods of physical education and self-education to enhance the body's adaptive reserves, promote health, including non-traditional and national types of exercise;
- the basis for ensuring the protection of life and health of students in the teaching and upbringing process and after-hours activities, taking into account the region;
- medico-biological and psychological bases of physical culture, including national features of the ethnoses.

Statistical analysis. To organize the experimental study, a mathematical statistics method was used, which was used to quantitatively analyze the experimental data. To compare the EG and CG distributions in the context of the mathematical and statistical processing of the results of pedagogical studies, we used χ^2 . The choice of this criterion for mathematical-statistical processing is due to the following characteristics: the application of the criterion is possible when the results of EG and CG groups on the state of the studied property, the attribute are distributed into more than two categories (class), in our case to levels (high, average, low); allows the transfer of scores obtained as a result of diagnostics of the formation of indicators in the levels (high, average, low) and build tables of distribution of points to find the number of people at these levels, and also allows to prove that in one of the levels (in one of the categories) the number of people is really more or less (Nagovitsyn et al., 2017).

3. Discussion

In the special scientific literature, the issues of introducing health technologies into the vocational training of teachers have been thoroughly studied. There are several key areas in the presented problems. The first line is connected with the search for solutions to problems, insufficient response of the education system, significant changes in the life activity of the society in the aspect of satisfying the health of the saving educational needs of modern students.

Beginning the discussion in this direction, let's turn to D. Puttnam (2015) research, in which the author puts urgent questions to the existing system of education and offers original solutions for the formation of independent, adapted to life, harmoniously developed personalities in students.

In their work, Y. Duan (2015) and others raise the problem of lack of attention on the part of management of educational organizations on the adaptation of the schoolchild to the university, towards the beginning of adulthood in the direction mental health. The authors offer a special psycho-social program for social support, a system of physical activity and a set of health-improving procedures. The effectiveness of the created conditions is proved by researchers on the basis of positive indicators of health, emotional state and anthropometric data of students, increasing their self-efficacy and learning activity, as well as active internal motivation to maintain a healthy lifestyle. The work of A. G. Papaioannou (2017) is devoted to the direction of professional training on the formation of an integral, harmonious and internal motivational to the physical activity of the individual. Based on the historical pedagogical approach, the physical culture and health methodology in the field of philosophy of education and the concept of cultivating the Olympic ideals, the author created a technology for motivating students to physical activity, health, well-being, friendship and mutual respect.

S. Spengler (2015), A. Woll (2015) propose and justify the concept "The more you are active, the more health you have." Based on the analysis of the correlation between physical activity and the quality of life in adolescence, the need to implement a sports club and an appropriate leisure system for students is proved in the educational organization. The study uses the original linear and multiple regression analysis to measure the physical activity of respondents in their free time. How to properly reconsider the perception and prepare students in the psycho-physical aspect to the transition from high school to higher education, are devoted to the scientific research of R. McPhail (2015). The author proposed a new methodology for this problem, developed and experimentally proven the original program for adapting freshmen at the university.

The next direction in the development of methodology and the implementation of health technologies in the professional training of teachers is focused on creating the currently required social and pedagogical conditions for the formation of a physically, intellectually and spiritually developed personality. In the foreseeing of the presented problem, the scientific work of

S.V. Sergeeva (2014), O.A. Voskresenko (2014), which offers an integrated program of educational work, developed on the basis of a system-functional approach, and successfully implemented at the university. The goal of the program is the organization and implementation of educational work to develop the personality of students, create conditions for their self-determination and socialization.

The development of the technology of health-preventive work was carried out in her scientific researches by P. H. Kulinna (2013). She proposed structural activities in three main areas: a model of psychosocial impact on youth, a model for the organization of rational youth physical activity and comprehensive programs of the school health system. Attention is drawn to the study of T. McFadden (2017) and others on the prevention of mental health through the activation of a special system of motor activity. The statistical results in their work showed that the depressive symptoms of university students are decreasing, and their motivational state to cognitive activity and life self-esteem is increased from baseline to high.

The research of L. Shagrir (2015) is noteworthy, in which the actual goal is stated: the development of a professional concept that defines interactive activities in the field of health of the savings of teachers and students. The results of her research show three types of conceptual principles: the role of educators is to help learners to adapt, to succeed in learning and to expand their connections with them; teachers should expand the ability of students and help them grow and build their professional identity as teachers; When directing their students, teachers should act as an intermediary between theory and practice. In the aspect of methodological substantiation of the student's personality development, the work of H. Messenger (2015) is interesting. In work on the basis of naturalistic and ethnographic approaches, a sociocultural complex model of perspective education, upbringing and personal development of students in college was developed.

