

OPTIMISATION OF SPEED IN VOLLEYBALL GAME THROUGH SPECIFIC MEANS

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Abstract: Dominant volleyball game is relationship-speed force. Most actions are based on this relationship. At the moment the rally tend to decrease in duration, it is becoming increasingly necessary and rapid executions agile. Amid modification of the technique and tactics of volleyball players tend to be a consummate athlete, strong, fast, able to respond efficiently to increasingly higher in the competition.

In this paper we intend to try to establish manifestations of volleyball game speed and to improve its means to a team of cadets in the national championship. For this we used a battery of specific tests volleyball game. Some tests appear in the rules of the federation control specialist, others are used for some coaches to monitor training the club.

Speed and skill are motricities qualities particularly important in the game of volleyball and must be a concern in lower echelons training.

It was assumed that the group which will work on specific and non-specific means of volleyball, appropriate and directed to speed development during training, will learn an enormous technical and tactical capacity wider and faster execution.

Finally, this research attempts to evaluate to see if specific drive systems used in the training of volleyball players were cadets, had been successful in developing specific speed game of volleyball.

Key words: *optimisation, speed, volleyball*

Introduction

Currently volleyball game is a game where physical training is crucial. It is very clear that while the two teams are at the same level of technical and tactical point of view, the difference does physical training. Those who practice a modern volleyball concluded that only permanent improving this side will enjoy steady success. Permanent monitoring of the evolution of this component of training has led to some methodical lines, the training programs strictly observed both coaches and players [1].

Dominant volleyball game is relationship-speed force. Most actions are based on this relationship. At the moment the rally tend to decrease in duration, it is becoming increasingly necessary and rapid executions agile. Amid modification of the technique and tactics of volleyball players tend to be a consummate athlete, strong, fast, able to respond efficiently to increasingly higher in the competition [2].

Unfortunately, these qualities are conditioned by genetically mostly just speed [3]. The question is: can we develop this quality motor? If so, how much and at what age? In this paper we intend to try to establish manifestations of volleyball game speed and to improve its means to a team of cadets in the national championship. For this we used a battery of specific tests volleyball game. Some tests appear in the rules of the federation

control specialist, others are used for some coaches to monitor training the club.

We proposed in this paper to study the possibility of improving the speed and its manifestation in a team of cadets, given that this level represents the beginning of the game of volleyball performance and implicit structure that will build high performance.

Speed and skill are motricity qualities particularly important in the game of volleyball and must be a concern in lower echelons training. In the game of volleyball experience the following manifestations of speed: speed of reaction, execution speed, speed, speed the pace of other driving qualities.

The speed can be improved with specific and nonspecific means volleyball game in a relatively short period of time.

Hypothesis research

It was assumed that the group which will work on specific and non-specific means of volleyball, appropriate and directed to speed development during training, will learn an enormous technical and tactical capacity wider and faster execution.

Research tasks

For the elaboration of work we have established the following tasks:

- Documentation literature;
- Establish research hypotheses;
- Choice batch for research;

- Establish forms of manifestation of speed in the game of volleyball;
- Choice of control samples that will be used for testing;
- Carried out;
- Registration and achieving results tables;
- Making batteries exercises for improving speed and their practical application in the experiment group;
- Analysis and synthesis of final results of test data in graphical form;
- Develop conclusions and drafting work.

Research methods

- Study bibliographic material
- observation method
- The experimental method
- The method of graphic representation

This research tries to assess whether specific drive systems used in the training of volleyball players were cadets, had been successful in developing speed.

To test the hypothesis, were used 10 subjects aged between 15-16 years, who were from CS Dinamo Bucharest club. I used two variables:

The independent variable (VI), represented by specific and nonspecific drives volleyball consisting of: games and exercises performed at an intensity of 40-60%.

The dependent variable (VD), represented by players from that pursue issues of speed and whether there is any effect of change VI.

