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FEATURES OF THE APPLIED PHYSICAL PREPAREDNESS OF THE FIRST-YEAR STUDENTS OF A LEGAL HIGHER EDUCATIONAL INSTITUTION

Abstract. Purpose: to study a level of the development of separate applied physicality of the 1st year students of a legal higher educational institution. **Material** and Methods: students of the l course of Institute of preparation of investigative specialists for the Ministry of Internal Affairs of the legal higher educational institution in number of 83 girls and 94 boys took part in researches. Methods were used: analysis and generalization of scientific and methodical literature, pedagogical test, methods of mathematical statistics. Results: it is fixed that one of the component of preparedness of a university graduate for the performance of his professional duties is the level of their health, physical and psychological preparedness. The research of an extent of the performance of one of tasks of the applied physical training of students is conducted – the development of the applied main physicality: general endurance and force. Following the results of the implementation of the running test of Cooper it was revealed that girls have a low degree of physical working capacity, boys – average. It is also defined that force of muscles of an abdominal tension and muscles of feet are poorly developed at students of both sexes. Force of muscles of an upper shoulder-girdle is developed rather good at boys, girls – haven't enough. Conclusions: researches showed that the process of classes on physical training of students – future investigative specialists of the Ministry of Internal Affairs is needed to be specialized according to the professiogramm of an investigator and to pay a special attention to the development of applied general and special qualities.

Keywords: students, a work of an investigator, applied physicality, force, endurance, level of the development.

Introduction. Now the educational process in HEI is gradually reorganized according to "The law of higher education of Ukraine from 01.07.2014". Information about closing, reorganization, merger of HEI of Ukraine because of their surplus, non-importance of graduates, and their non-competitiveness in labor market is often traced in mass media. Therefore today the question of the need of the interaction of an employer with higher education institution "for the purpose of preparation of the competitive human capital for hi-tech and innovative development of the country, self-realization of the personality, ensuring requirements of the society, labor market and the state in qualified specialists" is particularly acute [3]. One of the professional duties making preparedness of a university graduate for the performance is the level

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of his health, physical and psychological fitness. These components have an important value at the preparation of investigative specialists for MIFU.

In recent years the questions lighting the system of professional-applied physical preparation of student's youth were lifted in works of many scientists. So, the subject of special physical preparation in the system of professional-applied training in higher educational institutions of military formations of Ukraine, namely the Ministry of Internal Affairs and the Ministry of Defense, tax inspection was lit in the works of E. A. Yarmoshchuk, 2002; Yu. P. Sergiyenko, 2005; O. M. Lavrentyeva, 2012; O. A. Yareshchenko, 2012; I. Yu. Mikhuta, 2014. Bases of PAPP of students of technical colleges and modern approaches to this type of physical preparation were considered by R. T. Rayevsky, 1985; G. G. Lapshina, R. L. Dmitrov, 2013; V. G. Fotinyuk, 2013; T. V. Ludovic, 2014. In physical training of students of legal higher education institutions A. N. Ulanovskyi, A. P. Karpovich, L. V. Lisovskaya, 2014 were engaged in the development of innovative technologies. At the same time the scientific data connected with researches of professional-applied training of specialists of a legal profile, their physical development and the level of health in native scientific and methodical literature are presented not enough.

Communication of the work with scientific programs, plans, subjects. The research was conducted according to the initiative subject of the RW for 2011-2015 of the chair of physical training No. 3 of National law university "Yaroslav the Wise law academy" and according to the Thematic plan of the research work of Kharkov state academy of physical culture for 2013-2015 on a subject 3.5.29. "The creation of standards and technologies of the formation of healthy lifestyle, technology of the improvement of quality and safety of food".

The objective of the research. In this regard studying of a level of the development of separate applied physical qualities of students of the 1 course of legal higher education institution was the purpose of this work.

Material and methods of the research: analysis and generalization of scientific and methodical literature, pedagogical testing, methods of mathematical statistics. Students of the 1 course of Institute of preparation of investigative specialists for the Ministry of Internal Affairs of National law university "Yaroslav the Wise law academy" in number of 83 girls and 94 boys took part in the researches.

Results of the research and their discussion. The investigator is an official who is authorized to carry out the preliminary investigation on criminal case, and also other powers provided by the criminal procedure legislation. A distinctive feature of working hours of the investigator is his non-normalized working day. Actually investigators carry out the considerable amount of works in Saturday and Sundays, not always have the right for a compensatory holiday after duty, use a lunch break not every day [2].