In his scientific work R.S. Nagovitsyn (2014), proposes the implementation of the educational space of a liberal arts university to form a harmonious personality in the physical culture based on mobile technologies. The author proposes the formation of a healthy lifestyle for students through the introduction of the author's methodology for the development of physical and mental qualities in the educational and upbringing process to prepare for testing the standards of the GTO (Nagovitsyn et al., 2015). In turn, the joint scientific research reveals a new approach to the implementation of physical culture and health in the northern region of the country by means of the author's program of skiing and improving winter running (Nagovitsyn et al., 2017).

Continuing the discussion, let us turn to the scientific work of P.A. Hastie (2017) and others, in which the process of teaching students on the basis of projects (PBL) in the field of recreational activities was studied in detail. Using the two-level hierarchical linear model (HLM), the authors show significantly significant results in the effectiveness of preventive health work, including the organization of a health-saving environment and various fitness and pilates techniques.

And the last key aspect of the methodology for the implementation of health and preventive activities in the educational space is related to scientific research on the theoretical and methodological justification for the formation of health-saving competence of students using various technologies and innovations (Nagovitsyn et al., 2016).

So, in his scientific work S. Finkam (2005) represents the theoretical and methodological foundations for the formation of a healthy culture of the working population, as well as student youth. S. Barradell (2017), T. Peseta (2017) justify the need to introduce conceptual approaches to the healing process of the younger generation. The authors propose the modernization of students' curricula in the direction of health-saving technologies.

In their scientific research H. Kienzler (2017), C. Fontanesi (2017) prove the effectiveness of the application of the new method of learning based on the program (IBL) in the aspect of developing a special course "Introduction to global health". The created course forms professional competencies for undergraduate students in solving specific problems related to health, and at the same time promotes the acquisition of special skills in the cultivation of a healthy lifestyle.

In turn, N.A. Barbarash (2016), D.Yu. Kuvshinova (2016) represent the results of the educational and scientific activities of the teaching staff on the development of ways to motivate the population, including students to a healthy lifestyle. In the satire, topical questions are posed in the aspect of the methodology of the science of health and the options for their solution. They proposed an unconventional program consisting of motivating lectures and talks on the verses of A. Pushkin, O. Mandelstam, I. Huberman, V. Dagurov, based on a humorous approach to this problem.

Continuing the discussion, it is worth mentioning the research work of R.I. Aizman (2014) and others, which examines the main problems of health-saving activities in the education system: the low level of professional competence of pedagogical workers, methodical, material and technical, information base; unsatisfactory use of the health-saving potential of a number of educational programs; lack of a mechanism for departmental and interagency cooperation, underdevelopment of the regulatory and legal framework. Immediate tasks are set to solve these problems and the main directions of the established Coordinating Council on the health of students and teachers within the framework of the Expert Council on Health and Physical Education of Students at the State Duma Education Committee.

The scientific work of M.A. Maznichenko (2013), N.I. Neskromnykh (2013), which proposed an original comprehensive approach to the prevention of adolescent social dependencies through the development of a classification of integrated pedagogical tools. Concluding the theoretical study, the remarkable work of D. Dudley (2016) and others, which attempts to solve the research problem in all three directions, is remarkable. The study presents the United Nations international programs on the interaction of education and health in the education and upbringing of the younger generation. Optimizing physical education is a model offered by the authors in their research. Based on the use of the "clinical" approach, scientists prove the absence of evaluation systems that are able to solve both the health goals and educational ones. In the experimental part, original methods are proposed that give a new idea, rethinking the role of health-preventive work in the education system.

Despite a significant number of scientific works in the research direction, it should be noted that there is an urgent need for systematization and methodological justification for the implementation of the educational process of students using the health of saving technologies. In the scientific literature, the issues of introduction of health-improving technologies in vocational training of teachers have been thoroughly studied, however, the development of a systemic health-preventive environment of a pedagogical university has not been carried out to date. What ultimately should contribute to ensuring the output of professional teacher education to a higher quality level through the integration of various clusters, components and innovative technologies in the field of health savings training (Nagovitsyn et al., 2017).

In the development of models, we used the scientific work on theoretical modeling in higher education M.A. Dahlgren (2016) and others. The authors propose a "sociomaterial" view on the implementation of the educational process in terms of identifying the following areas: material, situational, representative and relational. The fundamentals of models in their scientific work reflect the systematization of training in the case of European countries: Australia, Sweden and the United Kingdom. Which illustrate various approaches to modeling and related features in the emerging forms of learning. On the basis of general scientific methods of research in the aspect of development of theoretical and methodological foundations, a structural model of the program "Health-saving education" was created in the pedagogical university (Fig. 1).

