

# Examining the Fundamental Elements of Physical and Health-Enhancing Educational Activity of Student in Distance Learning

Nataliia Kononets<sup>1\*</sup>, Valeriy Zhamardiy<sup>2</sup>, Oleksiy Nestulya<sup>3</sup>, Svitlana Nestulya<sup>4</sup>, Valentina Tsina<sup>5</sup>, Lesya Petrenko<sup>6</sup>, Tetyana Nikolashyna<sup>7</sup>, Olena Ilchenko<sup>8</sup>, Maria Polyakova-Lahoda<sup>9</sup>, Eduard Borodai<sup>10</sup>

<sup>1</sup>*Department of Pedagogy and Social Sciences, University of Ucoopspilka «Poltava University of Economics and Trade», Poltava, Ukraine*

<sup>2</sup>*Department of Physical Education and Health, Physical Therapy, Ergotherapy with Sports Medicine and Physical Rehabilitation, Ukrainian Medical Stomatological Academy, Poltava, Ukraine*

<sup>3</sup>*Rector Higner Educational Establishment of Ucoopspilka «Poltava University of Economics and Trade», Poltava, Ukraine*

<sup>4</sup>*Department of Personnel Management, Labor Economics and Economic Theory, Higner Educational Establishment of Ucoopspilka «Poltava University of Economics and Trade», Poltava, Ukraine*

<sup>5</sup>*Department of General Pedagogy and Andragogy, Poltava V. G. Korolenko National Pedagogical University, Poltava, Ukraine*

<sup>6</sup>*Department of General Pedagogy and Andragogy of Poltava V. G. Korolenko National Pedagogical University, Poltava, Ukraine*

<sup>7</sup>*Department of the Ukrainian Language, Poltava V. G. Korolenko National Pedagogical University, Poltava, Ukraine*

<sup>8</sup>*Department of General Pedagogy and Andragogy, Poltava V. G. Korolenko National Pedagogical University, Poltava, Ukraine*

<sup>9</sup>*Department of General Pedagogy and Andragogy, Poltava V. G. Korolenko National Pedagogical University, Poltava, Ukraine*

<sup>10</sup>*Department of Pedagogical Skills and Management named after I. A. Zjazun, Poltava V. G. Korolenko National Pedagogical University, Poltava, Ukraine*

---

## ABSTRACT

*This study illustrates the notion of physical and health-enhancing educational activity in distance learning processes as a particular kind of helpful activity on understanding the physical and health-enhancing knowledge. Based on analysing the psychological and pedagogical literature, 4 structural elements of student youth's physical and health-enhancing educational activity have been designated following distance learning processes: reflexive-subjective, target, motivational, as well as activity-creative elements. Based on the data obtained, the motivational element indicates the motives system prompting them to physical education (PE) and makes the necessary for such classes in circumstances of remote education over the course of quarantine. The target element indicates goal setting, its details, and tasks intended to master the system of physical culture and health-enhancing knowledge, abilities, and skills. The activity-creative element reveals the system of skills as a collection of techniques to carry out physical activities at home, applying digital didactic materials. Moreover, the reflexive-subjective element demonstrates the capacity of students to handle their internal world, obey healthy lifestyle rules, especially during quarantine, develop emotional maturity, get the most out of their potential, invoke a sense of concentration, self-confidence, strength, movement.*

**Key words:** Education, Student youth, Educational activity, Physical, Health-enhancing activity, structure, Distance learning

**HOW TO CITE THIS ARTICLE:** Nataliia Kononets, Valeriy Zhamardiy, Oleksiy Nestulya, Svitlana Nestulya,Valentina Tsina, Lesya Petrenko, Tetyana Nikolashyna, Olena Ilchenko, Maria Polyakova-Lahoda, Eduard Borodai, **Examining the Fundamental Elements of Physical and Health-Enhancing Educational Activity of Student in Distance Learning**, J Res Med Dent Sci, 2021, 9(7): 419-424

