APPLYING VARIOUS EXERCISES TO DEVELOP THE PHYSICAL FITNESS OF 11-YEAR-OLD FOOTBALL PLAYERS

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Abstract: This article comprehensively examines the coordination abilities of 11-12-year-old football players, providing specific recommendations for developing their strength, agility, speed, and technical skills. Results for each test and practical suggestions for improvement are presented, along with training strategies designed to lay the foundation for the players' future success.

Keywords: Coordination, speed, agility, 11-year-old football players, standard deviation, coefficient of variation, arithmetic mean.

ПРИМЕНЕНИЕ РАЗЛИЧНЫХ УПРАЖНЕНИЙ ДЛЯ РАЗВИТИЯ ФИЗИЧЕСКОЙ ПОДГОТОВКИ 11-ЛЕТНИХ ФУТБОЛИСТОВ

Аннотация: В этой статье всесторонне рассматриваются координационные способности 11-12-летних футболистов, даются конкретные рекомендации по развитию их силы, ловкости, скорости и технических навыков. Представлены результаты каждого теста и практические предложения по улучшению, а также стратегии тренировок, призванные заложить основу для будущего успеха игроков.

Ключевые слова: Координация, скорость, ловкость, 11-летние футболисты, стандартное отклонение, коэффициент вариации, среднее арифметическое.

INTRODUCTION

After gaining independence, great attention began to be paid to all areas in our country, especially to the physical education and sports activities of the youth, which became one of the important directions for ensuring the physical and spiritual well-being of the younger generation.

The Decree of the President of the Republic of Uzbekistan dated March 5, 2018, No. PF-5368 "On measures for the fundamental improvement of the system of state management in the field of physical education and sports" and the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated March 24, 2020, No. 187 "On the organization of the development of children's and youth sports," as well as other regulatory and legal documents related to this field, have created a solid foundation for the development and popularization of football as a sport.

Football is considered one of the popular sports aimed at the comprehensive physical and mental development of young athletes. Especially for 11-year-old football players, special preparation training provides them with an essential foundation to develop their physical abilities and achieve high results in the future. Determining and developing the level of physical fitness of athletes at this age through various methods requires tailored approaches and strategies. During the research, testing the physical fitness levels of football players allowed for identifying the strengths and weaknesses of each player and creating training programs suited to them.

LITERATURE REVIEW

Numerous studies conducted by both local and foreign scientists have highlighted the importance of developing coordination abilities in 11-12-year-old children as a significant area of research. During this age period, children experience rapid physical and neurological development,

creating favorable conditions for improving coordination. Individual and group exercises play a crucial role in developing coordination abilities [3].

11-12-year-old children's coordination abilities development focuses on physical and neurological aspects. According to Petrov, during this age period, children's nervous systems develop rapidly, creating favorable conditions for improving coordination in sports.

He recommends developing coordination abilities through individual and group exercises, as specialized training and exercises are crucial in strengthening children's sports skills. The study analyzes and emphasizes the importance of individual and group training in developing the coordination abilities of 11-12-year-old children.

Kuznetsov's research shows that age-appropriate physical exercises play an important role in developing coordination abilities. He believes that coordination exercises, considering children's physical conditions, can achieve effective results in both individual and group training.

RESEARCH METHODOLOGY

To address the set objectives, the following methods were used: theoretical analysis of scientific and methodological literature, analyzing and summarizing the works of Uzbek and foreign scholars on the topic, pedagogical observation, pedagogical tests, and mathematical statistical methods.

ANALYSIS AND RESULTS

In this analysis, the physical preparedness indicators of 11-year-old football players were studied using the following tests. By performing 5 consecutive jumps in place and 3 somersaults, the arithmetic mean value of the test was determined to be 11.3, reflecting the average movement coordination and strength preparedness of the athletes. The standard deviation was 1.6, and the coefficient of variation was 14.1%, indicating the uniformity of the results. Similar results demonstrated the overall effectiveness of the training. During the training process, various intensity jump exercises and special coordination programs were incorporated to improve the players' strength and jumping techniques. Such exercises enhanced movement harmony and increased physical activity. It was recommended to regularly reassess the exercises to monitor changes.

In the ball control and 360-degree turn test, the arithmetic mean value was 18.3, with a high standard deviation of 4.03, indicating the instability of the results. This exercise tests coordination and balance. The coefficient of variation was 0.21%, showing the need to develop this ability among football players. To improve this exercise, it was recommended to use station-based exercises and devices aimed at enhancing balance and coordination stability.

In the juggling with a football (within 60 seconds) test, the results showed an arithmetic mean value of 25.7, while the standard deviation was 15.5, and the coefficient of variation was 48.6%. This high variation reflects significant differences in the technical abilities of the players. Juggling skills require long-term training to strengthen the technique. It was deemed appropriate to prepare special juggling exercises with varying levels of complexity, taking into account the individual abilities of the players.