To implement the program, the activities of university structures aimed at protecting and promoting the health of students, teachers and staff of the university, deputy deans in educational and social work, curators and tutors of academic groups, a trade union student organization, including the sports and health committee of the trade union bureau, are organized. To promote the implementation of certain areas of the program involved organizations involved in the protection and promotion of health in the city of Glazov. The main executors of the program were: the department for educational and social work; trade union organization of students and graduate students; Department of Physical Culture and Life Safety; the center of leisure and creativity; sport Club; service of social and psychological support of students; psychological club "Synergy"; Combine student food; sanatorium-preventorium of the university; health center of the Institute; council for educational and social work; Department of Pedagogical and Art Education; curators and tutors of academic groups; bodies of student self-government; a student detachment of law and order "Sirius".

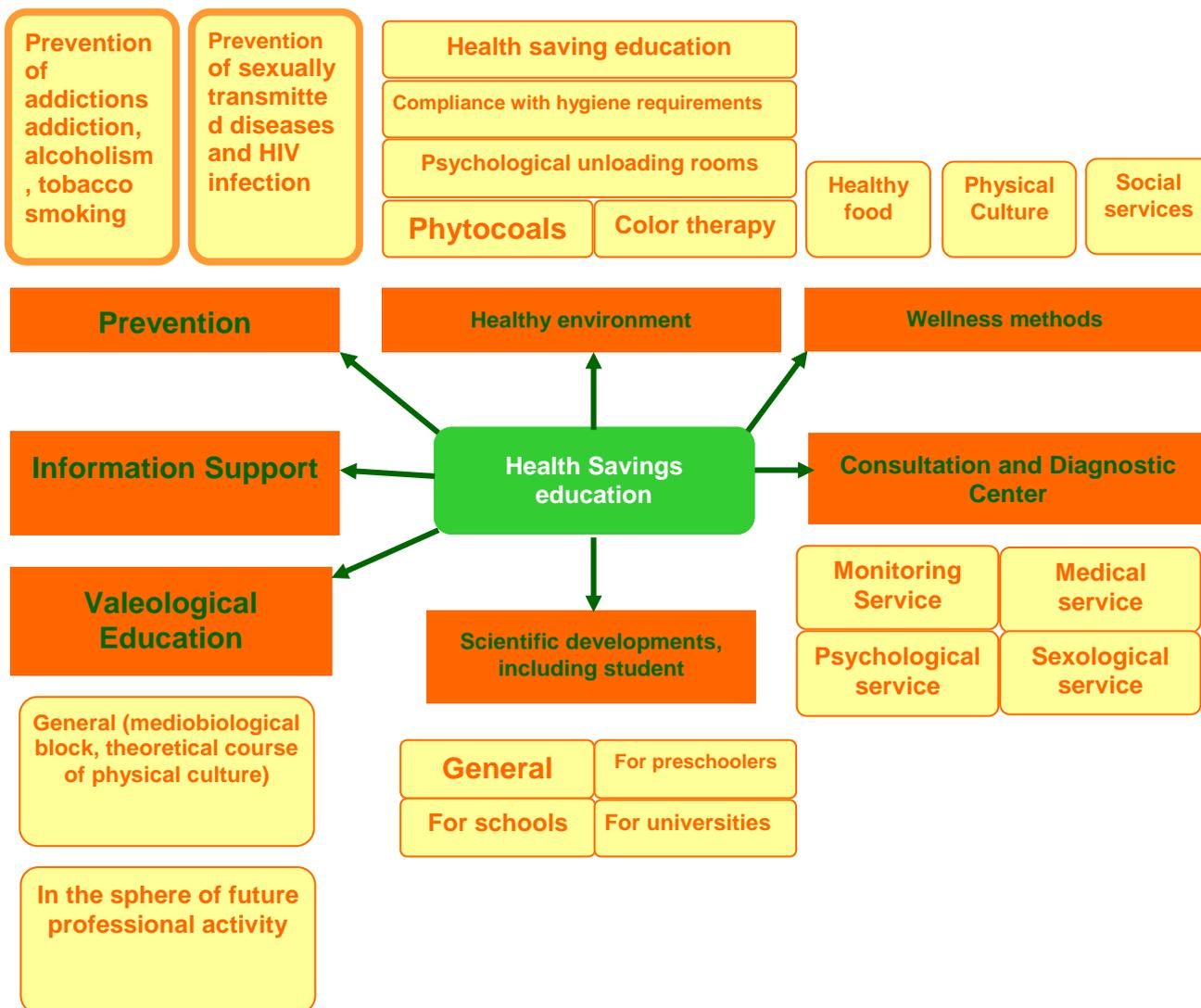


Fig. 1. Structural model of the program "Health saving education"