Following direct observation made on the experimental group have met the following manifestations of speed: reaction execution, displacement (and change direction), stop complex power - speed, complex speed - resistance.

For the experiment using a set of tests that were performed once at the beginning duration of the experiment and again at the end of this period. His reaction followed the experimental group sets specific exercises to speed development.

The following will describe the control samples included in these tests, both those required by the specialized federation and the chosen us.

Tests control.

1. Jump high for attack.

- Touching the bar is done with one hand. The two jumping icon treats and highlights the best.

2. Lifting of lying dorsal trunk.

- It works in dorsal slept with knees bent and feet flat on the floor. Raise the trunk until the chest touches the knees. It works in two series of 45

sec. with a break of 15 sec. between sets. Include cumulate.

3. Lateral displacement on the distance of 3 m.

- Executing on the distance bounded by attacking line and the center line of the land. The contractor will achieve two strokes at each performance with one hand. Working time is 1 min.

4. Displacement 5x6m.

- The athlete starts from the bottom line of the land and execute moving to the front line. The two lines will be achieved at each execution. Perform five repetitions at maximum speed. Execution time is timed.

5. Consecutive attacks.

- The athlete will perform 10 strokes of attack without pause between repetitions of the ball thrown by coach. After each execution, preparation of the next impetus for withdrawal is made behind the attack line. It is envisaged that the height of balls thrown trajectory is constant and not very high for each repetition. We measure the time from execute.

6. Consecutive blocks.

- The athlete will perform 10 actions jam without pause between repetitions in Zones 3 and 4 or Zone 3 and 2. On the opposite side of the net two athletes will stay and support over the top band of the net by a ball which will make the block by contractor. Distance between ball will be 4.5 m. Move to block specific step will be added or crossover performer choice. We measure the time of execution.

The means of operation in preparation (independent variables)

1. Exercises for the development and execution speed of reaction

a) A player at work, another receipt. The player receiving the service from sitting, back. The noise produced by the contact of the hand ball that serves skill of receipt amounts, taking turns and runs; 3x5 executions. It works alternatively Variants:

- different positions in anticipation of service tailored to the level of knowledge;
- different positions depending on the process of serving the ball.

b) 5 m from the wall two players sit one behind the other. The rear three throws tennis balls to the wall at the front to catch them. Repeat 3 times, 2 minutes break.

c) The same exercise, but the player throws volleyball back wall and the front makes a reception with two hands down 3 x 5 executions.

c) Near the net, reaching runs away back attack line, followed by the momentum of the arms and legs, shot attack pass from a high 3 x 3 executions.

2. Exercises for development of speed, change of direction and stop

a) Zone 1, lateral and taking the ball under appeal to the 6 ball near the net attack (player goes on the line side by hitting the ball forward);

b) same exercise in zone 5;

c) reception from of long and short attack (doubling) in the 2 players (4-6 receiving) with a focus on land movement, change of direction, stop;

d) Preparatory reduced squad games: play 3-3 all the land; 4-4 game changing lines after each attack or rotation after each pass the ball over the net.

3. Exercises for development of speed-strength physical qualities combined

a) Medicinal throwing their arms (the place or jump); medicine ball 1, 2 or 3 kg; 4x5 reps, two minutes rest between repetitions;

b) Medicinal throwing 1kg over the net with one hand: getting up with his left hand, changes and throws right:

- one step and half with jump: 3x5 repetitions, rest in between repetitions, 3 minutes.;

c) of lying back, throwing the ball with two hands at a medical partner of the 7 -8 m away;

d) moving the blockage between zones (III and IV or III and II) with a medicine ball: one tennis ball with every slap, flexion;

e) of lying back, throwing medicine lifting the horizontal trunk when throwing to a partner of the 4-5 m distance.

f) Coach line at 3 m, the player who is throwing the ball over the net to the left and right. It runs trips to blockage, leaving it to pass over the net (aggressive blockage). For inward draw a circle with a diameter of one meter off the floor, halfway between coach and one who lets jam. The player must block so that it can bounce the ball in the circle. The distance that the athlete moving the blocker is 3-4 m. Runs 7-8 jumping.

