Scientific News of Sports Academy
Sport Science Journal
vol. 6, № 4, 2024, pp. 30-33.

# THE INFLUENCE OF TRAINING LOADS ON THE DEVELOPMENT OF SPEED ABILITIES OF YOUNG PUPILS

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**Nəşr tarixi**
Qəbul edilib: 14 oktyabr 2024
Dərc olunub: 25 dekabr 2024


**Annotation.** The article analyzes the methodology of improving speed abilities as the main factor of physical fitness in tennis, age-related mechanisms and speed characteristics are revealed, the influence of training loads aimed at developing the speed qualities of young tennis players, school teachers are investigated.

**Keywords**: *speed abilities, training loads, heart rate. Speed abilities are complex and multicomponent.*

**Introduction.** They directly depend on genetic predisposition and a number of internal and external factors (age, coordination, strength abilities), they are difficult to improve and quickly fade away. Experts note that young pupils who want to become tennis players have different types of speed (starting, distance, acyclic, mixed; without a ball, with a ball) develop relatively independently, there is no transfer of speed when performing coordination dissimilar actions and exercises. Most scientists call the age of 9-14 years the most favorable period for the development of speed, and in a later period, the increase in speed occurs mainly due to movement techniques and speed-power potential [1, 3]. At the same time, according to the observations of scientists, in the practice of training young athletes, the main attention is paid to the development of endurance, dexterity and flexibility, while as no more than 11.8% of the time is spent on improving speed, 8.2% of speed and strength qualities [2]. In practice, a series of running and jumping exercises of low coordination complexity with submaximal intensity are widely used: short-term explosive exercises (running 5-30 m, long jump from a place, high jump from a place) jumping exercises with a large number of repetitions (hurdles, triple and five jump), high-intensity exercises for the muscles of the trunk and upper shoulder girdle, exercises with weights. Not Monotonous techniques are recommended. It is best to vary various exercises to improve the speed of movement without a ball (running segments of 6-30 m, running with a sharp stop, running in place with a high hip lift, running backwards, running with a somersault forward, jumping, running up stairs, imitation of running movements in a supine position) and with a ball (driving the ball 28 m, driving the ball with a movement to the side, driving the ball with a racket forward, keeping the ball with a constant transfer to a partner, driving the ball with a sharp stop and then with a racket with the transfer of the ball). In this case, the pauses between the series should last at least 4 minutes. It is recommended to use low-volume loads with a series duration of three to five minutes and medium-volume loads with a series duration of 3-4 minutes, which do not cause a negative effect on the functional state of the body, to develop the speed abilities of athletes [4]. The purpose of the study: To study the influence of training loads aimed at developing the speed abilities of young pupils tennis players aged 10-12 years. For the purpose of studying, we conducted a pedagogical observation. Pedagogical supervision took place from September to April on the basis of the Lisey School team in Baku.The results of the study and their discussion. Repeated and competitive methods are the main ones in improving speed abilities. The best result is achieved when using a series of high-speed exercises in a competitive mode. The main task of functional fitness of young