**Corresponding author:** Nataliia Kononets

**e-mail** ✉: natalkapoltava7476@gmail.com

**Received:** 28/04/2021

**Accepted:** 27/07/2021

## INTRODUCTION

The challenges of time and the organization of the distance educational process in higher education determine the search for new approaches to physical and health-improving education of student youth, which take into account opportunities for rethinking the values of physical culture and health-preservation of students, coverage in a new range of their educational, upbringing and health functions. This determines the content of physical and health-improving activities of student youth in the educational environment of a modern university as an independent field of activity in terms of distance education, while highlighting its educational priorities. Therefore, increasing attention to physical and health-improving activities of student youth in the context of distance education is an important part of higher education in modern realities. It is a qualitative and effective measure of the complex impact of various forms, means and methods of development of physical culture on the personality of the future specialist in the process of forming his professional competence. The result of this process is the level of individual physical culture of each student, his spirituality, the level of development of professionally significant abilities.

At the same time, today every high school teacher should be aware of the fact that in the conditions of distance educational process students sit at the computer almost all day. (4–5 academic lessons according to the schedule, performance of tasks, abstracts, individual projects and other types of independent work with use of computer devices and digital technologies), which has a very negative effect on their health, physical and emotional state. Therefore, the issue of effective organization of physical and health-improving educational activities of student youth under conditions of distance educational process is a priority for scientific and pedagogical research and pedagogical practice. Higher education is obliged to help students realize that there is nothing more important than health and to teach them to constantly care about their physical development, that is to be engaged in physical exercises independently, even in the conditions of distance learning. At the same time, in order to effectively organize and evaluate the results of physical and health-improving educational activities of student youth under conditions of distance educational process, it is necessary to determine the components of this activity.

The issue of organization of physical and health-improving activities of students in higher education institutions has been the subject of research [1,2],

Various aspects of the above-mentioned problem have been covered in a number of dissertations by Ukrainian researchers: organizational bases of activation of sports and improving activity of students in the conditions of institution of higher education [3], methods of teaching students to apply strength in the process of physical education [4], theoretical and practical principles of forming motivation for physical activity in the process of physical education of students of higher education institutions [5], ways of forming value categories of personal physical culture in student youth [6], pedagogical features of models of physical education of students of higher education institutions at different courses of study [7], the use of computer technology in improving the efficiency of the educational process of physical culture [8] etc.

Despite a significant amount of scientific and pedagogical research, the issue of structural and component analysis of physical and health-improving activities of student youth during distance educational process has not been adequately covered.

## MATERIALS AND METHODS

The aim of the study is to identify and characterize the components of physical and health-improving educational activities of student youth in the conditions of distance educational process.

The following theoretical research methods were used to study this problem: analysis of scientific literature and normative documents, synthesis, comparison, generalization and systematization of the obtained data. This was done in order to compare the different views of scientists to clarify the concept of «physical and health-improving activities of student youth in the distance educational process», to determine the structural components of physical culture and health education activities of student youth in the distance educational process.

Structural components of physical and health-improving educational activity of student youth were allocated under conditions of distance learning process are investigated on the basis of the following universities: University of Ukoopspilks «Poltava University of Economics and Trade», Poltava National Pedagogical University named after V. G. Korolenko, Ukrainian Medical Stomatological Academy.

## RESULTS AND DISCUSSION

On the basis of the analysis of scientific works of the above-mentioned scientists «physical and health-improving activities of student youth in the distance educational process» we interpret as a specific type of purposeful activity on mastering the system of physical

culture and health knowledge as information to be mastered, physical culture and health skills as ways of activity, experience of physical culture and health activities, which gives us an idea of the relationship between learning and health, as well as a system of various online activities, which are aimed at improving the physical capabilities of students, increase motor activity, psycho-emotional stability and adaptive reserves of their body during distance learning.

