

DOI 10.31392/NPU-nc.series15.2023.02(160).07

**Salamakha O.**  
*senior lecturer of the department of health and sports technologies*  
**National Technical University of Ukraine «Kyiv Polytechnic Institute» Ihor Sikorskyi**  
**Chekhovska A.**  
*senior lecturer of the department of health and sports technologies*  
**National Technical University of Ukraine «Kyiv Polytechnic Institute» Ihor Sikorskyi**

## THE INFLUENCE OF MODERN INNOVATIVE TECHNOLOGIES ON THE MOTOR ACTIVITY OF STUDENTS

*The article reveals the features of using modern innovative technologies to increase the motor activity of students. Modern methods for determining the optimal level of motor activity for people of different age categories were analyzed. Methods of increasing motor activity using modern innovative technologies have been determined. The article describes the characteristics and features of the use of innovative educational technologies in the physical education of students. In the scientific work, the organizational and methodical features of the use of interactive teaching methods to increase the level of motor activity are given. Modern forms of activity organization in the system of extracurricular activities are revealed. Overcoming passivity involves: a certain consistency in changing negative instructions and creating new behavior; a pedagogically justified complex of educational influences aimed at changing the negative behavior of a student and at changing the negative stereotype of his behavior. Overcoming the negative attitude to motor activity involves changing the ratio of effective - practical and educational functions in education.*

*The main manifestation of a passive attitude to physical culture in most cases is the absence of students from classes without a good reason, and sometimes there is a certificate from a doctor. In modern scientific and methodical works, the issue of measurement and assessment of the mode of motor activity is considered quite widely, the daily and weekly volumes of motor activity of persons of different ages and physical condition are investigated using the Framingham method; regularities and interrelationships of motor activity and physical condition were studied.*

**Keywords:** *physical education, education seekers, innovative technologies, motor activity, physical culture and health and sports and mass events.*

**Саламаха О., Чеховська А. Вплив сучасних інноваційних технологій на рухову активність студентів.**  
*В статті розкрито особливості використання сучасних інноваційних технологій для підвищення рухової активності студентів. Проаналізовано сучасні методики для визначення оптимального рівня рухової активності для осіб різних вікових категорій. Визначено способи підвищення рухової активності з використанням сучасних інноваційних технологій. В статті подано характеристику та особливості використання інноваційних освітніх технологій в фізичному вихованні студентів. В науковій праці наведено організаційно-методичні особливості використання інтерактивних методів навчання для підвищення рівня рухової активності. Розкрито сучасні форми організації діяльності в системі позанавчальних занять.*

**Ключові слова:** *фізичне виховання, здобувачі освіти, інноваційні технології, рухова активність, фізкультурно-оздоровчі та спортивно-масові заходи.*

**Formulation of the problem.** The study of the passive attitude of the individual to physical culture shows that the dominant factor in its motivational sphere is the desire to bypass the educational and training process of physical exercises, explaining this for various reasons, due, as a rule, to the imperfection of the social and psychological relations of the individual, as well as ignorance of the more important role of motor activity for health [1]. Students' lack of readiness for motor activity manifests itself in various forms: motivated refusal to perform tasks with reference to pain, fatigue; indifferent performance of motor tasks (partial, incomplete); lack of significant interests and aspirations in collective actions (relays and games); predominance of egoistic and individualistic motives of behavior. To overcome these negative manifestations, the teacher must know the reasons for their occurrence.

When studying the reasons for the emergence of a passive attitude to motor activity, the following three groups of students are distinguished: - who verbally have a positive attitude to physical exercises; - who show indifference to motor activity; - who have a negative attitude towards the educational and training process and collective actions.

Many teachers emphasize the special role of the nature of the attitude of the person himself to various types of activities. The activity itself does not yet contribute to the development of motor activity, and also does not always ensure the overcoming of negative attitudes towards physical exercises. This is possible if all the educational work is at the university. as well as the requirements of the physical education teacher are designed for a positive attitude towards the actions of each student [2].

**Analysis of literary sources.** In modern scientific and methodical works, the issue of measurement and assessment of the mode of motor activity is considered quite widely, the daily and weekly volumes of motor activity of persons of different ages and physical condition are investigated using the Framingham method; regularities and interrelationships of motor activity and physical condition were studied by A. Drachuk, O. Kuts, T. Krutsevich, issues of self-control of physical condition were dealt with by O. Pyrogova. These studies related to professional, applied, age and gender aspects, different in terms of the content of types of physical culture, sports and health activities.

