


METHODS OF SCIENTIFIC RESEARCH IN THE SCIENCE OF PHYSICAL EDUCATION

DAMINOV BEKHZOD KUCHKAROVICH
SENIOR LECTURER, REPUBLIC OF UZBEKISTAN

[E-mail daminov@inbox.ru](mailto:daminov@inbox.ru)

 +998900703915

Abstract: the theoretical and methodological aspects of physical training are highlighted in the article.

Key words: science, physical education, scientific research, experience, education, skill, methodology, competence, military athlete.

Like any science, theoretical and methodological aspects of physical training are carried out through scientific research. With its help, any person will be able to use one or another means of physical training, how to use a targeted method to quickly achieve the expected result, how to determine sports ability in people, how to organize the course of sports training, how to exercise. It is possible to organize a good team of people and that's it.

In order to carry out scientific research qualitatively, it is first necessary to determine its general and individual tasks. After that, convenient search methods are selected. All methods of scientific research can be divided into two main groups:

- a) collection and implementation groups of scientific research;
- b) processing groups of received materials.

The first group includes:

1. Tracking style.
2. Method of experience.
3. Method of studying documents and materials.
4. Survey method (interview, study of questionnaire data, opinions and

comments).

Monitoring method - the student will be able not to interfere in the educational process, but only to monitor the educational process and results. When using these methods, it is studied how the process of physical education is usually carried out.

Experimental method - this method of scientific research is organized in such a way that the researcher needs it.

For example, it creates certain conditions that affect the learning of the participants.

The method of studying documents and materials is usually used in such a way that there is no basis for observing the pedagogic process based on past experiences.

Inquiry method - this method is very close to the method of studying documents and materials. But it cannot be reflected in the documents, often people's opinions and comments are needed, which help to find questions about some of the information they provide.

Methods of collecting all materials are often important in collective research. For example, in the course of studying a sports specialty, special experiments are conducted, monitoring of a young athlete, study of documents, their ability to grow in sports, indicators of general physical development, medical examination data, doctors, pedagogues and coaches' opinions and comments are taken into account.

Each researcher of these methods will be able to use all kinds of methods: starting from simple writings, he will implement the use of complex technical equipment.

For example, it is enough to record the progress of training and data in the observation method, sometimes it is possible to take a film or use sophisticated recording equipment, depending on the research task.

Regardless of which method the seeker uses, the method will have its own name and direction.

The method of processing the received materials includes:

1. Method of logical conclusion.
2. Mathematical method of materials processing.

These methods are aimed at complementing each other, like the method of processing materials.

Each scientific research will be focused on theoretical analysis, results and conclusions, practice and development of future theory of physical education.

Basic concepts of theory and methodology of physical education and sport
Here we present the concepts and definitions of some basic words related to physical education and sports:

Physical culture is a part of the general culture, established in society for the purpose of developing physical and intellectual characteristics, improving physical fitness, physical development, movement activity, forming a healthy lifestyle, and social adaptation through physical education and the set of values, norms and knowledge in use.

Physical education is a pedagogical process aimed at improving the human organism morphologically and functionally, improving basic movement skills and skills important for its life, related knowledge, skills, competences, and physical qualities, as well as protecting the Motherland. focused on self-training.

Physical training is a process of specialized physical training aimed at solving some practical tasks. The process of physical training is a specially organized pedagogical activity carried out for the purpose of physical improvement of military personnel using physical exercises, healing forces of nature, and hygienic factors.

The process of physical training is carried out in accordance with the specific rules of general military education and training, sports training.

The level of physical fitness of a person is characterized by the level of formation of movement skills and the level of growth of physical qualities.

Physical development is the gradual natural formation of the human body - the process of changing its appearance and its function. It is characterized by anthropometric (morphological) characteristics of a person.

The main signs of physical development include height, weight, chest size, bone and muscle growth, and the proportion of the body and its organs.

Morphology (in biology) is the science of the structure and form of the organism, derived from the Greek morpho (form), logos (doctrine). That is, a morphological change means a change in the shape of the body's organs due to their volume.

The functional state of the person is the internal organs of the body and is characterized by the level of maturity of the system, the stability of the body against the negative effects of military-professional activity, and the presence or absence of various diseases.

Physical qualities are the characteristics of the organism that ensure the movement of a person. Basic physical attributes include speed, endurance, strength, and agility.

The quality of agility means a person's ability to perform appropriate actions in a complex or frequently changing situation.

Endurance quality means a person's ability to perform an action at a high level, without reducing its effectiveness, for a long time.

The quality of strength refers to a person's ability to overcome or resist external resistance with muscle strength.

The quality of speed means the ability of a person to perform movement actions in a short time.

Flexibility quality is a morphofunctional characteristic of human locomotor apparatus, which is measured by the mobility of the links of this apparatus, its maximum amplitude (deflection, bending, stretching, stiffness, twisting, etc.). "Tarbiya" is derived from the Arabic language and means to nurture.

Types of education - intellectual, physical, moral, labor, sophistication, ecological, ethical, economic, legal.

