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## FEATURES OF ASSESSING THE QUALITY OF JUMPING ABILITY IN YOUNG VOLLEYBALL PLAYERS

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### Abstract


The study of jumps in volleyball players and the kinematic factors that provide it according to the current Abalakov method, determining the effectiveness of special exercises designed to form kinematic elements that provide jumps, determining the height of vertical jumps from a place and from a run using the Abalakov method, arm movements from a standing position and determining the height of a vertical jump without arm movements, determination of the height of a vertical jump with movements of the right and left hands, determination of the height of a vertical jump with movements of the right and left legs.

**Keywords:** Assessment of jumping quality in young volleyball players, volleyball elements, technique, development of jumping ability and jumping endurance.

### Introduction

#### ANNOTATSIYASI

Voleybolchilarda sakrovchanlik va uni ta'minlovchi kinematik omillarni amaldagi Abalakov usuli yordamida o'rganish, sakrovchanlikni ta'minlovchi kinematik elementlarni shakllantirish bo'yicha ishlab chiqilgan maxsus mashqlar samaradorligini aniqlash, joydan va yugurib kelib vertikal sakrash balandligini Abalakov usulida aniqlash, joydan qo'llar harakati va qo'llar harakatisiz vertikal sakrash balandligini aniqlash, joydan o'ng va chap qo'l harakati bilan vertikal sakrash balandligini aniqlash, joydan o'ng va chap oyoqda debsinib sakrash balandligini aniqlash.

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**Kalit so‘zlar:** Yosh voleybolchilarda sakrovchanlik sifatini baxolash voleybol elementlari, texnikasi sakrovchanlik va sakrash chidamkorligini rivojlanish.

## АННОТАЦИЯ

Изучение прыжков у волейболистов и обеспечивающих его кинематических факторов по действующей методике Абалакова, определение эффективности специальных упражнений, разработанных для формирования кинематических элементов, обеспечивающих прыжки, определение высоты вертикальных прыжков с места и с разбега по методике Абалакова, движения рук из положения стоя и определение высоты вертикального прыжка без движений рук, определение высоты вертикального прыжка с движениями правой и левой руки, определение высоты вертикального прыжка с движениями правой и левой ноги.

**Ключевые слова:** Оценка прыгучести юных волейболистов, элементы волейбола, техника, развитие прыгучести и прыжковой выносливости.

The Law of the Republic of Uzbekistan "On Education," the "National Program for Personnel Training," the Law "On Physical Culture and Sports," the Decree of the President of the Republic of Uzbekistan dated June 3, 2017 No. PP-3031 "On Measures for the Further Development of Physical Culture and Mass Sports," the Decree of the President of the Republic of Uzbekistan dated March 5, 2018 No. UP-5368 "On Measures for the Fundamental Improvement of the System of State Management in the Field of Physical Culture and Sports," as well as the tasks defined in government decisions on physical culture and sports, the most pressing issue today in all educational institutions, namely strengthening the movement of physical culture and sports among the population, increasing its popularity, including the organization and conduct of physical culture and sports classes using new methods and means to educate the younger generation in the spirit of physical strength, agility, willpower, patriotism, increasing the number of student youth engaged in sports

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It is also aimed at consistently eliminating shortcomings and omissions in the further development of physical culture and sports among student youth.

Therefore, the importance of physical education in the implementation of physical culture and health improvement and mass sports work in all educational institutions, strengthening the physical culture and sports movement among the population, and increasing the popularity of sports is invaluable.

Physical education is considered the most important and mandatory part of the continuous education system, while raising the factor of physical education and sports to a new level in the personnel training system is our main goal.

In order to involve broad segments of the population in mass physical culture and sports work, the Ministry of Sports, together with the Ministry of Sports of the Republic of Uzbekistan, organizations in its system, and other ministries, develops a calendar plan of mass sports events and, in accordance with it, organizes a wide range of sports events.

In particular, competitions among schoolchildren, as well as the Women's Spartakiad, family sports competitions "Mahallamiz Pahlavonlari," "Sog'lom Oila" in mahallas, and republican championships, championships, international tournaments, Asian Games, World Championships and World Championships in many sports are gaining widespread popularity.

The main goal of these sports competitions is to cultivate in the hearts of the younger generation a love for sports, to demonstrate their achievements in sports, to form in young people the principles of a healthy lifestyle, strong will, patriotism, and devotion to the Motherland, to create conditions for engaging in sports at the level of modern requirements, and to affirm high Olympic principles in the minds of young people.