The analysis of literary sources and scientific and methodological works of V. Vilenskyi, V. Romanenko, and G. Ivanova

shows that the majority of scientists focus on the general problems of the motor activity of young people, and the issue of managing the motor activity of students with the use of modern information and communication technologies.

**Presentation of the main research material.** Passive students do not respond to positive influences, and they consider any tasks unnecessary, as well as uninteresting and useless. Overcoming passivity involves: a certain consistency in changing negative instructions and creating new behavior; a pedagogically justified complex of educational influences aimed at changing the negative behavior of a student and at changing the negative stereotype of his behavior. Overcoming the negative attitude to motor activity involves changing the ratio of effective - practical and educational functions in education [3].

The main manifestation of a passive attitude to physical culture in most cases is the absence of students from classes without a good reason, and sometimes there is a certificate from a doctor.

The analysis of absenteeism from classes without a good reason showed the most characteristic points: - occupations other than the main educational activity, namely: in circles of scientific and technical creativity, as well as self-activity, etc.

Many students believe that they are healthy enough and also have enough strength: why attend physical education classes.

There are students who are physically weak. They cannot perform many exercises, and therefore they are ashamed to show their weakness, especially if their classmates see it. Shyness is also present when both the male and female contingents work together [1].

For some, the main reason for not attending classes is the fear of not exercising, as well as the fear of fatigue associated with exercising.

The list of reasons for a passive attitude to physical culture indicates how much a teacher should know in order to obtain a complete and objective description of a person. Therefore, to determine the level of the student's attitude, the teacher can conduct an interview with him or offer to fill out a questionnaire with the inclusion of questions related to a passive attitude to physical culture. It is also advisable to test certain personality traits, namely: willpower, sociability, anxiety, shyness, self-esteem, etc.

The method of the Framingham study is widely used to determine the motor activity of a person. In the Framingham method, motor activity is studied in the following way: each subject records in a table the number of hours per day that he spent on activities of various levels of physical activity [1].

The Framingham technique allows quantitative and qualitative determination of daily motor activity based on the timing of daily activities of various types with registration of the intensity of each type of physical effort. The value of these measurements is presented in the form of a digital value of the physical activity index [2].

When timing, all the activities that the subject is engaged in are recorded and divided into five levels: basic, sedentary, small, moderate, intensive.

The basic level includes: sleep, lying down.

For sitting: reading, working at a desk, watching TV, listening to music, working on a computer, etc.

To name a few: classes at institutions of higher education, driving a car, traveling on all types of transport, walking, personal hygiene.

To Moderate (Average): Household, regular walking, yard work, painting, repairs, ballroom dancing, bicycling on flat terrain, etc. To intense (high): strength sports, running, dancing, long swimming, brisk walking, mountain biking, digging in the garden, etc.

According to the Framingham method, the optimal indicator of the motor activity index corresponds to 42 points, which implies motor activity at the basic level - 8 hours, 8 hours - sedentary, 2 hours - at the level of low physical activity, 3 hours - at the average level and 3 hours - at the level high physical activity [2].

The implementation of these ways goes better when such techniques are used as: conversations using examples; pedagogical requirements; creating situations, as well as complex methods of influence. It should be especially noted that various pedagogical methods, such as the educational influence on a physically passive person, as well as the influence of propaganda methods, the use of medical research facts, as well as the data of special tests; indications of health have a positive effect on such a category of people. It should be taken into account that there are cases when students are physically passive due to being busy with academic work, and in some cases - due to various deviations in the state of health.

There is often a difference between a person's desire and actual capabilities regarding one or another type of physical activity. In particular, this explains the non-attendance of physical education classes and the desire for a peaceful life. As a result of the influence of these factors, a passive attitude of the individual to physical culture appears [4].

One of the conditions for the elimination of hypokinesia is to increase people's sense of responsibility to apply the entire arsenal of propaganda, as well as pedagogical and psychological, and in necessary cases, administrative measures on a daily basis and consistently.

So, it is possible to distinguish four groups of measures that are applied to physically passive people: 1) propaganda and general influence; 2) educational in nature; 3) administrative influence; 4) medical care (including medical monitoring of health, as well as real assessment of physical condition and provision of recommendations for a healthy lifestyle, and primarily - movement regime).

Thus, the involvement of a physically passive student in physical education primarily depends on a comprehensive study of the personality, as well as determining the degree of its detraining. The main method of work is the educational social-psychological-pedagogical orientation of the educational-training process and the promotion of physical culture, as well as a healthy lifestyle.

