

**THE IMPORTANCE OF VOCATIONALLY-APPLIED PHYSICAL TRAINING OF YOUNG PEOPLE FOR THE FORMATION OF PERSONNEL RESERVE POWER STRUCTURES OF THE STATE**

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Ukraine**ABSTRACT**

In modern society is essential physical education of youth. The level of physical development of young people largely determines the success of their careers. The purpose of this study was to investigate the influence of physical training for young people to form a reserve of personnel for law enforcement agencies of the state. In the course of this research following methods were used: a theoretical analysis and synthesis of the scientific literature and documentaries, a content analysis of documentary material, sociological and pedagogical methods, methods of studying the dynamics of change of emotional state and physical activity, as well as physical health and performance incidence of respondents, methods of mathematical statistics. More than 86.4% of the young people selected for service in the uniformed services of Ukraine (Ministry of Defense, Ministry of Interior, Ministry of Emergency Situations) in childhood and youth were actively engaged in physical training and participated in sport competitions. Their preliminary physical fitness, particularly the development of such qualities as strength, endurance, speed and agility, enhanced the successful passing of the training programs in the power structures of the state. Given that the majority of young people enrolled in the reserve personnel of the state security forces, in childhood and youth systematically engaged in physical training, and indicators of their strength, endurance, speed and agility characteristics meet the requirements of professional competence, the importance of the state system of physical education of young people is difficult overestimated. Persons who have attained the best results in sports, in most cases more successfully mastered the curriculum of training. This proves the need to adapt the physical training of the population to the professional requirements of the reserve personnel of law enforcement agencies, the use of special programs of professional and applied physical training of youth.

**Keywords:** young people's health protection, professionally-applied physical training, the state law enforcement bodies, the level of physical development, the theory and methodology of physical education.

**INTRODUCTION**

The level of physical development and the degree of physical fitness of young people play very important role in maintenance of success in their professional activities in future. Under the logic, it is possible to affect on the efficiency degree of future professionals to perform effective activity within the framework of the particular profession by the usage of deliberate action on the process of physical education of young people. Thus, there is no doubt that the present topic is relevant and requires a fundamental scientific study.

Some researchers have studied the effect of the development degree of person's separate physical qualities on his ability to perform the complex production objectives in extreme conditions effectively (Ponomarenko, 2002). Furthermore, there were investigations, which led to the conclusion that physical training of young people, studying in secondary and higher education institutions, can have professional and applied nature (Straško, 2009). Multiannual investigations, studying the conditions necessary for successful learning of certain production occupations, show that, according to the nature of professional activity within the framework of this occupation, quite certain physical qualities, which presence is due for the ability of proper production objectives' performance, are high-demanded. However, in most cases, the most important physical qualities, needed for successful professional activity, are strength, endurance, legerity and quickness.

In addition, it was found that the process of getting used to the unusual conditions of professional activity, in the vast majority of cases, corresponds with the laws of adaptation period and is characterized by the presence of appropriate stages.

The duration of the final adaptation to the unusual person's activity conditions depends on the difference between these new conditions and his customary ones. But in all cases, there are four successive stages of the process of adaptive organism alteration during the process of adaptation to the unusual conditions (Sukharev, Pokrovskii, 1990).

However, the person's old functional ties, which ensure the organism adaptation to the usual existence conditions, were destructed during the first stage of this process. During the second stage of the alteration process there is an active search for new functional ties which can provide sufficient adaptation of organism to the new (unusual) conditions of their activity. During the third stage of the alteration process there is automatic selection of the most efficient functional ties in which the ties that have not been particularly productive, were canceled, and those who were very rational and useful, fixed on the reflex level. Finally, during the fourth stage of the alteration process, the selected and fixed positive functional ties were transferred into more economical mode of their support (in terms of consumption of energy and plastic resources of organism).

Despite the high value of investigation results, unfortunately, the problem of appropriation of developing and applying special programs of professional and applied physical training of young people, contributing to their more rapid and complete adaptation to the difficult and dangerous conditions of professional activity in future, is still not fully studied.

Therefore, the aim of this study was to investigate the dependence of the success of professional activity of the personnel of state special services, on the algorithm of physical training during the childhood and youth of those persons, whom formed the personnel reserve of such services.