Educational methods are social consciousness-forming, habitual training, motivating and punishing. Training methods used in the process of physical training are aimed at the formation of moral and spiritual qualities of military personnel, and the consolidation of the ranks of the military team.

For this purpose:

- use methods of persuasion, encouragement and performing exercises in the spirit of competition;

- it is achieved by objectively evaluating the changes occurring in the physical qualities of the personal content.

Pedagogical process = education + upbringing = education means imparting knowledge, and education, as we said above (from the Arabic language), means to bring up and care.

Knowledge - remembering and re-explaining the learned information;

A skill is an automated way of performing a person's conscious work actions that develops over a long period of repetition.

(Skill - being able to apply the learned knowledge in familiar situations);

Qualification is a person's readiness to successfully perform certain activities based on knowledge and skills.

(Competence is the ability to apply the learned knowledge and developed skills in unfamiliar situations and create new knowledge);

Competence is the ability to apply existing knowledge, skills and abilities in daily activities.

Method is a Greek term, research method, way, knowledge of natural and social phenomena, method of research (method, method) Methodology - a set of methods and methods of performing, implementing, performing any work, achieving a predetermined result in the performance of activities, a set of learned methods (methods), clarifying the method (method) and tasks, turning methods into guidelines, algorithms, a ready-made recipe (method of preparation, pattern), teaching about teaching methods.

Methodology - Yun.metod + logos is a way of teaching. Teaching about the scientific method in general, about the methods of some sciences (for example, a certain science, for example, the methodology of history).

Technique is a Latin word meaning "the art of performing". Exercise techniques are always changing and improving.

The science of physical education teaches the formation of movement skills that are important in life.

There are three main directions in physical education, and human physical education is carried out on the basis of this direction. They are: general physical training, professional physical training, sports training.

General physical training is aimed at strengthening health, acquiring a wide range of movement skills and abilities, and developing basic movement qualities that serve as a basis for subsequent special training.

General physical training uses all kinds of means of physical training, various physical exercises, healing forces of nature and hygienic factors.

General physical training at all stages of physical education is carried out more often in the school physical education system, in public health activities, and through individual forms of physical exercise.

Vocational physical training is a process of physical training aimed at preparing for a specialized, specific type of work (for example, a miner, mountaineer, firefighter) and defense activities.

In this, the types of physical exercises that are close to the trade or profession are used. The use of profession-oriented physical training accelerates the process of acquiring labor skills, increases labor productivity, and improves the body's resistance to harmful factors of the external environment.

The distinction between general and professional physical fitness is somewhat conditional, and both areas complement each other.

Sports training represents a special direction in physical education. Its task is to ensure that a person achieves high results in a chosen sport.

Sports fitness in physical education, high sports result related to improving the functional capabilities of the body, becomes a criterion for assessing people's physical fitness. It is widely used as a target for physical education.

The process of physical training is a specially organized pedagogical process aimed at a specific goal. It is based on the fact that military personnel perform physical exercises with the effective use of natural healing factors, strictly following the hygiene conditions for the purpose of physical development.

This process will consist of providing military education and upbringing to military personnel based on general principles and organizing training based on the principle of special sports.

In order to effectively solve the tasks related to physical training, exercises aimed at developing the physical and special qualities and military-practical skills of military personnel and maintaining them at the level of demand are used.

The main means of physical training are physical exercises that strictly adhere to safety rules, hygiene conditions, and effectively use the health-giving factors of nature.

Physical exercises (games, gymnastics, sports, tourism)

Exercise structure (internal and external)

Healing forces of nature (water, sun, air)

Hygienic factors (personal and collective)

Forms of physical training include:

- morning physical education;
- training sessions;
- public sports activities;
- includes physical exercises performed in the course of training and combat activities.

The physical training of the troops is organized taking into account the specific characteristics of each type of troops in terms of combat use, and has its own directions. Implementation of these directions is ensured in the following forms:

- during the morning physical education - in this, various options for morning physical education and physical exercises aimed at forming and developing the most important military-practical skills, physical and special qualities of military personnel are used;
- during the training sessions - in this case, the training time allocated to physical training is the relevant sections of the physical training program, using more physical exercises aimed at the formation of the most important military practical movement skills, physical and special qualities will be rationally distributed and appropriated in accordance with the purpose;
- during mass-sports activities - in this, the most important military-practical sports, sports and physical exercises games are widely used;
- in the process of training-combat activity - in this, military-practical exercises, actions and behaviors characteristic of the relevant military specialty are used.

In addition, during physical training, the practicality of the educational process is ensured, comprehensively, in a specific system, rationally and precisely.

The commander (chief) is responsible for the proper organization of physical training, the level of physical training of the personnel, and the objective assessment of the level of physical training of each serviceman.

LIST OF REFERENCES:

1. B.Q. Daminov., Boxing by sport. Textbook. Opposite: 2021 at the Higher Military Aviation school Republic of Uzbekistan.
2. B.Q. Daminov., Organizing the process of wrestling training. Methodical guide at the Higher Military Aviation school Republic of Uzbekistan Karshi 2021.