The realization of the intended goal - the formation of a motivational element (needs, as well as motives and desires and interests) - is impossible without the manifestation of volitional efforts. It is physical culture that greatly contributes to the

development of willpower and strengthening of health [4].

Any purposeful activity is always associated with willpower. Volitional effort is the basis of any active-imagined or motor act.

Volitional effort is an effort on oneself, which is carried out consciously and which is an impetus for the immediate implementation of some action: during observation and with concentration of attention. However, when the action is carried out easily and habitually, it seems that it happened by itself as a result of the desire that arose. When we have to overcome certain difficulties, then we see that willpower is needed.

Speaking about students, it is safe to say that they have a will. They graduated from school and entered a higher educational institution, and are also engaged in academic work every day [1].

Physical culture helps to overcome the fear associated with failure and defeat; non-recognition, as well as underestimation when overcoming the load; with making independent decisions; with the assumption of responsibility. Overcoming these obsessions requires willpower.

Willpower is the beginning of everything. The importance of the will to achieve the goal is clear. Will is the most important element of success in the struggle for knowledge, as well as for health and happiness. The will is cultivated when there is an objective need to overcome certain obstacles, as well as difficulties in achieving a clear goal.

So, first of all, you can't talk about willpower in a hurry based only on the effectiveness of your activity. The fastest or strongest student is not the best, since speed and strength depend not only on volitional effort, but also on a number of psychophysiological and morphological factors that are not subject to will.

Secondly, there is no how such willpower that manifests itself equally in different situations. When overcoming specific difficulties, some people are more strong-willed, while others are less strong-willed.

The nature of volitional effort has not yet been fully studied, but it is known that it is associated with the tension of certain muscle groups, that is, it is an ideomotor act.

The duration of volitional activity depends on the energy of the activity: the more resources a person has, the longer he can maintain willpower. So, we approach the issue of will, as well as its elements that characterize the manifestation of willpower [3].

When performing various types of activities, a person develops certain elements of willpower, such as: purposefulness, determination, endurance, perseverance, as well as courage and independence and discipline. Physical culture is the most real and effective environment that nurtures the above-mentioned elements.

Purposefulness is a volitional element, in which the continuity of its manifestation depends both on practical actions and on their understanding, as well as on objective self-evaluation.

Determination consists in a quick and necessarily intelligent, motivated decision, as well as in choosing ways and means to achieve a set goal or in solving a specific task. Determination is best developed by creating such situations in which the student is forced to make decisions on his own, the correctness of which is not obvious to him or when undesirable consequences for him are possible (for example, when he is afraid to do an exercise).

Temperance is an important quality of personality, which consists in the ability to restrain one's physical and mental manifestations if they are inappropriate, as well as if they are undesirable for people and if they are illogical.

Endurance includes: courage, that is, a person's ability to perform tasks well, despite fear; restraint, that is, the ability to suppress ill-thought-out emotional reactions; concentration (concentration), that is, the ability to concentrate on a task even despite distractions.

Perseverance in achieving the goal is manifested in patience, that is, due to long-term resistance to a certain factor (mainly it is a physiological factor), which causes fatigue and pain. In contrast to patience, perseverance is a repeated manifestation of willpower when achieving a goal. Perseverance is largely determined by the strength and stability of the motive for the activity the student is engaged in.

The manifestation of courage is connected with the development of courage. Not every display of courage is pedagogically expedient. The teacher must take into account what the student's courage is aimed at. For example, this quality can be the result of wanting to do something. In addition, the motivations for showing courage are selfish manifestations of the student. Often there are foolish acts that are committed to show heroism. It is necessary to explain to students the correct meaning of heroism.

A certain fusion of willpower is independence - this is the ability to find a way to a set goal on one's own initiative, as well as to carry out the decisions made. Education of the important need for independent physical exercises as the main factor of working capacity. is the main task of teachers [3].

Discipline as a stable element of personality is formed gradually; characteristic features are instability and changes in student behavior. This suggests that discipline can have a temporary nature and depends on interest in classes or on being forced to attend them for the sake of credit. Analysis of this quality allows us to draw a conclusion about the importance of an individual approach or changing the methodology of building classes.

**Conclusions.** So, as we can see based on the analysis of pedagogical research and the practical experience of scientists, interest in regular physical exercises is constantly growing, but still the question remains of how to implement this interest as far as students are concerned.

A student, as an active participant in the preservation of health at the state, as well as at the social and personal levels, must acquire knowledge about a healthy lifestyle, as this knowledge is a necessary component of the professional training of a future specialist. In relation to this issue, rich theoretical material has been developed, but at the same time, an implementation system for involving students in active physical education activities has not been developed.