### **Features of jumping qualities assessment**

As a result of studying the degree of influence of physical education lessons combined with volleyball elements on the physical fitness of primary school students, Zuoza Aureolius-Kazis Kazevich (1989) came to the conclusion that purposeful volleyball lessons are not only an effective means of educating young

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students, but also allow them to be admitted to the volleyball club based on a preliminary selection and determine their correct specialization using forecasting.

M.I. Popichev (1992), who proposed a new methodology aimed at developing jumping qualities, tested this methodology on young volleyball players. He divides these volleyball players into 4 groups based on the length of their body joints:

1. Children with short calves and long thighs and body;
2. children with long thighs and short torso, short calves;
3. children with long calves and short thighs;
4. 4. children with short thighs, long bodies, and calves.

1. Taking into account these morphological features, the children of each group were engaged in a certain number of jumping exercises, and after a certain period of time, the effectiveness of these exercises was checked. This effectiveness consisted in the fact that the best indicators (upward jump, deflection force and time) were noted in the children of the first group.

2. M. Boyirbekov (2003), who for many years observed the growth of jumping endurance of qualified volleyball players, achieved results of scientific and practical significance. In particular, in his opinion, highly qualified volleyball players jump from 306 to 600 times in one game to hit and block. The maximum number of jumps for performing these skills corresponds to 4 games (142 times). The jump for blocking (122), and the jump for striking (113 times), are repeated more often. According to observations, the number of jumps performed during one training session was less than the number of jumps in one competition. The obtained results draw attention to the fact that during training, it is necessary to use specialized jump exercises based on technical skills performed with and without the ball, and the number of such exercises should be 1.5-2 times greater than the number of jumps performed in competitions.

3. 3. As mentioned above, the quality of the jump during the game depends not only on the number but also on the height at which it is performed. Therefore, it is necessary to form this quality from the initial stage, based on effective exercises. In improving jumping ability and jumping endurance, not only special

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exercises but also the use of various equipment-trainers yields good results. In particular, a jump spreader or jump stand develops jumping ability and jumping endurance. The stand consists of sections, which can be placed at different heights. Exercises performed mainly to improve jumping ability include: 1. Bir oyoqda va ikki oyoqda debsinib sakrash;

4. 4. Jumping;

5. 5. Jumps during the upward jump and execution of the attacker's shot;

6. 6. Exercising on a jump spreader develops jumping ability. A shock absorber is attached to the waist and floor, and a jump is made to touch the hanging ball. When monitoring exercises, it is necessary to pay attention to the correct use of equipment by the trainees and the correct and precise execution of exercises. Rhythmic execution of the above-mentioned exercises plays an important role in young volleyball players. For this, it is advisable for the volleyball player (athlete) to maintain their jumping power and agility skills at a consistent pace.

7. It's also worth noting that the athlete must apply their energy to the ball with a specific focus on the jumping power and agility. The volleyball player, responding to their zone, must accurately execute an attack shot or pass, a jump without interfering with other partners in blocking. In improving jumping ability in young volleyball players, it is also possible to increase jumping ability by using various active and folk games outside of school and in school conditions. Jumping ability and jumping endurance not only play the necessary role during the game, but also ensure the development of agile execution of technical techniques and the player's ability to change position during the game. In the course of the game, there are extremely diverse driving situations that require the player to think quickly and accurately when blocking and striking.

8. Below are the indicators of horizontal jumps from a standing position and running in 10-12 year old boys and girls who have just begun to engage in sports, both at the beginning and after 6 months of training.

Table 1 shows the normative indicators characterizing the speed-strength and jumping qualities of young volleyball players.