**METHODS**

This investigation was made on the basis of the study of documentary sources of information on 1,268 individuals selected for inclusion to the reserve of personnel groups of some state structures of Ukraine (Ministry of Defense, Ministry of Internal Affairs, Security Service, Ministry of Emergency Situations and others). The age of tested people ranged from 18 to 25 years. Among them there were 986 males and 282 females. All these persons have attended medical examination and were found eligible for admission to the reserve to form the state structures data, under the conclusion of medical commission. Furthermore, all of them have successfully passed special physical and psychological tests.

**Experimental design**

During the working process the following research methods were used: analysis and synthesis of scientific literature data, analysis of documentary materials and medical records, sociological methods (questionnaires, poll and interview), the test to determine the adaptive capacity under Bayevskii R.M., anthropometric methods, mathematical statistics methods.

The investigate work about reservists state were carried out on the basis of district military registration and enlistment offices of the city of Kyiv.

The investigation was divided into three stages (since 2009 till 2012). At the first stage, the health status and anthropometric parameters of young peoples, enrolled as candidates to the personnel reserve of state force structures, were examined. For this purpose, the work in military registration and enlistment offices and medical commissions authorized to determine the level of candidates' applicability for certain kinds of special activity, was made.

At the second stage of investigation, the anamnesis of physical development of each candidates, was examines. At the same time, their physical activity typical mode and the dynamics of changes in physical applicability were taken into account. The third stage of investigation was devoted to the analysis of obtained information and, on the basis of these results, to the development of the special program project of the professional and applied physical training for young people, who was preparing to work in groups of the state force structures.

#### Statistical analysis

Processing of information received during investigation process, was carried out with the help of mathematical statistics methods. Therewith, the analysis of the compliance of the quantitative indicators distribution form with the law of normal distribution was verified under the criteria of the Shapiro-Wilk test (W). For quantitative indicators, which had normal distribution, the average value and standard deviation were determined.

For quantitative indicators, which distribution was not corresponded with the normal variant, the median and also the upper and lower quartiles were determined. The significance of difference for independent groups was determined under the U-criteria of Mann-Whitney test, and for dependent groups under the Wilcoxon test.

### RESULTS

Special activities focused on keeping and strengthening health of young people, are an essential part of modern system of physical, psychological, and aesthetic education of man, which provide the capacity for harmonious development of his personality.

As a result of our investigation it was found that the level of appropriation of young people to the professional activity within the frameworks of certain occupations depends on the level of development of their physical, moral and psychological qualities, which guarantee the availability to implement typical manufacturing operations with the appropriate level of efficiency and reliability.

There were supplied data that 92.6% of young people (1174 of 1268 peoples), which state was studied during the period since 2009 till 2012, the regime of motion activity and the nature of systematically executed physical exercises are correspond with the algorithm of planned physical training of the specialists of state force structures. Definitely these individuals had more advantageous process of adaptation to the intensive physical activities (during the special training of officers of state force structures).

For the purpose of integrated assessment of functional capacity and level of physical appropriation of the tested persons, the control system KONTREKS-2, which included the series of indicators and tests (age, body weight, blood pressure, heart rate, flexibility, speed, dynamic power, speed endurance, speed-strength endurance, overall endurance, and recovery rate), was used.

The results of distribution of tested persons into the relevant categories according to their level of physical appropriation, are presented in the following table.

Table 1 Characteristics of physical appropriation of young people enrolled in the reserve of state force structures

Serial Number	Level of physical appropriation	Number of marks	Absolute number of persons	Percent
1	Low	less than 50	0	0
2	Below average	51 - 90	14	1.1%
3	Average	91 - 160	473	37.3%
4	Above average	161 - 250	649	51.2%
5	High	over 250	132	10.4%

In this table we can see that the vast majority of young people enrolled in the reserve of state force structures, has high, average and above average levels of physical appropriation. Furthermore, the group of individuals having above average level of physical appropriation is the most numerous (51.2%).

### DISCUSSION

To enroll the young adults to the number of candidates for the reserve of state force structures, it is necessary to meet their level of physical appropriation with the established standards (Bondarevsky, 1983).

