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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**EFFICIENCY OF IMPROVING THE PHYSICAL TRAINING OF
13-14 YEAR OLD VOLLEYBALL GIRLS IN EXTRACURRICULAR SPORTS
TRAINING****Gulhayo Karimova***Independent Researcher at the Institute of Physical Education and Sports**Teacher at Fergana State University**E-mail: karimovagulhayo1@gmail.com**Fergana, Uzbekistan***ABOUT ARTICLE**

Key words: 13-14 year old volleyball players, age-physiological characteristics, special endurance, extracurricular sports activities.

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Abstract: The article discusses work with sports reserves in the sports system, especially the formation of physical and functional training of adolescent volleyball players, approaches to working with 13-14-year-old volleyball players, adapted to their age and physiological characteristics, aimed at developing special endurance, sustainable growth of sports results, as well as problems that may arise in improving the physical fitness of 13-14-year-old volleyball girls in extracurricular sports activities.

Relevance: In the world sports system, work with sports reserves, especially the formation of physical and functional training of adolescent volleyball players, is one of the important areas. Thus, when working with 13-14-year-old volleyball players, approaches aimed at developing special endurance, adapted to their age and physiological characteristics, lead to a stable increase in sports results. In such dynamic sports as volleyball, the ability to endure strong loads for a long time during a game ensures the athlete's successful participation.

In many leading sports countries of the world, scientific research has been conducted in the field of physical training of adolescent athletes in volleyball, especially the formation of special endurance qualities. Research is being conducted on the physiological and

psychopedagogical aspects of extracurricular sports training when working with adolescent athletes, the adaptation of the volume and intensity of loads for volleyball players to age-related physiological indicators, the use of interval and mixed training methods in developing endurance, the application of methods for increasing endurance and movement effectiveness by working in anaerobic-aerobic zones, with an emphasis on the mechanisms of loads for the formation of special endurance in volleyball players.

In our country, one of the priority areas is the implementation of specific measures to form a healthy lifestyle for the younger generation, strengthen their physical and mental health through sports, further develop children's and youth sports, and involve them in physical culture and sports. Such tasks as "Development of criteria for systematic assessment and functional monitoring of the preparedness of volleyball players in sports schools, academic lyceums, and specialized educational institutions" have been defined.

As a methodological approach to the strategic tasks defined in the Resolutions of the President of the Republic of Uzbekistan No. PP-274 dated July 19, 2024 "On Measures for the Further Development of Volleyball Sports," No. PP-421 dated December 4, 2024 "On Measures for the Development of Team Sports and Improvement of the System of Selection of Talented Youth," as well as in other regulatory legal documents.

The purpose of the study is to develop proposals and recommendations for improving the effectiveness of physical fitness of 13-14-year-old female volleyball players in extracurricular sports activities.

Research objectives:

- development of a methodology for developing special endurance in 13-14-year-old female volleyball players during extracurricular sports activities.

The research results and their discussion:

Among the athletes of our country, there are many who demonstrate their strength and power in the world arena. However, when analyzing sports results in recent years, it was noted that the records of Uzbek volleyball players have not been updated, and the growth rate of results is very low. In volleyball, there are practically no leading teams that can compete with the strongest athletes of the world. Therefore, it was deemed appropriate to develop the endurance of 13-14-year-old female volleyball players. Because, at present, the development of endurance in 13-14-year-old female volleyball players is one of the urgent problems. Currently, the development of special endurance in female volleyball players is one of the important

issues. Before the study, we also studied the endurance, physical fitness, and anthropometric indicators of 13-14-year-old girls.

At the initial stage of the study, their height, weight, strength of the left hand, right hand, position of the chest during inhalation and exhalation were determined. Their anthropometric status was studied, and their physical development status was checked using special control tests.

High demands are placed on 13-14-year-old female volleyball players during extracurricular activities. They require large volumes of work and high intensity. For girls aged 13-14, maintaining work activity for a long time during extracurricular activities contributes to an increase in the activity of the cardiovascular and nervous systems of volleyball players.

During our research, a methodology for developing special endurance in extracurricular activities of 13-14-year-old volleyball players was developed.

(see Table 1).