The system program "Health Savings Education" was developed on the basis of the law of the Russian Federation "On Higher Professional and Postgraduate Education", the federal target program "Comprehensive Measures against Drug Abuse and Illicit Trafficking for 2009-2010", Federal Law No. 3 "On Narcotic Drugs means and psychotropic substances" dated 08.01.1998, Federal Law No. 87 "On restriction of tobacco smoking" of 10.07.2001, Federal Law No. 38 "On preventing the spread of the disease caused by the virus in the Russian Federation (HIV infection)" from 30.03.1995, the Federal Law "On Narcotic Drugs and Psychotropic Substances" from 10.12.1997 year.

Based on private scientific methods of research, a model of management and provision of health-preventive activities in a pedagogical university was created in the view of developing the organizational and managerial foundations of the program "Health Savings Education" (Fig. 2).

The model is a definition of management processes, the processes of providing work, a list of directions and the final outcome of the organization of health-prevention activities. The developed model is based on the principles of pedagogical design and scientific developments in the field of quality management of the process.

The management processes of the health-prevention system are: monitoring system: diagnostics of the state of all activities of the program; development of the program: the formation of an action plan, coordination of the work of structural units, identification of the main and auxiliary processes, the deadlines for the implementation of measures and the system for assessing

effectiveness; resource mobilization: identification of material, administrative, technical resources for the implementation of the program at the level of the institute, faculty, structural unit, distribution of duties and responsibilities of its participants; program monitoring: is conducted annually after the end of the school year. The monitoring objects are: the progress of the planned process, assessment of the reasons for the failure of its activities, management of changes, needs, expectations and satisfaction with the results. Capacity building of the program: assessment of the real state of program implementation, identification and planning of improvements, setting new goals for its implementation for the next period.

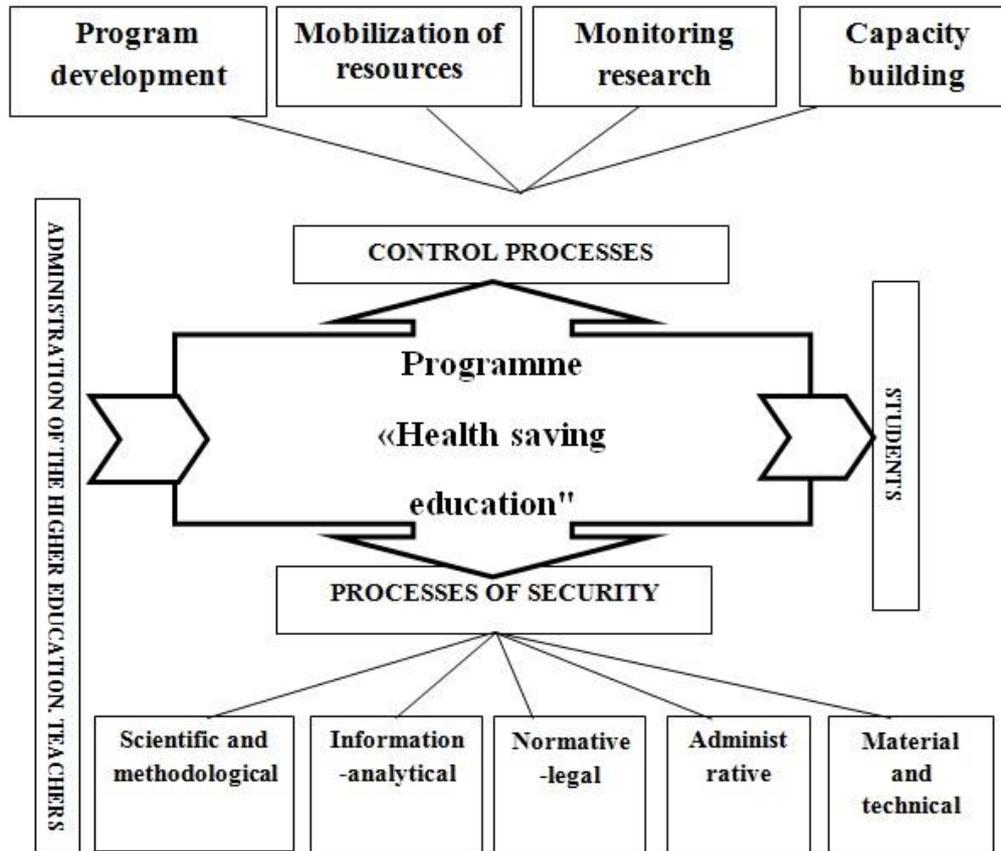


Fig. 2. Model of management and provision of health-prevention activities in the pedagogical university