Successful physical and health-improving activity of a modern student in the conditions of distance learning depends not only on his abilities and knowledge, but also from motivation, meaning from the desire to achieve significant success and self-affirmation. Therefore, the higher the level of motivation of the student, the more factors motivate him to exercise physical and health-improving activities and stimulate his self-affirmation in the context of a healthy lifestyle, the greater the student's efforts and, accordingly, the higher the results he will be able to achieve. An important role in the process of formation and maintenance of motivation of physical and health-improving educational activity of the student in the conditions of distance learning is played by pedagogical activity of the teacher of physical culture. One of the criteria of his skill, and in fact an indicator of effectiveness, is the success of students in physical and health-improving activities, which is manifested in the expression of interest in physical culture and sports, which are held at the university not only to promote health, comprehensive development and sports improvement, but also to master the skills of vocational training for future production activities, as well as the formation of the need for regular exercise and sports. Also a manifestation of the effectiveness of pedagogical activities of a physical education teacher is a stable orientation of students to maintain a healthy lifestyle and physical state outside the university. Another criterion of skill of teachers of physical culture is the presence of students' positive motives for learning, formed general learning skills, motives for physical and health-improving activities. Thus, the formation of motivation for students to engage in physical and health-improving activities in the context of distance learning is important for maintaining physical capabilities and maintaining the health of each student.

In connection with the above, after analyzing a number of works by scientists [5,9] we single out the motivational component of physical culture and health-improving educational activity of students in the conditions of distance learning.

The motivational component of students' physical and health-improving educational activities reflects the system of motives (internal and external), which motivate them to physical education, form the need for such classes in terms of distance learning during quarantine, development of physical capabilities of the body, maintaining a healthy lifestyle, mastering various types of physical exercises, improvement, self-development, as well as the level of special interests and

hobbies of physical activity, their interest and active participation in exercise and health-preservation.

In fact, the motivational component characterizes the student's motivation for learning activities during the distance learning process in a harmonious combination with physical and health-improving activities. Motivation for physical culture and health-improving educational activity of students should be understood as a psychological characteristic of the student's interest in mastering physical culture and health-improving knowledge, to the acquisition of certain skills and abilities, to their own physical development and health-preservation [5].

Agreeing with the position of previous studies, it should be noted that the basis of motivation for educational, physical and health-improving activities of student youth is the inner need of students to know the physical capabilities of their body, as well as in maintaining physical activity and a healthy lifestyle.

Internal motivation of students to physical culture and health-improving educational activity in the conditions of distance learning has the following characteristics: motives must be conscious (the student must understand why he is exercising); motives should be aimed at creative physical and health-improving activities; these motives must be stable so that the desire to engage in physical culture persists long enough; online training sessions should benefit and bring joy.

External motivation, as rightly noted by others, is determined by the hierarchy of external motivations: rewards, punishments, other various positive or negative reinforcements [3].

Using the research of others, the external motives of students' educational activities to physical exercises can be divided into social (stereotype in society states that to engage in physical culture is prestigious, «cool», as students say, it helps to be in great physical shape, is a manifestation of a healthy lifestyle, as evidenced by the video content of students in social networks) and personal (i really like sports training, fitness, swimming, football / volleyball / basketball, sports clubs, participating in competitions, communicating with different students, I can do what other students can't, etc.).

But in addition to these, it is worth noting other motives: the desire to test and discover their strengths and abilities, the need to fulfil one's responsibilities to the teacher, to the parents, to the university, to the state, and ultimately to oneself, to achieve significant success in sports, motives for self-development, and so on.

Undoubtedly, any physical culture and health-improving educational activity, in particular, of student youth who found themselves in quarantine, cannot be effective if the goal is not set. Therefore, the next important component of physical and health-improving educational activity in the conditions of distance educational process is a target component.

We agree with scientists that the organization of the educational process is primarily associated with a clear definition of its purpose (or target), awareness and acceptance of it by students. Thus, a clear goal setting of teach causes students to understand the essence and methods of organizing educational activities, significantly influencing their active involvement in the process [10-12]. Therefore, setting of goals and taking actions that ensure their implementation actualize the identification of other important components of physical and health-improving activities of student youth in the distance educational process.