pupils is to demonstrate their level of physiological mechanisms of the body and states of physical qualities: strength, speed, endurance, flexibility and coordination. Therefore, we suggest keeping records of training loads based on general, special and technical training. This allows us to adequately assess the multidirectional nature of training loads: special physical, technical, tactical training and determine the development of physical qualities of our pupuls, tennis players. By speed abilities, you can determine the intensity of training loads at a certain training stage. Depending on the volume and degree of intensity The speed of movement depends on the training loads. At the same time, high-speed physical activity can cause a number of physiological changes in the body of young athletes, depending on the sequence of working out training elements, the number of repetitions of exercises, and rest pauses. In order to improve the speed of young tennis players, aerobic training exercises are used to develop general endurance, and a mixed and anaerobic regime is used to develop special endurance and speed qualities. The most well-known method of controlling an athlete's speed abilities is the heart rate (HR), which reflects the energy cost of the frequency of movement. Heart rate indicators indicate a change in the functional state of vegetative systems: thermoregulation, metabolism, external respiration, endocrine system, central nervous system, etc. An experimental test of the speed capability was carried out on the group 25 pupils tennis players aged 10-12 years. Means and methods of preparation they were evenly distributed throughout the preparatory period. To achieve our goals, we have developed a diagnosis of children's speed abilities, which includes a set of pedagogical assessment tests Heart rate: starting speed (overcoming a ten-meter stretch by running from a place), distance speed (overcoming thirty meters by running from a place), special (high-speed) endurance (running 3 times for 28 meters with alternating running around three racks located at a distance of 9 meters from each other). The organization of training loads at the preparatory stage lasted 60 days. The first 25 days there was a predominance of the volume of high-speed starting work, on day 32-56 there was a predominance of high-speed endurance. At the same time, a relationship was noted between the values of volume and duration. Observation of pupils of the Baku City Lisey School at the age of 10-12 years revealed that the heart rate at the level of the anaerobic threshold at the final stage of the experimental study decreased from 163 beats/min 3+10.3 to 154 beats / min 5+11.4 beats/min with maximum increase in oxygen consumption. When assessing speed abilities at the preparatory stage of the training process, a decrease in heart rate was noted in tennis players aged 10-12 years against the background of a rational combination and application of various means and methods of speed exercises, which indicates a significant potential for economical functioning of the body at this age stage. The limiting criteria were the heart rate threshold of 164 beats/min, critical the level is 176 beats/min. In the starting speed in running at 10 m – 176 beats / min, in the distance speed in running at 30 m – 167 beats /min, in the special speed in running 3x30 m – 163-154 bpm. Conclusions. Thus, the impact of training loads aimed at developing the speed abilities of young athletes should be judged based on the intensity of the load, functional fitness and age of tennis players our pupils, since age-related changes affect the functional capabilities of the heart. Improving speed abilities students tennis players are most effectively exercised in parallel with the development of high-speed endurance, speed and strength qualities, and techniques for performing game actions not in a state of physical or emotional fatigue. At the same time, strive for a speed of exercise close to the maximum, change the speed of exercise from the maximum to the submaximal, train the relaxation rate of working muscles.

It is extremely important to organize and conduct all those processes very correctly for the benefit of our pupils who wants to learn to play tennis correctly. Vitally important to observe and to have a proper training in a school. Those observations which are made by us in

the school peoduce very deep analyses for our scientific experiments and answers for them.

Our children learn to play tennis with those elements very quickly. Also other very needed and important elements were included in our programme of observations. Those combinations of new elements are very effective for the development of our pupils and their higher results. It is really great to observe their lessons and improvments.

They learn very quickly how to learn new elements of tennis in our schools.It is so interesting and highly motivating to teach and see their progress there.They play, move and create a new versions of those wonderful studies. From the very beginning to the very end. Starting playing at very early age it is highly captivating process.

The importance of those games is possible to estimate propaly. Because they are so interesting and captivating.

They are so vulnerable and proper stractured. Our pupils are so kept by those games so they are enjoy them too much. For example when I took a game to show them with elements of tennis.They recieved it with a great joy.

They were so glad and enthusiastic about it. And it went just brilliant and orginized. It was so nice to observe it and implement new elements in it.

Those games have gained a new meaning and ideas.Those ideas are very productive and very well settled in their practical life and new trainings.

For example we were studying a tennis loop element with outdoor games. It is that element a racket for the children goes back for their movement and that takes certain speedand hits a ball from the highest position.We have 3 types of services in tennis spin, flat, slice. That preparing exercise helps a lot to initiate their better understanding of the game.

And it used to be implented and practised very very well.

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# MƏŞQ YÜKIƏRİNİN YENİYETMƏLƏRİN SÜRƏTİNƏ TƏSİRİ

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**Anotasiya.** Bu məqalə təhlil edir sürət qabiliyətləri əsas faktor fiziki aktivlik kimi tennisdə. Yaş və sürət mexanızmlərin və onların xüsusiyətləri. Sürət qabiliyətlərinin inkişafı.

**Acar sözlər:** *sürət qabiliyətləri, məşq yükləri, ürək döyüntüləri, Sürət qabiliyətləri mürrəkəb və çox komponentlərdən ibarətdilər.*

# ВЛИЯНИЕ ТРЕНИРОВОЧНЫХ НАГРУЗОК НА РАЗВИТИЕ СКОРОСТИ ПОДРОСТКОВ

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**Аннотация.** Эта статья анализирует методологию развития скоростных способностей как основной фактор физической активности в теннисе, возрастные механизмы и обнаружение скоростных характеристик. Влияние тренировочных нагрузок нацеленных на развитие скорости молодых игроков, учеников отображено в данной статье.

**Ключевые слова:** *скоростные способности, тренировочные нагрузки, частота сердечных сокращений, скоростные способности комплексны и мультикомпонентны.*