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**DEVELOPMENT OF SPECIAL SPEED-POWER ABILITIES IN ORGANIZING
TRAINING IN VOLLEYBALL ATHLETES WITH HIGH SPORTS SKILLS**

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Abstract. The article extensively discusses the issue of developing special speed-strength abilities in the process of training volleyball players. The results of the study show that speed-strength qualities in volleyball players with high sports skills are one of the decisive factors in competitive performance. The experimental training program used plyometric exercises, interval jumping tasks, and exercises performed on special simulators as the main tools. At the end of the study, significant positive changes were noted in the athletes' jump height, speed, and impact force.

Key words: volleyball, speed-strength abilities, plyometrics, special exercises, high sports skills.

Introduction

In the modern sports system, in particular in volleyball, the issue of athlete training is emerging as one of the most important areas of scientific research. Volleyball is distinguished by its dynamic characteristics, tactics based on quick decision-making, and the requirement for a high level of physical training. The main difference between teams that are successful in international arenas today is the combination of technical, tactical, and physical qualities possessed by their players. In particular, special speed-strength abilities are of particular importance for volleyball players. Special speed-strength abilities mean the athlete's ability to perform his movements with maximum speed and high force. For example, during a strike, an attacker demonstrates the ability to jump high in a short time, maintain balance in the air, and hit the ball with force. Blocking also requires a high level of jump and strength from the athlete. Therefore, speed-strength abilities are considered one of the main components that determine the superiority of a volleyball player in the competition process [11,12,13,14,15,16].

Many studies have been conducted in the scientific literature on the development of speed-strength abilities. In particular, Verkhoshansky (2011) in his work "Special Power Training" dwells in detail on the positive effect of plyometric exercises on the jumping ability of athletes. Bompa and Huff (2015) emphasize the need for gradual increases in loads in the annual training cycles of athletes to develop speed-strength abilities. Platonov (2015) also scientifically highlighted the role of special physical qualities in the training of athletes with high sports skills [1,2,3,4].

In studies conducted in Uzbekistan (Karimov, 2020), the effectiveness of plyometric exercises aimed at developing speed-strength abilities in volleyball players was



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separately studied, and the results were positive. Special speed-strength abilities determine not only physical fitness, but also the effectiveness of technical and tactical actions. For example, an attack shot executed with high speed and power can be a decisive factor in breaking the opponent's defense. Also, athletes' precise timing when blocking and quick return of the ball can decide the fate of the game. Therefore, coaches should pay special attention to exercises aimed at developing speed-strength abilities when organizing training sessions [5,6,7,8,9,10].

Today, plyometric exercises, interval running, and weight training are considered one of the most effective tools in sports methodology. Plyometric exercises train the athlete's muscle fibers to generate maximum force in a short period of time. This helps develop the volleyball player's ability to jump, hit, and block quickly. Interval exercises, on the other hand, increase the athlete's endurance and also form the qualities of speed. Weight training increases strength indicators and strengthens muscle strength [17,18,19]. In this article, we will analyze the methodology for developing special speed-strength abilities in organizing training sessions for volleyball players with high sports skills on a scientific basis. In the research process, plyometric exercises, interval running tasks, and special simulator exercises were used to evaluate changes in the athletes' jump height, speed, and impact force. Based on the results, scientific and methodological recommendations for the effective organization of volleyball player training are developed [20,21,22].

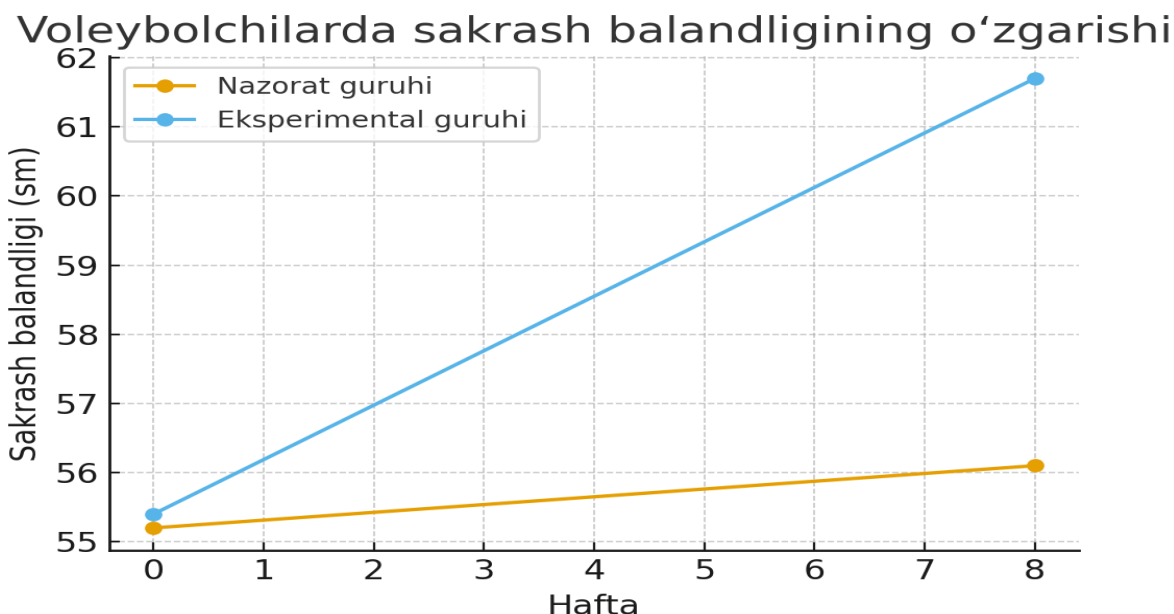
Methods

The study was conducted in a professional volleyball club in Tashkent. 16 highly skilled volleyball players aged 18–23 participated. The athletes were divided into 2 groups: a control group (8 people) and an experimental group (8 people). The experimental group trained for 8 weeks based on a special program for the development of speed-strength abilities.

Results

Indicators	Control group (baseline)	Control group (final)	Experimental group (beginner)	Experimental group (final)
Vertical jump (cm)	55.2	56.1	55.4	61.7
20 m run (seconds)	3.15	3.11	3.14	2.98
Strength of impact (kgf)	52	53	51	59

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Discussion

The results show that the athletes in the experimental group achieved significantly higher results than the control group. This indicates that plyometric exercises and interval running tasks effectively develop their speed-strength abilities.

Conclusion

Speed-strength abilities are one of the main factors determining the competitive performance of volleyball players, plyometric exercises, interval running, and weight training effectively develop these abilities, athletes in the experimental group achieved higher results than the control group, coaches should pay special attention to the development of special speed-strength abilities in training.

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