Based on the analysis of scientific works [13], we characterize the content of the target and activity-creative components as follows: the target component of physical culture and health-improving educational activity under conditions of distance learning reflects the process of goal setting, its detailing and tasks, aimed at mastering the system of physical culture and health knowledge, skills and abilities, ideas about the physical capabilities of the body, ideas about a healthy lifestyle, ideas about future difficulties, conditions for performing tasks, the amount of knowledge, techniques, tools and ways to achieve the goal.

This component is consistent with the overall purpose of physical education as a discipline of any university educational program to train future professionals in various fields of knowledge and specialties. This purpose is to form an understanding of the role of physical culture in the development of personality and its preparation for professional activity, the need for physical improvement and self-education, the need for regular exercise and sports. (dominance of didactic principles of naturalness and cultural conformity, emotional learning, accessibility, clarity).

In general, the target component should ensure that students acquire such competencies, in particular through online classes (Syllabuses of the discipline «Physical Education» University of Ukoopspilks «Poltava University of Economics and Trade», 2020): General competences. Ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, machinery and technology, to use different types and forms of physical activity for active recreation and healthy living. Ability to learn and be modern trained.

We are convinced that nowadays in the conditions of distance educational process during quarantine physical education, as well as maintaining one's own health is a real art, after all the organization of physical culture and improving educational activity under such conditions is, first of all, joint creativity of the teacher and students, which requires figurative thinking, imagination, creative imagination and to organize classes in an online format, and for the students themselves while performing various physical exercises at home. Therefore, it is quite

appropriate to single out the activity-creative component of physical and health-improving educational activities of student youth in the conditions of distance learning.

Analyzing the work of physical education teachers with students in the distance educational process, we conclude that physical and health-improving education is an active process, constant actions that students perform at home, watching a variety of videos (on the website of the Department of Physical Education, in YouTube, online broadcasts in Instagram or TikTok), which are closely related to creativity. Performing the physical exercises, motors offered by the teacher, students have an opportunity to repeat them several times; their activity during this period should be aimed at better performing the exercise with each repetition, correcting the mistakes pointed out by the teacher. Assimilating the material, students gain confidence in their abilities, they have a desire for independent active action. Independent performance of physical exercises (fitness, gymnastics, aerobics, elements of sports dance, etc.) helps to master material better, promotes mental, physical development, opening space for creative initiative [10].

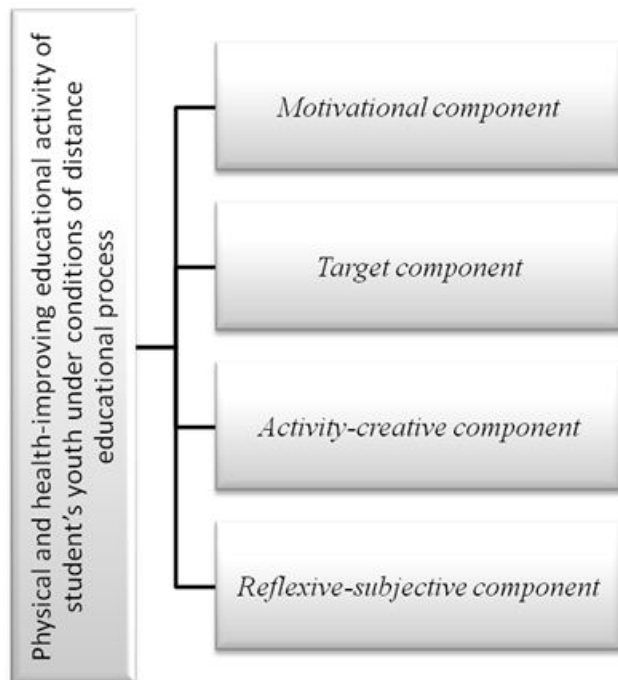
Therefore, the activity-creative component of physical and health-improving educational activity of student's youth reflects the system of abilities and skills as a set of ways to perform physical exercises at home with the use of digital didactic materials. The content of the component reveals the individual physical capabilities and creative abilities of students; skills and abilities to perform various physical exercises, mostly general preparatory (physical exercises that provide comprehensive functional development of the student's body and are aimed at preparing the student's body for future work, mastering movements, education of physical qualities, rehabilitation of organs and systems of the body). The advantages of general training exercises, especially during quarantine, are that they are clearly dosed, can be used in different variants and combinations. This allows you to choose the nature of the effects on certain muscle groups and certain body systems, which contributes to maintaining health and maintaining physical shape. General training exercises may contain elements of gymnastics, acrobatics, aerobics, fitness, etc.