Results

Noting the results of the last test and we can analyze the evolution of athletes in our study experimentally during the two investigations and the relationship between the results of each, in order to thereby determine whether the players are all our same level of development speed.

Jump high for attack

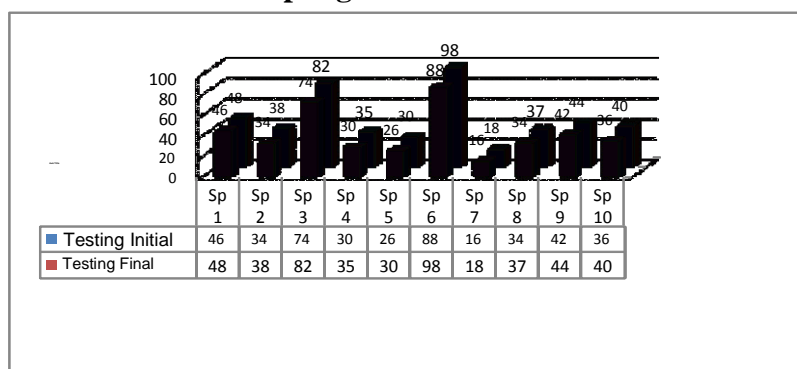


Table 1 – Jump high for attack

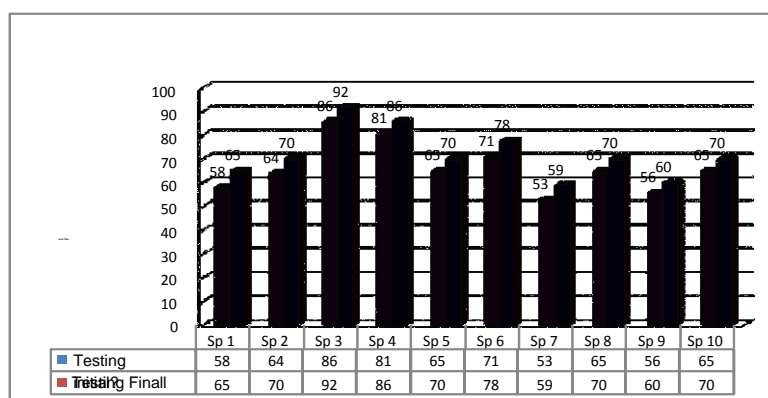


Table 2 – Lifting of lying dorsal trunk

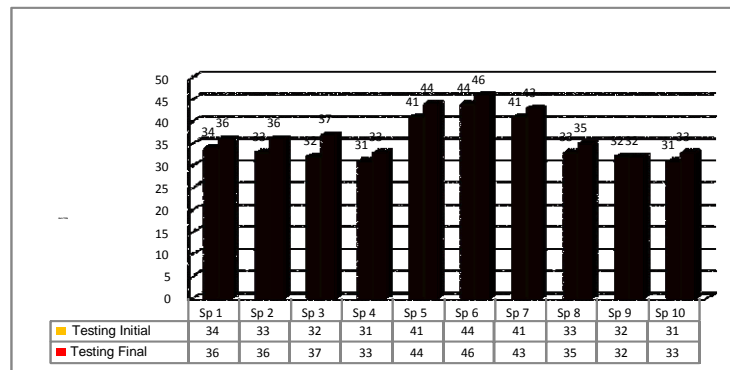


Table 3 – Lateral displacement on the distance of 3 m

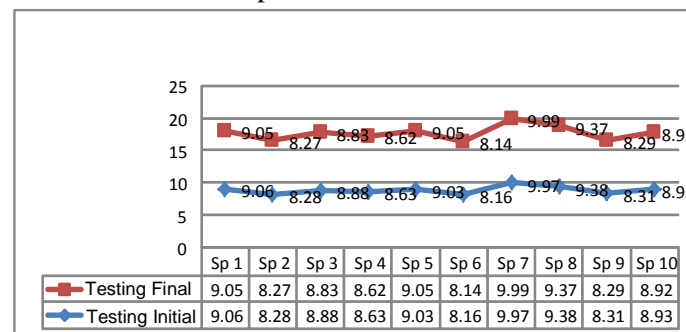


Table 4 – Displacement back and forth on the distance of 6 m

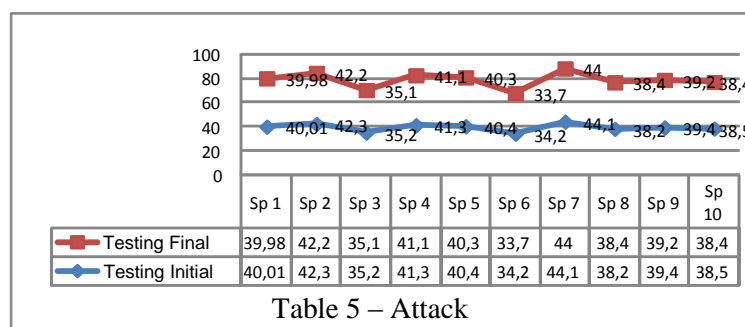


Table 5 – Attack

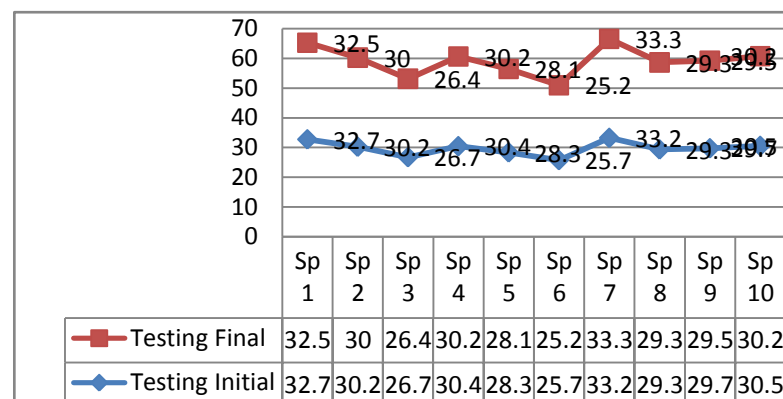


Table 6 – Bloc

Discussions

Duration of the exercise must be well established so as not to fall speed towards the end. The running time is determined by the form of speed that is intended to be developed. Usually perform 5-6 repetitions starting sec. and reach 50-60 sec. or more [4].

The exercises to be well learned so be favored their performance at full speed (athlete should focus on the details but on the maximum speed) [5].

Preference will be given to speed development, by sport-specific exercises, in the technical processes and technical-tactical actions executed under competition (sequences of play, quick attacks, combinations in attack, Relay, dynamic games).

Breaks of repetitions to be large enough to allow a return to normal body functions and, primarily, oxygen debt recovery. A pause too long leads, however, blurring the bark excitation, which requires very precise determination of breaks between repetitions [6].

Prevention can be achieved through speed capping a well-designed workout by choosing appropriate exercises, following the continuous and systematic development of all qualities, along with educating speed [7].

Conclusions

The study reached the following conclusions we have drawn:

In the game of volleyball experience the following manifestations of speed: speed, live for implementation, speed of response, specific forms (closing speed, speed changes of direction), speed the pace of other qualities driving (speed - power, speed - resistance).

In all nine tests more than 75% of the subjects were able to achieve higher performance, managing to improve the speed by up to 6%, the test period of only four months.

The research group generally had a spectacular evolution, differences between initial and final tests are up 6%. Most improvements were obtained between 0-4%.

It notes visible progress between the two tests, which proves that the training was well planned and organized and use the most effective means of teaching.

The means chosen to achieve the objectives have been effective, well-dosed, it highlighted the progress and the quality of execution of techniques.

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