The processes of ensuring the system of health-prevention activities are: information and analytical support: publication of information materials for students, methodological guides for curators of academic groups, maintenance of special headings on the Institute's website and faculty websites, faculty newspapers, trade union student newspaper "Creative"; regulatory and legal support: development and implementation of normative and legal documents necessary for effective health-prevention activities; scientific, organizational and methodological support: study of advanced developments in the field of health-saving technologies in education, development and implementation of educational and methodical complexes, grandiose educational activities; generalization of diagnostic data; administrative support: creation of the Coordination Council, at the level of the university implementing the main directions of the program, organizing working groups at faculties, as well as other services that organize health-prevention activities; financial, material and technical support: planning of material resources for the organization of health-preventive work.

4. Results

To identify the effectiveness of the implementation of the educational process using the program "Health saving education" on the basis of the development of a structural model and management and support model, in the fourth quarter of 2015, data was collected from the respondents participating in the study and three indicators were monitored (Fig. 3-5)

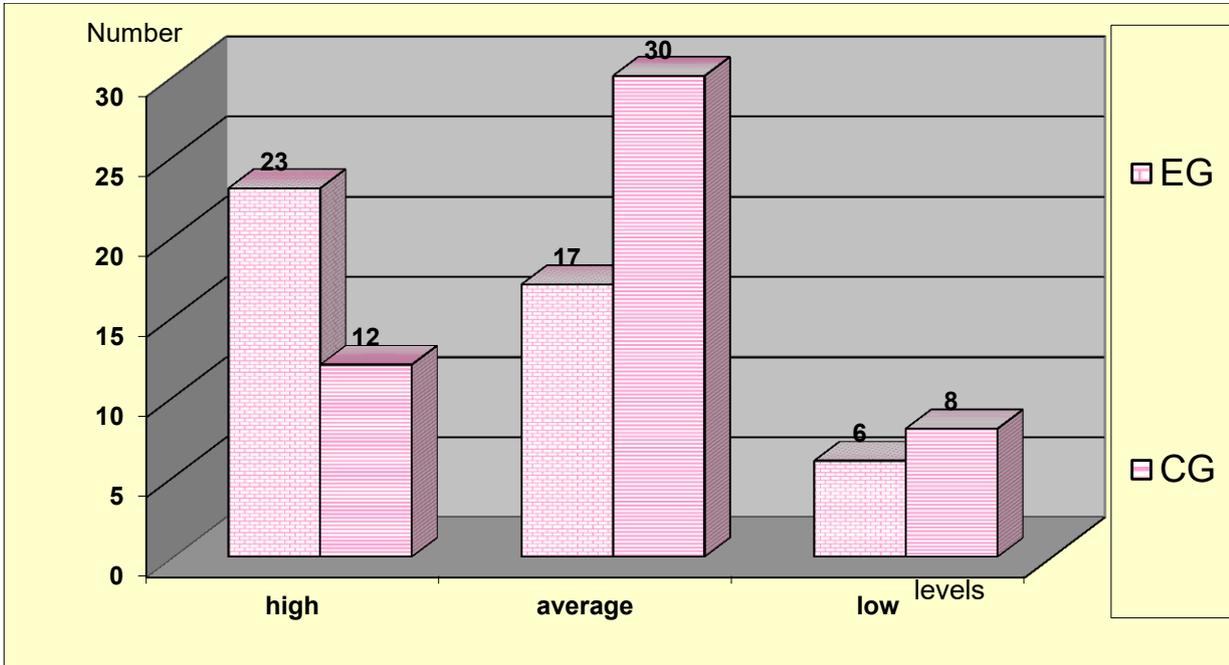


Fig. 3. Results of comparative analysis of EG and CG by educational indicator

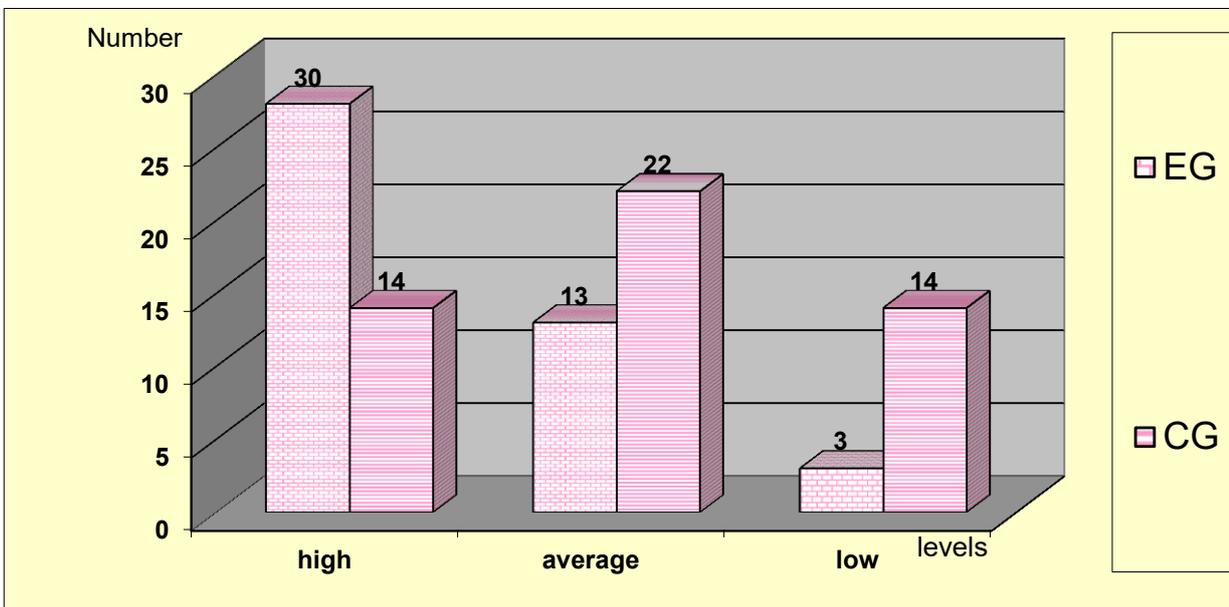


Fig. 4. Results of comparative analysis of EG and CG by upbringing indicator

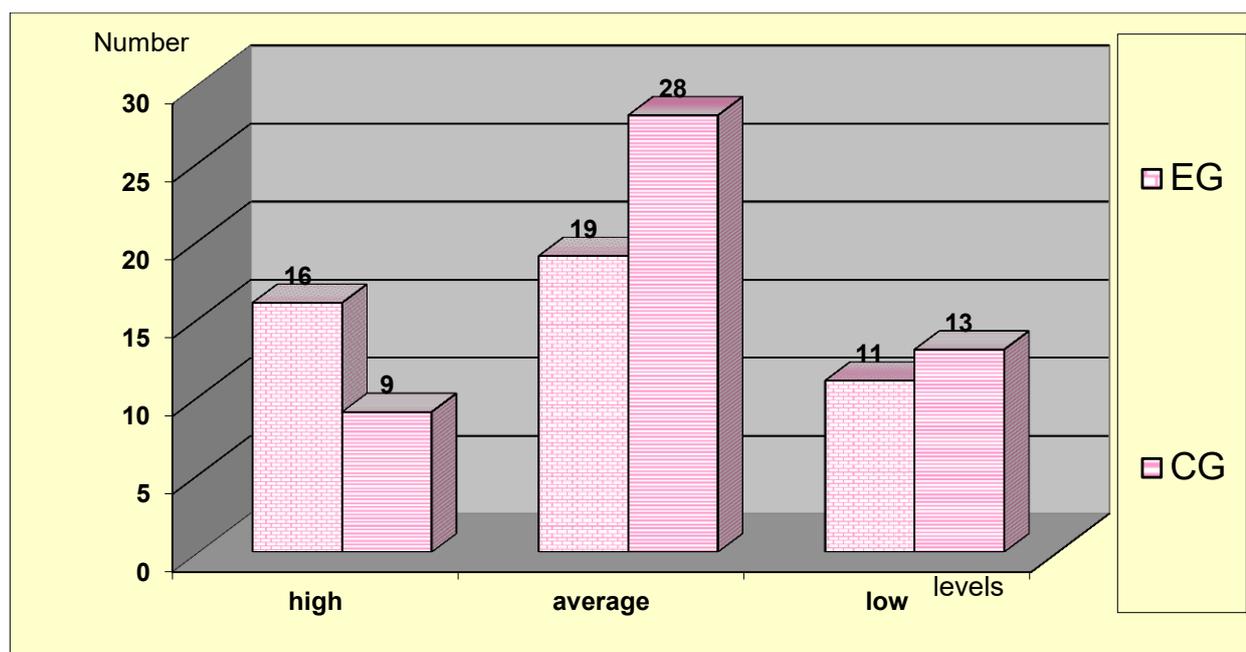


Fig. 5. Results of comparative analysis of EG and CG by health indicator

The obtained numerical data were subjected to mathematical-statistical processing by X^2 . Comparison of the distributions of EG and CG on the basis of the results of pedagogical studies for all three indicators revealed a statistically significant difference $P < 0.05$. This, in turn, proves the reliably significant effect of the applied author's models on the implementation of vocational training at the institute.