The question of forming students' interest in active physical education is relevant and expedient for consideration.

Without solving it, it is impossible to significantly target students to choose an active life position, as well as to form a habit of systematic motor activity.

#### References

1. Griban, G P. (2014). Methodical system of physical education of students. Zhytomyr: Ruta Publishing House.
2. Koryagin, V., Blavt, O., Stadnik, V., Tsiokh, L. (2020) Organization and methodology of extracurricular physical education of students of higher education institutions. Lviv Politechnic Publishing House.
3. Physical education of students / Ed. V.M. Koryahin (2018). Lviv Polytechnic Publishing House.
4. Anikieiev, D.M. (2015). Criteria of effectiveness of students physical education system in higher educational establishments. Physical education of students. 5. 3-8
5. A handbook for teaching and learning in higher education: enhancing academic practice / [edited by] H. Fry, S. Ketteridge, S. Marshall. 3 rd. ed. p. cm. (2009). Taylor & Francis.

DOI 10.31392/NPU-nc.series15.2023.02(160).08

UDC: 796.853.23:612.01- 796.818

**Shemchuk V. A.,**

*candidate of pedagogical sciences, senior researcher*

*Head of the research department for the development of physical education, special physical training and sports of the research center for problems of physical education, special physical training and sports of the educational and scientific institute of physical culture and sports and health technologies*

*The National Defence University of Ukraine named after Ivan Cherniakhovskiyi (Kyiv)*

**Pavlov R. V.,**

*senior teacher of the department of tactical and special physical training of faculty № 3 (Preventive activities)*

*Kharkiv National University of Internal Affairs*

**Stepchuk N. V.**

*Senior teacher of the department of Physical Education, State University*

*«Uzhhorod National University», Uzhhorod, Ukraine*

**Shelekhova T. V.,**

*Senior teacher of the department of Physical Education, State University*

*«Uzhhorod National University», Uzhhorod, Ukraine*

**Pyshka O. P.,**

*Senior teacher of the department of Physical Education, State University*

*«Uzhhorod National University», Uzhhorod, Ukraine*

**Susla V. Ya.,**

*Senior teacher of the department of Physical Education, State University*

*«Uzhhorod National University», Uzhhorod, Ukraine*

#### DETERMINATION OF THE COMPONENTS OF THE TECHNICAL PREPARATION OF THE FINALISTS (WOMEN) OF THE 2022 WORLD SAMBO CHAMPIONSHIP

Taking into account the results of monitoring of specialized Internet resources (analysis of scientific and methodological, special and reference literature), the members of the research group established, that the urgent issue of organizing a systematic analytical review of the components of the technical and tactical preparation of female athletes who specialize in combat sports in accordance with their world rating in the chosen type of martial arts is devoted to the insufficient number of scientific studies, this, in turn, emphasizes the relevance and practical component of the chosen direction of scientific research.

The purpose of the study is an analytical and statistical analysis of the technical preparation of highly qualified female athletes who specialize in Sambo wrestling – finalists of the 2022 World Championship (Bishkek, Kyrgyzstan). Research methods: abstraction, measurement, expert evaluation, survey, comparison, observation, etc.

As a result of the theoretical research, the members of the research group conducted an analytical and statistical analysis of the technical readiness of highly qualified athletes (women) (specialization in Sambo wrestling) – finalists of the 2022 World Championship (Bishkek, Kyrgyzstan). We consider it expedient to take the results of the theoretical research into consideration by leading coaches who specialize in Sambo wrestling (sports section). We recommend focusing the attention of the leading coaches on increasing the indicators of activity and efficiency of the competitive actions of female athletes (women who specialize in Sambo wrestling), namely: development and improvement of technical and tactical preparation of fellow fighters (in the rack: focus on improving the technique of undercuts and hooks; on the ground floor: focus on performing pain techniques on the legs after the opponent is fully restrained); reducing the number of warnings for violation of the rules, through a theoretical study of the current Rules (practical training of complex technical and tactical combinations); expanding the arsenal of crown technical actions; development of individual tactical schemes for conducting a competitive fight in the rack and parterre with the use of restraints and pain techniques on the arms and legs; improving indicators of the subsystem of biological control of sportswomen; development of general physical and special physical readiness of wrestlers.

Prospects for further research in the chosen field of scientific intelligence include analytical and statistical analysis of the technical readiness of highly qualified Combat Sambo wrestlers, finalists of the 2022 World Championship (Bishkek, Kyrgyzstan).