Such level of human physical qualities development is ensured by the adequate regime of physical training and optimal degree of realization of genetically determined organism qualities. Among the basic physical qualities which characterize the level of physical appropriation of person, the most important, to achieve a state of full or partial compliance with the requirements, are the following qualities: speed, overall endurance, speed strength and motor coordination (Bulatova, 2008). The level of development of these qualities, determines the person's ability to the complete fulfillment of hard-coordinated motor tasks, which have professional and applied value for this specialty.

Accounting the fact that not all young people are involved in the state system of students' physical training, used in secondary and higher educational institutions of the country, many of them are forced to exercise physical training alone (Andreev, 2000; Osipov, 2002). For the majority of young people, the important condition for the success of independent physical education is the implementation of the principle of creative self-development. Therefore, the achievement by the young people of the necessary level of development of those physical qualities that determine their suitability for certain types of professional activity, become possible only in the case of the sufficiently complete implementation of the principle of creative self-development.

One of the important circumstances, which significantly affects on the degree of effectiveness of independent physical training of young people, is the availability of their full interest in achieving the desired level of physical appropriation and the formation of constant stereotype related to the necessity of systematic training (Vedmedenko, 1999). Unfortunately, nowadays only the small part of youth hold these views, and it supports the idea about the necessity of strengthening of the educational work carried out among young people, in order to create the need for leading healthy lifestyles.

The scientifically based theory of the physical education of the person should be the fundamental basis of the set of measures aimed at the physical training of different groups of populations (Vatseba, Petryshyn, 2001). This theory should identify the main aspects of the functioning of modern physical training system of various groups of the people, which is part of their physical culture (Lynets, 1997) and is aimed primarily at the development of endurance and motor qualities of the person (Zatsiorsky, 1981).

Nowadays, the theory of physical education of different categories of the people, used in many countries of the world, involves the use of measures complexes aimed at the development of the basic physical qualities of the person (Prystupa, 1995; Savenkov, 2006), but, despite of its relatively high efficiency, it has certain drawbacks. In particular, this system of physical education of population does not include the usage of special exercise complexes, which have professional and practical importance.

As, during the development of scientific and technological progress, the requirements to the level of professional appropriation of specialists, working in different sectors of the economy, are constantly increasing, the requirements to the level of development of the physical qualities of personnel, performing the complex manufacturing tasks, are increasing also. We can get success in rising of the level

of physical appropriation of workable sections of society only by improving the system of physical education of people (Operaylo, 2006).

There are several ways to optimize the current system of physical training of various groups of people in any state. However, the most promising and rational are the way, which provides the deep comprehensive study of the health state of the appropriate group of society, and the development, on the basis of the analysis of such results, of the prospective educational and training programs, which have professional and practical value for the most actual production specialties (Pirogov, 1089; Savenkov, 2006). To solve such a complex and demanding task successfully we need the joint efforts of the most experienced scientists with extensive work experience in the field of physical education and sport in many countries around the world.

### CONCLUSION

The results of made investigations confirms the hypothesis that the problem of optimization of modern system of physical training of various categories of society in many countries of the world is extremely important nowadays.

On the basis of data obtained during investigations, we can make the following conclusions:

1. The important role in successful training of specialists working in various fields of industrial activity played the level of development of precisely those physical qualities, which determine their ability to perform complex manufacturing tasks with the required level of quality and reliability. The state system of physical training of various categories of society (especially young people), which is an integral part of the physical culture of the community of people, has the great importance for the development of these specific qualities.

2. The modern system of physical training of various categories of society used in many countries of the world, has relatively high level of efficiency, however, it is not ideal, and should be improved on the basis of the latest scientific achievements. One of the promising directions for improving the system of physical education of society is the usage of special educational and training programs, which have professional and practical value for the most actual industrial specialties, on the basis of deep study of health state and physical abilities of people.

3. It is desirable to use special educational and training programs of professional and applied orientation, designed to prepare candidates for enrolling in the register of state force structures, whose main aim is the fight against organized crime and international terrorism, in the process of creation of the universal system of physical education of society, designed for usage in many countries around the world. It is necessary to consolidate the peace-loving forces of all nations and to joint affords of the leading scientists of many countries around the world, working in the field of physical education and sport, to solve this extremely important international problem.

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