Based on the obtained data of the conducted experiment and a comparative study between the experimental and control groups, it was revealed:

- in the EG in full-time education at the Faculty of Pedagogical and Art Education, where during the three academic years (2012/13, 2013/14, 2014/15) implemented the program "Health saving education", recorded a significant increase, compared with the CG, the number of respondents at a high level, and a significant decrease in the number of respondents at a low level, as compared to the CG. This confirms the effectiveness of the implementation of the educational process on the developed structural model and model of management and provision of health-preventive work in the pedagogical university;

- the introduction of the author's program "Health saving education" had the most significant increase, according to the upbringing indicator. This, in turn, proves that specially organized systemic health-preventive work promotes the manifestation of interest and need among learners in the promotion a physical and healthy image and lifestyle. In this regard, there is a significant increase in the number of students who have an active health-saving position through conviction in the idea of the impossibility of normal life activity and effective professional activity without the implementation of health-prevention activities.

5. Conclusion

Thus, the study developed a structural model and model of management and provision of health and preventive work, as the basic, fundamental foundations in the structure of pedagogical health-saving education for teachers. And as integrating resources and scientific and educational potential of higher professional education. The main indicators of the effectiveness of the implementation of the program "Health saving education" (educational, health and upbringing) are presented, levels and their detailed characteristics are revealed.

The research has solved actual problems in the direction of improving the theoretical justification for the process of health education of future teachers in the aspect of implementing the author's system program, provided that it is structured in providing and managing. Based on the specially organized experimental work and the development of diagnostic tools on the basis of

B. Bloom's classification in the author's modification, the effectiveness of the implementation of the program "Health saving education" has been proved, in the aspect of ensuring the output of professional pedagogical education to a higher quality and health-saving level.

The practical significance of the research is that the use of the author's program will allow us to reach the higher quality level of the professional training of teachers, which ensures the individual-differentiated health-saving development of the student. The proposed patterns, provisions and conclusions create prerequisites for further study of the phenomenon of implementing health-saving education in methodological, content and management aspects. The presented practical experience of implementing the program "Health saving education" can be used to build a professional space in other educational organizations.

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References

- Aizman et al., 2015 – Aizman, R.I., Kazin, E.M., Fedorov, A.I., Shinkarenko, A.S. (2014). Problems and aims of health care activity in the education system at the present stage. *Novosibirsk State Pedagogical University Bulletin*, 17(1): 9-17.
- Barbarash, Kuvshinov, 2016 – Barbarash, N.A., Kuvshinov, D.Y. (2016). Motivation of population for healthy life style. *Novosibirsk State Pedagogical University Bulletin*, 6 (1): 100-108.
- Barradell, Peseta, 2017 – Barradell, S., Peseta, T. (2017). Putting threshold concepts to work in health sciences: insights for curriculum design from a qualitative research synthesis. *Journal Teaching in Higher Education*, 3(22): 349-372.
- Dahlgren et al., 2016 – Dahlgren, M.A., Fenwick, T., Hopwood, N. (2016). Theorising simulation in higher education: difficulty for learners as an emergent phenomenon. *Journal Teaching in Higher Education*, 21(6): 613-627.
- Duan et al., 2015 – Duan, Y., Brehm, W., Wagner, P., Chung, P. K., Graf, S., Zhang, R., Si, G. (2015). Transition to Adulthood: Relationships among Psychosocial Correlates, Stages of Change for Physical Activity, and Health Outcomes in a Cross-Cultural Sample. *Journal of Physical Activity and Health*, 12(11): 1461-1468.
- Dudley et al., 2016 – Dudley, D., Goodyear, V., Baxter, D. (2016) Quality and Health-Optimizing Physical Education: Using Assessment at the Health and Education Nexus. *Journal of Teaching in Physical Education*, 35(4): 324-336.
- Finkam, 2005 – Finkam, S. (2005). Developing a Healthy Culture. *Athletic Therapy Today*, 10(4): 56-57.
- Hastie et al., 2017 – Hastie, P.A., Chen, S., Guarino, A.J. (2017). Health-Related Fitness Knowledge Development Through Project-Based Learning. *Journal of Teaching in Physical Education*, 36(1): 119-125.
- Kienzler, Fontanesi, 2017 – Kienzler, H., Fontanesi, C. (2017). IBL in the classroom: a Global Health Hackathon. *Journal Teaching in Higher Education*, 22(2): 129-142.
- Kulinna, 2013 – Kulinna, P.H. (2013). School-Based Physical Activity and Health Behaviors Among Adolescents. *Kinesiology Review*, 2(1): 55-60.
- Maznichenko, Neskromnykh, 2013 – Maznichenko, M.A., Neskromnykh, N.I. (2013). Adolescents' Social Dependences as the Feature of Complex Educational Prevention. *European Journal of Contemporary Education*. 5(3): 148-161.
- McFadden et al., 2017 – McFadden, T., Fortier, M.S., Guérin, E. (2017). Investigating the effects of Physical Activity Counselling on depressive symptoms and physical activity in female undergraduate students with depression: A multiple baseline single-subject design. *Mental Health and Physical Activity*, 12(3): 25-36.
- McPhail, 2015 – McPhail, R. (2015). Pre-university prepared students: a programme for facilitating the transition from secondary to tertiary education. *Journal Teaching in Higher Education*, 20(6): 652-665.
- Messenger, 2015 – Messenger, H. (2015). The identification of a value-based pedagogical pattern promoting 'development of the person' in higher education. *Journal Teaching in Higher Education*, 20(7): 738-749.