## 1 jadval Average indicators of physical fitness of young volleyball players

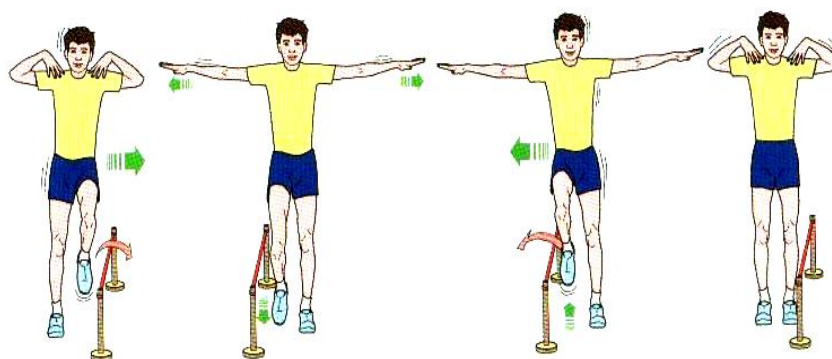
Tests	Participant's age			
	10 years old	12 years old	14 years old	16 years old
30 m run (m/sec)	4,50	4,00	3,70	3,60
Abalakov Jump (cm)	45,8	49,0	46,3	68,3
Long jump (cm)	198	206	235	260
Long jump (cm)	339	421	450	459
Filled Ball Throw (m)	8,22	12,70	13,21	13,62
60 m run (m/sec)	8,90	7,90	7,70	7,20

### Results of jumping ability

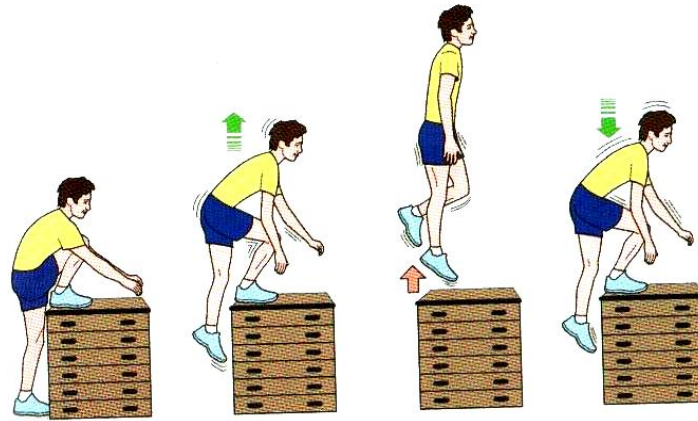
In volleyball, most game skills are performed in jumping positions. Therefore, this quality is a decisive factor in achieving a useful result.

Sample exercises:

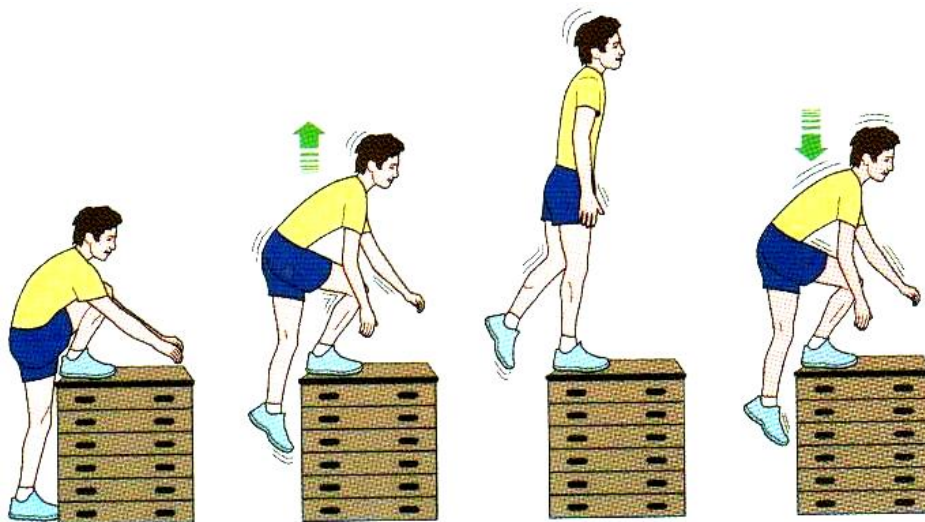
- squats with 50-70% of one's own weight;
- Rapidly rise from a half-squat position with a weight of no more than 50% on the shoulder;
- jumping with devices of different weights;
- training leg muscles on training equipment;
- jumping with a jump rope at different speeds and heights;
- jumping over obstacles of varying heights, etc. (Figures 1, 2, 3, 4, 5).