Table 1

Methodology for the development of special endurance in 13-14-year-old female volleyball players during extracurricular sports activities

№	Main direction of exercises	Fixed assets	Norm
1	Development of the level of general physical fitness (strength, speed, flexibility, and the ability to relax muscles).	Slow run to warm up URM without projectiles; URM with a stuffing ball, dumbbells, rope, barbell, and other projectiles; Exercises on projectiles.	5-10 minutes. Exercises 8-10 10-15 minutes.
2	Improvement of running technique.	Special running exercises: Running with high knees; Running with a backward swing of the shin, walking with a quail's step; Jumping - jumping running; Jumping from foot to foot (Ohu-like) running. Running technique improvement exercises: Accelerated running on a turn and straight track; Running from low and high starts; Accelerated running down and up; Running 30, 60, 80, 100 m on the go; Repeated running of 100-300 m at a speed close to maximum;	10-15 minutes. 4 x 30-40 m. 4 x 30-40 m. 4 x 30-40 m. 4 x 30-40 m. 4 x 30-60 m. 4 x 30-60 m. 4 x 80-100 m. 3 times in total. 2-3 times. 4x100+100 m, 200+200 m.

		Alternating running at distances of 100 and 200 meters.	
3	Development of strength.	Practice with a barbell (stroke, snatch, jump, squat and bend), with a bag of sand; Track and field jumps, jumping exercises, and throwing.	with a 25-30 kg barbell 15-20 minutes. 15-20 minutes.
4	Development of general and specific endurance	Cross-country running with acceleration and without tension; Fartleck; Walking; Fast running in 100-1200 m distance segments, repeated running at competitive speed and higher; Fast 100-200-400 m + slowly varying 100 m run.	30-45 minutes. 30 minutes. 1 hour. 2x600m, 3x400m, 4x300m, 5x200m, 6x100 m, 5x100+100 m, 4x200+100 m, 3x400+100 m.
5	Increasing the level of general and physical fitness and active rest.	Engaging in other types of athletics (jumping, throwing); Sports games (basketball, volleyball, football); Morning exercises and outdoor walks.	Up to 1 hour. 40 minutes. 2 hours.
6	Training, tactical preparation, and development of competitive experience.	Introduction to the basics of tactics; Development of a sense of speed; Application of tactical techniques in competitions; Control run;	At the selected distance.

This methodology is aimed at increasing special endurance in female volleyball players of this age category through extracurricular activities, which allows increasing the indicators of general and special physical training of athletes, perfect execution of technical movements in conditions of endurance, and strengthening health-improving factors. The methodology allows developing the special endurance of female volleyball players through the following directions. In this case, through general physical training exercises, it increases the possibilities of activating the musculoskeletal system of athletes, developing such qualities as muscle strength, agility, and flexibility. With the help of special running exercises, the development of endurance qualities and the improvement of running technique are achieved. Through strength exercises, it is possible to increase the effect of force in strikes, jumps, and movements. The formation of anaerobic endurance was achieved through running with varying speed (interval, variable running). Through training aimed at improving tactical preparedness, skills of making decisions in the game and demonstrating endurance in game situations are formed. The possibilities of stimulating recovery processes and preventing physical fatigue through active

recreation and other sports will be expanded. Personality-oriented and age-appropriate training based on the principle of load, combining volleyball technique and endurance, allows for the formation of the ability of athletes to work stably in long-term game situations, health improvement and hardening, as well as creating conditions for constant monitoring through control tests.

As a result of the effective application of the methodology, such opportunities as an increase in special endurance indicators in 13-14-year-old female volleyball players, an increase in the ability to correctly perform technical movements in conditions of speed and fatigue, an improvement in the functional capabilities of the cardiovascular and respiratory systems, a positive attitude towards sports, the formation of discipline and volitional qualities are expanded.

The methods we have chosen will help to strengthen the health of high school students, improve their physical fitness, form a healthy lifestyle in students, and acquire skills and abilities. To identify talented athletes, we used special tests: running 100m, 300m, 600m, 1500m and jumping from foot to foot for 50m (number of steps), as well as 6 minutes of cross-country running.

Conclusion

In conclusion, by repeatedly performing movements and practicing in dynamic conditions, volleyball technique stabilizes, and volleyball players develop the skill of correctly performing technical movements in complex situations. The effectiveness of extracurricular activities also increased. In this case, exercises organized in extracurricular forms (clubs, sports groups, independent classes) serve the meaningful organization of free time for female volleyball players. This form increases the overall quality of athletes' training, ensuring consistency and continuity. The factor of health improvement and hardening is also taken into account. Endurance exercises activate the cardiovascular, respiratory, and muscular systems, contributing to the strengthening of health. Thus, at the beginning of the study, we studied the level of physical development of schoolchildren. The difference in their birth year and age, as well as the level of physical fitness, are presented in the following tables. As a result, it was found that before the study, the indicators of students in both groups did not differ significantly from each other and were almost identical.

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