[Nagovitsyn, 2014](#) – Nagovitsyn, R.S. (2014). Conceptual framework of formation of personal physical culture of student based on mobile learning. *Theory and Practice of Physical Culture*. 10:3.

[Nagovitsyn et al., 2017](#) – Nagovitsyn, R.S., Maksimov Y.G., Miroshnichenko A.A., Senator S.J. (2017). Implementation of the didactic model of preparing students for innovative practice within the framework of continuing teacher education. *Novosibirsk State Pedagogical University Bulletin*. 7 (5): 7-24.

[Nagovitsyn et al., 2016](#) – Nagovitsyn, R.S., Rassolova, E.A., Senator, S.Yu., Torbina, I.I. (2016). Web portal design to prepare students for gto tests. *Theory and Practice of Physical Culture*. 1: 13.

[Nagovitsyn et al., 2015](#) – Nagovitsyn, R.S., Vladykina, I.V., Senator, S.Yu. (2015). Training program to hit standards of all-russian sports complex «Ready for labour and defence» (GTO) based on mobile learning. *Theory and Practice of Physical Culture*. 1: 13.

[Nagovitsyn et al., 2017](#) – Nagovitsyn, R.S., Volkov, P.B., Miroshnichenko, A.A. (2017). Planning of physical load of annual cycle of students', practicing cyclic kinds of sports, training. *Physical Education of Students*, 21(3): 126-133.

[Nagovitsyn et al., 2017](#) – Nagovitsyn, R.S., Volkov, P.B., Miroshnichenko, A.A., Tutolmin, A.V., Senator, S.Yu. (2017). The influence of special graduated weight bearing in Greco-Roman wrestling on the growth of students sports results. *Physical education of students*, 21(6): 294-301.

[Papaioannou, 2017](#) – Papaioannou, A.G. (2017). Teaching a Holistic, Harmonious and Internal Motivational Concept of Excellence to Promote Olympic Ideals, Health and Well-Being for All. *Journal of Teaching in Physical Education*, 36(3): 353-368.

[Puttnam, 2015](#) – Puttnam, D. (2015). Learning to Be - Do Our Education Systems Do Enough to Enable Learners to Flourish as Independent, Autonomous and Well-Balanced Individuals? *European Journal of Education*, 50(2): 120-122.

[Sergeeva, Voskrekasenko, 2014](#) – Sergeeva, S.V., Voskrekasenko, O.A. (2014). Development and implementation of educational work integrated programme for masters of vocational training and mentors on the basis of a systemic functional approach. *Integration of Education*, 4(77): 54-59.

[Shagrir, 2015](#) – Shagrir, L. (2015). Working with students in higher education – professional conceptions of teacher educators. *Journal Teaching in Higher Education*, 20(8): 783-794.

[Spengler, Woll, 2013](#) – Spengler, S., Woll, A. (2013). The More Physically Active, the Healthier? The Relationship Between Physical Activity and Health-Related Quality of Life in Adolescents: The MoMo Study. *Journal of Physical Activity and Health*, 10(5): 708-715.