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IMPROVING THE COORDINATION ABILITIES OF STUDENTS AT A PEDAGOGICAL UNIVERSITY WITH THE USE OF BOXING TOOLS

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Abstract
This article discusses the introduction of a set of exercises with boxing tools and elements during physical education training sessions with students of a pedagogical university, in order to increase their coordination abilities. 40 first-year students took part in the pedagogical experiment.

Keywords: Physical education, boxing, coordination abilities, dexterity, educational and training process, pedagogical experiment.

Introduction

Being a historically developing social phenomenon, physical culture affects all spheres of life, since it solves such tasks as education, upbringing and health promotion in a single and interrelated way. However, like other spheres of public life, it needs constant updating.

In recent years, society's need for harmoniously developed individuals has led to a reassessment of the values of physical culture. Contrary to the well–established opinion that physical culture is a motor activity aimed primarily at the development of human physical parameters, a new system of thinking should be formulated in society that characterizes physical culture mainly from a general cultural point of view [1].

Physical education of students is a discipline that teaches students to maintain and strengthen their health, improve physical fitness, develop and improve the psychophysical abilities necessary in their future professional activities. An urgent problem of students' physical culture is the development and use of such methods and means that would contribute to the functional improvement of the body, increase its efficiency, make it resistant and hardy. Optimization of the

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pedagogical process is impossible without taking into account the individual characteristics of the students, without selecting adequate training effects [2].

Boxing, with its variable nature of relationships in combat, high emotional tension and diverse effects on the athlete's body, is one of the most difficult types of martial arts.

The educational and training process in universities using boxing tools contributes to the active involvement of young people in this wonderful sport, which fosters such important qualities as determination, strength, will, courage [4].

One of the main tasks solved in the process of physical education is to ensure the optimal development of physical qualities (strength, speed, endurance, dexterity and flexibility) inherent in a person. Physical qualities are innate morpho functional qualities, thanks to which human physical activity is possible, which receives its full manifestation in appropriate motor activity.

The development of dexterity is one of the main aspects of students' physical development and contributes to their physical and psychological well-being. In recent years, instead of the term dexterity, the expression coordination abilities have been used. This is the ability to quickly, accurately, expediently, economically solve motor tasks. This ability is expressed in the ability to quickly master new movements, accurately differentiate and control various characteristics of movements, and improvise in the process of motor activity in accordance with a changing environment [3].

The practice of physical education and sports has a huge arsenal of tools to influence coordination abilities. The main means of educating coordination abilities are physical exercises of increased coordination complexity and containing elements of novelty.

The complexity of physical exercises can be increased by changing spatial, temporal and dynamic parameters, as well as due to external conditions, changing the order of the projectiles, their weight, height; changing the area of the support or increasing its mobility in balance exercises, etc.; combining motor skills; combining walking with jumping, running and catching objects; performing exercises on a signal or for a limited period of time [5].

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The purpose of the study:
The use of a set of exercises with boxing elements to improve the coordination abilities of students of a pedagogical university.

Research objectives:
1. To carry out a theoretical and bibliographic analysis and determine the importance of coordination of movements in the system of modern physical education of students;
2. To identify the level of development of students' coordination abilities;
3. Apply a set of exercises with boxing elements for students of the experimental group;
4. To determine the effectiveness of the developed methodology in the course of a pedagogical experiment.

Research methods: review of scientific and methodological literature, pedagogical testing, pedagogical experiment, method of mathematical statistics.
In order to improve the indicators of coordination abilities of students of a pedagogical university, it was decided to conduct a pedagogical experiment. 40 first-year students who were engaged in physical education (elective discipline) in natural conditions at the Branch of the Russian State Pedagogical University named after A.I. Herzen in Tashkent were selected as subjects. The sample of subjects was divided into two groups of 20 students each.
To identify the initial indicators, the following tests and samples were used:
1. Shuttle run 3*10 m (sec);
2. Static coordination (Romberg test);
3. Sensitivity of the vestibular analyzer (Yarotsky test);
4. The reaction of the cardiovascular system (CVS) to physical activity (Rouffier test);
5. The height of the jump from the spot, cm (according to Abalakov);
6. The length of the jump from the spot, cm;
7. Exercise-the "Tag game" test, number of times.

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Table 1 – The results of the initial indicators

№	Tests	The results of the initial testing of KG (n=20)	The results of the initial testing of EG (n=20)
1.	Shuttle run 3*10 m (sec);	11,2±1,09	11,5±1,10
2.	Static coordination (Romberg test);	84,34±1,18	84,69±1,18
3.	Sensitivity of the vestibular analyzer (Yarotsky test);	74,78±1,23	75,86±1,25
4.	The reaction of the cardiovascular system (CVS) to physical activity (Rouffier test);	8,79±1,15	9,36±1,18
5.	The height of the jump from the spot, cm (according to Abalakov);	51,36±1,22	50,68±1,22
6.	The length of the jump from the spot, cm;	188,79±2,23	190,65±2,23
7.	Exercise-the "Tag game" test, number of times.	8,48±1,08	7,25±1,08

Based on the results of the initial testing, it was decided to introduce a set of exercises with boxing elements to increase the coordination abilities of students engaged in higher education.