The numbered group running test, with an average value of 18.8, a high standard deviation of 2.2, and a coefficient of variation of 11.6%, indicates that the exercise shows players' agility and quick reactions are at an average level. Low variation indicates that the training ensuring uniformity among players' results has been successful. To further improve these results, interactive exercises focused on precision and speed should be introduced. Additionally, measuring results

with special reaction sensors helps monitor players' progress. Enriching training with colorful or numerical markers improved players' reaction times. This helps increase agility and reaction levels.

In the test of taking steps forward in a straight line with eyes closed, the average value is 28, the standard deviation is 18.9, and the coefficient of variation is 67.5%, showing significant differences in balance ability among players. This exercise should be implemented considering each player's individual needs. A system of exercises from simple to complex should be developed to enhance balance. Exercises such as controlling the ball while standing on one foot or moving along different lines with closed eyes are important. Adding exercises like standing or rotating on various platforms with closed eyes can further strengthen balance abilities.

Running around obstacles, in this test with an average value of 20 and a standard deviation of 6, and a coefficient of variation of 30%, indicates differences in players' agility levels. Special programs need to be developed to improve coordination and agility for some players. To complicate the test, reducing time, working with various obstacles, and introducing special dynamic exercises aimed at increasing speed are necessary.

Holding a soccer ball on the upper part of the foot while standing (10 meters), with an average value of 18.5 and a standard deviation of 4.72, and a coefficient of variation of 25.5%. The results of this exercise helped determine players' abilities to combine technique and balance. To improve ball control, exercises under complex conditions over long distances should be conducted. This helps improve players' technical skills. By forcing players to move in different directions or at different speeds during training, their technique and balance harmony can be enhanced.

A special exercise is performed on a 12-meter platform. The average value of this test is 12.2, with a sigma value of 4.4 and a coefficient of variation of 36%. High variation shows significant differences in players' reaction and coordination abilities. To develop this exercise, exercises focused on mobility should be added. Simulating various conditions on the platform can improve players' agility and concentration abilities.

In the test of standing in a swallow position on a gymnastics bench, the average value is 1.7, and the average standard deviation is 1.64, with a coefficient of variation of 94.1%, indicating very large differences in players' balance abilities. Targeted balance exercises are necessary to reduce these differences. Along with gymnastics exercises, using various dynamic balance equipment helps stabilize results. To complicate this exercise, using higher platforms can test players' ability to maintain balance.

Standing in place, jumping up 5 times, tumbling forward 2 times, and performing an 11-meter penalty kick, with an average value of 14.7, a standard deviation of 6.2, and a coefficient of variation of 42.1%. These indicators suggest a lack of stability in players' strength and technical abilities. Special strength and technique training can help reduce these differences.

1-tab. Physical fitness of 11-year-old football players

№	Indicators	$\overline{X}$	S_x^2	σ	V %
1	Jump up and down in place 5 times and do 3 lunges	11.3	1.6	1.2	14.1
2	Holding a soccer ball and turning 360 degrees	18.3	4.03	2	0.21
3	Juggling a soccer ball (in 60 seconds)	25.7	15.5	3.5	48.6

4	Running to numbered balls	18.8	2.2	1.4	11.6
5	Throwing stones forward in a line with eyes closed	28	18.9	4.3	67.5
6	Running around the bars	20	6	2,4	30
7	Carrying a soccer ball over the top of the net while standing (10 meters)	18.5	4.7	2.1	25.5
8	The exercise is performed on a 12-meter platform. Starting from the start line, three consecutive circles with a diameter of 150 cm are marked every 4 meters (the distance between the circles is 2 meters). The finish line is 2 meters away from the last circle.	12.2	4.4	2	36
9	Sitting in a swivel position on a gymnastic bench	1.7	1.64	1.2	94.1
10	Jumping in place 5 times, tumbling forward 2 times, and performing an 11-meter penalty kick.	14.7	6.2	2.4	42.1

CONCLUSION

The coordination abilities and physical fitness levels of 11-year-old football players were determined using various tests, including arithmetic mean, standard deviation, and variation coefficient indicators, and were pedagogically analyzed. Through these indicators, the strengths and weaknesses of each player were studied. The results regarding the physical fitness of 11-year-old football players show significant differences in the development of certain physical qualities. For tests with high variation, it is necessary to improve training through an individual approach. This is particularly important for the development of balance, coordination, and technical skills. Developing appropriate strategies for each exercise helps to standardize the players' preparation levels and improve overall efficiency. Additionally, it is recommended to introduce a system for measuring the development of players through individually planned training sessions.

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