Analysis of the works of others makes it possible to clarify the essence of the reflexive-subjective component of physical culture and health-improving educational activities of student youth in the conditions of distance educational process, which reflects the ability to manage their inner world, to reflect, to possess themselves, their mood (self-regulation), the desire and ability to follow the rules of a healthy lifestyle during quarantine, to form emotional stability, to make the most of their potential (physical capabilities, creative capabilities, opportunities for self-regulation), to evoke a feeling of strength, self-confidence, energy, activity.

The general idea of structure of physical and health-improving educational activity of student's youth in the



conditions of distance educational process as set of all its components is given in Figure 1.



**Figure 1: The structure of physical and health-improving educational activity of student's youth under conditions of distance educational process.**

It should be emphasized that structure of physical and health-improving educational activity of student's youth under conditions of distance educational process reflects the possibility of implementation during quarantine of physical and health-improving technologies, which have a positive effect on the physical development of students, contribute to the formation of values to their own physical «Self» and their own health. Such technologies include: rhythmic gymnastics, aerobics, fitness, fitness hybrids, etc [4,14-20].

Therefore, under conditions of distance educational process students can be offered, by watching the corresponding video resources, to use at home such physical culture and improving technologies:

- Rhythmic gymnastics, which includes a significant amount of movements that act on all parts of the body, promote the development of physical qualities (dexterity, flexibility, plasticity, endurance); and is performed with musical accompaniment, which organizes movements, improves mood, provides positive emotions. Rhythmic gymnastics classes help strengthen the cardiovascular and respiratory systems, develop flexibility and mobility in the joints;
- Aerobics as a system of health-improving classes based on the use of dance and gymnastic exercises in aerobic mode with the participation of large muscle groups; classes are aimed at developing aerobic endurance, coordination, strength and flexibility;
- Fitness (in the presence of simulators at home), which involves the recovery of the body, combines active training and proper nutrition, creates

conditions for weight loss, obtaining the desired physical shape, consolidation of the desired result of recovery of psycho-emotional state, etc.;

- Fitness hybrids – a new direction of physical training and health training, characterized by a combination of fitness disciplines. Given the conditions of the distance learning process, at home you can use such types of training as cardio, strength training, dance training, mental training, etc., everything that can be used at home.

## CONCLUSIONS

The study of the structure of physical and health-improving activities of student youth during distance educational process as a specific type of purposeful activity to master the system of physical culture and health-improving knowledge as information, subject to mastering, physical and health-improving skills as methods of activity, experience of physical and health-improving activities. The structure gives us an idea of the relationship between learning and health-preservation, as well as a system of various online activities aimed at improving the physical capabilities of students, increasing motor activity, psycho-emotional stability and adaptive reserves of their body during distance learning. The structural components of physical and health-improving educational activity of student youth under conditions of distance educational process are: motivational, target, activity-creative and reflexive-subjective components.

Prospects for further research in this area are the development of didactic conditions for the organization of physical culture and health educational activities of student youth during distance educational process, which would successfully contribute to the effectiveness of this activity for each of the identified components.