Standards of the criminal procedural code of Ukraine oblige the investigator to make an investigation of a criminal case in two-month time. Therefore often judge business qualities of the investigator, in particular, by number of the finished affairs by him in a month or in a year. Thus it is usually mentioned that in the two-month time established law term certain quantity of affairs are finished. However these

indicators serve not always as a measure of the productivity of work of the investigator [2].

Cerebration prevails in the work of the investigator. A third of all time leaves on the main work that is on the investigation of crimes. So, average data on expenses of time for an oral interrogation at investigators of prosecutor's office make 41,2 min., and investigators of the Ministry of Internal Affairs have 37,4 min. Meanwhile more than a half (investigators have prosecutor's offices – 52%, and investigators of the Ministry of Internal Affairs have 58%) interrogations proceed less than half an hour. Interrogations make over one and a half hours rather small part (investigators have prosecutor's offices – 6%, and investigators of the Ministry of Internal Affairs have 4% of all interrogations). Investigators make resolutions a little more often than once in two days, spending for this kind of activity for about 40 min. Also they make indictments once in eight-nine days, spending for this kind of activity 125-145 min. [2].

At investigators a lunch break proceeds for about 50 min. Investigators who have seven and more cases more often than others, don't use the right for a lunch break in the production. Investigators spend over a third of time for the labor processes connected with the letter. Therefore the use of computers is obvious. They, first, significantly reduce time costs almost of all labor processes connected with the letter, secondly, considerably facilitate the work of investigators, thirdly, considerably increase the culture of the investigative production [2].

Proceeding from the above stated, a working pose of an investigator – is free that means to stay in sitting positions, standing, in walking.

The greatest interest presents a memory role in the accumulation of an experience and the preservation of knowledge to psychology of an investigator. Character of requirements which are imposed to an investigator does arbitrary, semantic memory and its qualities, as large volume, high precision and readiness main in his profession. Free, purposeful attention, thinking, perception, imagination, speech aren't less important [1; 2].

The activity of an investigator is characterized by a high level of the responsibility, and also the excessive level of an emotional pressure. According to V. M. Retnev (2007), the following professionally caused diseases are inherent in investigators: cardiovascular and respiratory systems, central nervous and peripheral systems, digestive and musculoskeletal system.

Owing to the above stated, problems of professional and applied physical training of an investigator are:

- 1. The primary development of applied main physical qualities: general endurance, force, speed.
- 2. The primary development of applied special qualities: long working capacity, mental endurance, ability to long concentration, switch-controlling, fast orientation in new conditions, "noise stability" (ability to work at an action of foreign irritants), and also emotional stability and self-control.
 - 3. The primary development of applied mental qualities of:
- free and involuntary attention, and also its properties volume, density (concentration), distribution, switch-controlling and stability;

- memory (volume, speed, accuracy, durability of storing and readiness for reproduction);
- thinking (evident and effective, evident and figurative, quick, abstract); besides, discursive and intuitive thinking;
 - imagination (recreating).
- 4. The acquisition of necessary applied knowledge and methodical-practical skills.

Applied knowledge has to be acquired by students in the process as educational forms of classes (practical, methodical, control), and after-hour (morning exercises, classes in sports sections, participation in competitions, recreational classes in a day regimen etc.) [6].

On methodical-training classes students overtake methods and ways of sports and sports activity for the achievement of educational, professional and vital purposes of the personality. The special attention is paid to a technique of application of the exercises promoting working out, rest and restoration of an organism after the working day.

Educational- training classes are directed on practical activities with the use of exercises from different types of sport (track and field athletics, different types of gymnastics, swimming, volleyball, basketball, football, table tennis) for the achievement of the physical perfection directed on the formation of physical qualities and properties of the personality.

Applied special qualities that are properties of an organism providing its resistance to the influence of adverse factors of the professional activity are developed at the investigator gradually in the course of labor life. However this process is very long and not always comes to the end successfully. The regular and purposeful application of means of physical culture allows accelerating the development of special qualities, to develop them to a necessary level.