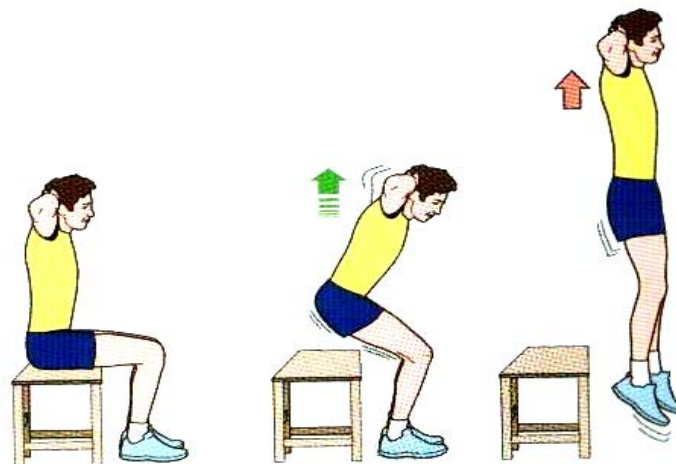
1- Fig.



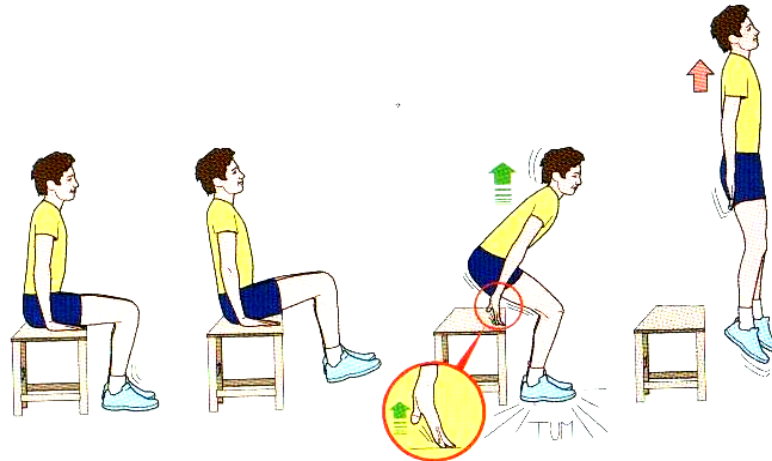
2- Fig.



3- Fig..



4- Fig.



5- Fig.



## Discussion

1. As a result of a visual analysis of the training of volleyball players of different ages and training, it was revealed that in today's volleyball, in the development of jumping ability and jumping endurance, which are of paramount importance, serious attention is not paid to the coordinated execution of a series that ensures jumping technique, coordination, and jumping height.

2. This is evidenced by studies conducted in 2018 to study the dynamics of the development of jumping ability and jumping endurance. The dynamics of growth of indicators characterizing these qualities in 19-21 year old volleyball players was characterized by extremely slow growth (jumping ability by 2 cm, jumping endurance by 3.32 times), which did not reach the level of regulatory requirements established by the program. Even among the female volleyball players of the UzSWLU team, these indicators did not differ with high results.

3. It has been proven that the unity of the main kinematic elements that ensure jumping ability and jumping endurance, as well as determining the composition of the jumping technique corresponding to the jumping game method, and its integration function are not observed. This circumstance allows us to conclude that jumping ability and jumping endurance are performed at a level below the capabilities of volleyball players.

4. For the purposeful and effective development of jumping ability and jumping endurance in volleyball players, first of all, it is necessary to teach the jumping

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technique corresponding to the game method performed by jumping, to improve it with the help of special local and integrating exercises. For the purposeful organization of this process, we propose to use block templates 1, 2, and 3, presented in this chapter. In addition, we believe it is advisable to introduce the concepts of "jumping technique and tactics," "kinematic elements that ensure the technique and tactics of jumping" into the process of teaching volleyball, developing jumping ability and jumping endurance.

### Conclusions

In recent years, it has been established that in volleyball publications, the issues of jumping technique, coordination, kinematic and aerodynamic elements characteristic of jumping game techniques are not disclosed. The lack of serious attention to these issues in the practice of training volleyball players of different ages was also confirmed by the results of visual observations. Devices and non-traditional tests created by us for assessing the indicators of jumping ability made it possible to reveal the role of the most important kinematic and aerodynamic elements that ensure the height and jumping technique during current research and pedagogical experiments. In particular, it was established that the explosive force of the right and left leg, developed in an asymmetrical ratio during the push-off for the jump, negatively affects the height and technique of the jump. From the results of the experimental study, it became known that during 4 months of traditional content training

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