## REFERENCES

1. Sirenko RR. Physical education of students. Lviv 2011; 251.
2. Donchenko VI, Zhamardiy VO, Shkola OM, et al. Health-saving competencies in physical education of students. *Wiad Lek* 2020; 73:145–150.
3. Bazilchuk VB. Organizational bases of activization of sports and health-improving activity of students in the conditions of higher educational institution: abstract of the dissertation for the degree of candidate of sciences in physical education: Lviv 2004; 22.
4. Gunko PM. Methods of teaching students to apply strength in the process of physical education: Abstract of the dissertation for the degree of Candidate of Pedagogical Sciences. National Pedagogical University named after M. P. Drahomanov. Kyiv 2008; 20.
5. Zakharina EA. Formation of motivation for motor activity in the process of physical education of students of higher educational institutions : Abstract of the dissertation for the degree of Candidate of

- Science in Physical Education and Sports. National University of Physical Education and Sport of Ukraine. Kyiv 2008; 21.
6. Marchenko OYU. Formation of value categories of personal physical culture in student youth : Abstract of the dissertation for the degree of Candidate of Science in Physical Education and Sports. Dnipropetrovsk State Institute of Physical Culture and Sports Dnipropetrovsk 2010; 20.
  7. Turchina SYU. Pedagogical features of models of physical education of university students at different courses of study: Abstract of the dissertation for the degree of Candidate of Science in Physical Education and Sports. National University of Physical Education and Sport of Ukraine Kyiv 2009; 23.
  8. Vasiliadi HV. The use of computer technologies in increasing the effectiveness of the educational process in physical culture (based on the material of the educational complex school-college): The dissertation for the degree of Candidate of Pedagogical Sciences. Karachaevsk 2005; 217.
  9. Zavydivska N. Ways to optimize physical culture and sports activities of students of higher educational institutions. Physical education, sports and health culture in modern society: Collection of scientific works. Lutsk 2010; 2:50–54.
  10. Zhamardiy VO, Donchenko VI, Yemets AV, et al. Physical development by means of fitness technologies as one of general aspects of student's health. *Wiadomości Lekarskie*. 2019; 1:1074-1078.
  11. Kononets N, Grynova M, Zhamardiy V, et al. Problems of implementation of the system of resource-based learning of future teachers of physical culture. *Int J Applied Exercise Physiol* 2020; 9:50–60.
  12. Stasiuk RM. Problems and ways to increase the effectiveness of physical education in higher educational establishments. Pedagogy, psychology and medical and biological problems of physical education and sports: Collection of scientific works. Kharkiv 2009; 3:146–149.
  13. Shkola O, Griban G, Prontenko K, et al. Formation of valuable orientations in youth during physical training. *Int J Applied Exercise Physiol* 2019; 8:264–272.
  14. Zhamardiy V, Shkola O, Tolchieva H, et al. Fitness technologies in the system of physical qualities development by young students. *J Physical Educ Sport* 2020; 20:142–149.
  15. Zhamardiy VO, Shkola OM, Okhrimenko IM, et al. Checking of the methodical system efficiency of fitness technologies application in students' physical education. *Wiadomości Lekarskie* 2020; 73:332-341.
  16. Zhamardiy V, Shkola O, Ulianova V, et al. Influence of fitness technologies on the student youth's physical qualities development. *Education* 2019; 49.
  17. Zhamardiy V, Shkola O, Bezpaliy S, et al. Modern Fitness Technologies in the Physical Education of Students. *Revista Dilemas Contemp* 2019..
  18. Zhamardiy V, Shkola O, Boichenko A, Prystynskyi V, et al. Dynamics of physical fitness of students during powerlifting classes. *Int J Applied Exercise Physiol* 2020; 9:49–60.
  19. Zhamardiy V, Shkola O, Otravenko O, et al. Dynamics of the functional state of students in the process of powerlifting in higher education. *Int J Applied Exercise Physiol* 2020; 9:24–35.
  20. Zhamardiy V, Shkola O, Saienko V, et al. Model of pedagogical system for teaching students motor actions in powerlifting. *Int J Applied Exercise Physiol* 2020; 9:76–85.