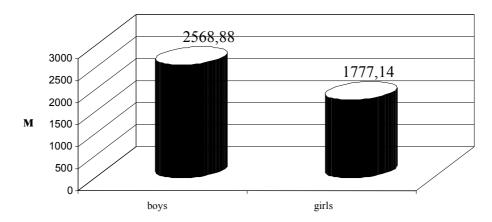
The ability to maintain working capacity long is closely interconnected with endurance and with its psychological aspect – strong-willed efforts. The exercises demanding overcoming of a psychological threshold "I can't" are for this purpose put into the practice. However in each case, it is necessary to individualize strictly the process of selection of such means and their dosage for each student.

The development of mental endurance, and also ability to long concentration, switch-controlling, "noise stability" of a future investigator is promoted by sports, especially so-called "distortion, favoring" of a game by a referee. Besides, traditional and oriental martial arts are widely used. The development of emotional stability and self-control is promoted by exercises from gymnastics: on shells, acrobatic exercises; exercises from track and field athletics, swimming, and skis.

First of all the development of applied main physical qualities forms a basis for the formation of the above-mentioned qualities of an investigator: general endurance and force.

By means of the 12-minute running test of Cooper at which the performance more than 2/3 muscle bulks is involved in work and loading has the essential impact on the systems providing the muscular activity, first of all on cardiovascular and

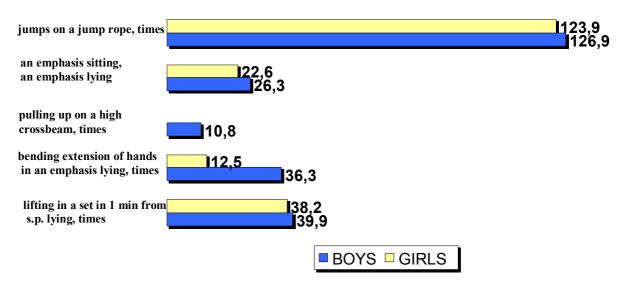
respiratory, we estimated physical efficiency of students. Results are presented in pic. 1.



Pic. 1. Average results of 12-minute running test of Cooper, m

Proceeding from standards to this test, the girls have a low degree of physical working capacity, the boys – average [10].

We also investigated various manifestations of power abilities of students: power dynamic endurance (an emphasis having sat down, an emphasis lying; bending extension of hands in an emphasis lying; lifting in a set from nominative lying, hands behind the head; pulling up in hanging); and also glycolytic working capacity (jumps on a jump rope) which results are presented in pic. 2.



Pic. 2. Average results of performance of test exercises by students of the 1st course

The analysis of the results presented on pic. 2, and their comparison with the norms presented by L. P. Sergiyenko, 2002, and V. A. Romanenko, 2005 testifies to the following:

- results of the implementation of the test "lifting in a set in 1 min." are low both at boys, and at girls and don't meet the age standards;

- results of the performance of the test exercise "bending extension of hands in an emphasis lying" speak about a high level of the development of dynamic power endurance at boys and low at girls;
- -students, according to standards, consulted on "perfectly" with the test exercise "pulling up on a high crossbeam";
- average result of the performance of the test exercise "an emphasis sitting, an emphasis lying" both at boys, and at girls is rather low and doesn't meet the average age standards;
- results of the implementation of the test "jumps on a jump rope" shown by students are rather low and don't meet the age standards.

Proceeding from the above stated, it is possible to draw the following **conclusions**:

- 1. The low-mobility is characteristic for the investigative work during the certain periods which leads to the decrease of a tone of the central nervous system, worsens regulation of blood circulation, breath and digestion that is badly reflected in health of the investigator and in results of his work.
- 2. It is necessary to pay a special attention to the solution of problems of professional and applied physical preparation in the course of classes on physical training of students the future investigative specialists of the Ministry of Internal Affairs, except the general tasks.
- 3. The level of the development of applied main physical qualities was defined within this work, investigating the extent of the performance of one of problems of applied physical training of students: general endurance and force. So, it was revealed by the following results of 12-minute run that the girls have a low degree of physical working capacity, the boys average. It is also defined that force of muscles of an abdominal tension and muscles of feet is poorly developed at students of both sexes. Force of muscles of the top humeral belt at boys is developed rather well, girls isn't enough.

Prospects of the further researches will consist in the research of the extent of the performance of problems of applied physical training of students by the definition of dynamics of a level of the development of their applied physical qualities.

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