The training sessions were conducted according to the university schedule, 2 times a week. In the main part of the classes, the students of the experimental group performed exercises to increase dexterity and coordination using boxing tools and elements. The students of the control group studied according to the traditional program approved by the Branch of the Herzen State Pedagogical University in Tashkent.

To improve the coordination abilities of the students of the experimental group, the following exercises were used:

1. To develop the ability to maintain balance: standing on one leg in different starting positions, walking on a gymnastic bench with eyes closed, walking on a gymnastic bench after performing three forward somersaults, maintaining balance on a moving support – a rolling skateboard, walking without deviations along a rope or along a chalk line after body rotations, Romberg test with eyes open and closed, etc.

2. To develop the ability to spatial orientation and spatial-temporal parameters, the following exercises were used: various relay races, outdoor games, guessing time intervals by stopwatch, acrobatic exercises, performing stands, performing various poses, somersaults, headstands, shoulder stands, and others.

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3. For the development of leg dexterity, the following exercises were used: movement along specified or planned points, symmetrical and asymmetric foot movements in the initial position lying on your back, in the standing position touching objects or marks on the wall with your feet at different levels and at different distances, performing elements from different dances, hitting a soccer ball at the goal for accuracy, juggling a soccer ball, jumping rope, etc.
4. Exercises for the development of manual dexterity: throwing small objects from partner to partner, throwing a tennis ball at a target for accuracy, juggling with tennis balls with your hands, throwing objects at an exact distance, throwing basketballs into a basket for accuracy, throwing tennis balls into standing pins, rolling stuffed balls into standing pins, mobile games and sports with balls (for example, a hand ball, basketball, darts, and others).
5. To develop the ability to combine various parts of the human body, outdoor games, sports games, folk games, the boxing game "tag", relay races with and without objects, and others were used.
6. To develop the rhythm of movements, the following exercises were used: punching bag – rhythm strikes with gloves, imitation of blows without gloves with a shadow, jumping rope, rhythmic combination of coordinated movements with hands and feet, dance movements and others.
7. To develop the pace of movements of boxers, the following methods were used: running on the spot in 10 seconds, striking with maximum speed on the spot, the same exercise in motion, tapping test, acceleration in running by 20-30 meters and others.

During the pedagogical experiments, it was possible to avoid the significant influence of interfering factors. At the same time, it was possible to ensure sufficient purity of the experiment to have a significant impact on the level of dexterity of the subjects, especially the students of the experimental group.

It should be noted that in the experimental group, the students who started studying using the experimental method were more motivated to the educational and training process, since new and unfamiliar physical exercises were interesting and unusual for them. This led to their active participation in training and increased concentration when performing exercises for general and specific dexterity. The students also showed interest in the level of development of these physical qualities, ways of their development to improve athletic fitness and the

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general level of preparedness for the upcoming interuniversity sports competitions of the Russian branches of the city of Tashkent.

3 months after the start of the experiment, in order to verify the effectiveness of our methodology, it was decided to retest, which included performing similar test tasks and samples that were in the previous time. The results of the final testing are presented in Table 2.

Table 2 – The results of the final testing.

№	Tests	The results of the final testing of KG (n=20)	The results of the final testing of EG (n=20)
1.	Shuttle run 3*10 m (sec);	11,1±1,09	10,1±1,08
2.	Static coordination (Romberg test);	83,58±1,17	89,72±1,16
3.	Sensitivity of the vestibular analyzer (Yarotsky test);	80,15±1,28	84,36±1,25
4.	The reaction of the cardiovascular system (CVS) to physical activity (Rouffier test);	7,89±1,15	5,75±1,14
5.	The height of the jump from the spot, cm (according to Abalakov);	52,16±1,22	58,23±1,20
6.	The length of the jump from the spot, cm;	192,54±2,24	205,74±2,20
7.	Exercise-the "Tag game" test, number of times.	7,68±1,07	5,75±1,06

According to the results of the final testing, it is noticeable that the data in both groups have improved, but the indicators of the students of the experimental group are much better, which indicates the effectiveness of the methodology developed by us.

During the experiment, the spatial orientation skills and spatial-temporal skills of the groups changed for the better. Calculations show that there are significant differences between the indicators of the groups.

The ability to maintain balance in the Romberg pose has also improved in both groups. Compared with the control group, the experimental results are much better. The differences between the groups are significant at a 5% significance level (the Student's empirical t-test is 3.4 conventional units, and the critical one is 2.08, that is, it is less).

The functional state of the subjects after the standardized Rouffier test load was significantly better after the experiment. The average value in the control group was 7.89 and in the experimental group – 5.75. Both averages are in the zone of

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"good" cardiovascular status. However, the indicator of the experimental group is significantly higher than that of the control group.

The last exercise, "tag game", required participants to avoid touching opponents. This practice was slightly better in the experimental group before the experiment, but not significantly. After the experiment, the differences appeared. This is the largest of all indicators when compared with the critical value (2.08).

Conclusions:

The analysis of scientific and methodological literature and materials preceding the study showed that there is no scientifically sound approach to the use of contactless boxing and auxiliary exercises as an effective means of forming coordination abilities, many motor qualities and general physical fitness in the practice of physical culture among students of the Herzen branch.

The data obtained during the experiment show that the level of physical fitness and coordination abilities of students in the control and experimental groups did not differ before the experiment began. The obtained results formed the basis for the development of an experimental methodology for determining the structure and content of contactless boxing in physical education of students.

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