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## THE IMPORTANCE OF TENNIS SERVICE AND ITS LEARNING METHOD

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### Abstract

*Purpose.* The purpose of this paper is to demonstrate that the application of a 30-minute program in the training session based on practicing the service in all directions and using all the effects, will lead to the improvement of this shot and at the same time gain the direct point of service without high consumption. energy.

*Methods.* For this, a series of motor tests were applied to a number of 16 athletes, aged between 13-14 years. The experimental group used 30 minutes of exclusive service during the training, performing a series of services that focused on directing the ball in all directions of the square: T, cross, in the middle and the use of all effects: slice, flat, lift .

*Results.* In the initial test, the results obtained were substantially equal in the two groups, while in the final test of the experimental group obtained significant results in all the tests applied.

*Conclusions:* A strong training base in which they are allocated during a training session at least 30 minutes to practice the service, will inevitably lead to performance, respectively awareness of the service controlling all effects and directing the ball in all corners of the service.

*Key Words:* service, training, T service, cross service, flat service.

### Introduction

"The service is considered to be the most important blow in tennis, because it is the first blow to the last round. If the first shot is successful, the service will be successful, and the player will have the advantage of turning it into a roundabout." (Silviu Zancu- "Tactica jocului de simplu", 1998). The service is an individual technical service, for solving a low load ,the task with a pronounced tactical character and with special psychological implications." (Eugen Cristea, Ilie Năstase- " Tennis ", 1979.) Each generation of specialists in the problems of sports training in tennis has contributed to the current theories on technical training according to a concept accepted by many technicians "playing regularly on points, gain experience", but forget that training and only participating in competitions makes for athletes to improve their technical and tactical skills as well as the necessary physical components, because "by training you gain experience". It should be noted that if an athlete is well trained and adapted to specific effort, even if the training is heavy, the overcompensation effect is obtained so that the game seems to be easier than the training itself. "When training is a threat, the game is a pleasure!" (Bompa T.O., 2003).

Classification of this procedure it is beneficial, first of all, to raise awareness of the quality of the service and to choose the most efficient service, but also to provide a number of services and services to the country.

### The stages of teaching technical procedures in tennis

Sports skills are formed by long repetition, influenced by fatigue, controlled or uncontrolled, mental activity or changing conditions in which they practice (Gh. Zapapan, 1984).

All these qualities are acquired through a long process of training, as well as depending on the physical development of the player, the development of the body's effort capacity, or the development of the psychic capacity, all these things taken to the limit of human endurance, (Simion, G ., Stanculescu, G, .Mihaila, I). Analysis of the trends in the development of tennis points to the emphasis on the fast attack style and the tehcinco-tactical improvement of the player ( Segărceanu A. 1998, Schultz R., 1993 .)

Great Specialists Anderson, 1979; Elliot, 1988; Elliot et al., 1986; 1995; Van Gheluwe et al., 1985; 1986 quoted by Miquel Crespo, Dave Miley, (1998) p.76-79, for the acquisition of a good service in the game

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of tennis, the early phases in the acquisition of the service technique are of great importance in which the most important elements are:

- simple action
- continuous action
- a good stable balance and placement of the ball
- the most correct grip (starting with an eastern right grip and gradually progressing to the continental one in the early phases of learning and consolidating the service).

As the player develops, other elements are usually introduced into the service:

- Change of the socket to the continental one.
- Use the wrist to give the ball the desired effect.
- Slice and topspin rotation for placement efficiency is added.
- Strong, flat service is encouraged.

Regarding the preparation of a suggestive analysis of the service, here are the six decisive characteristics suggested by Knudson, Luedtke, and Fairbault (1994), which must be followed. These characteristics are arranged according to their order and importance in the service training process.

1. Socket - Determines the route of the racket and forearm / wrist action
2. Throwing the ball - Determines the pace and route followed by the racket
3. Racket Preparation - Determines the pace and speed of the racket
4. Progressive upward movement - Determines the trajectory of the ball
5. End of hit - Increases the speed of the racket and protects the body
6. Posture-Influences balance, accuracy, and the development of missile speed.

Regarding the biomechanics of the blow at work, we consider that for an efficient service we must take into account certain moments in its execution such as; Brody (1987) states that there is a strong correlation in terms of the height of the impact site with the ball and the success of an efficient service. Thus, he claims that, serving with a speed of 145km / h and increasing the height of the point of impact with the ball from 2.16 m to approximately 2.68 m, you will double your chances of success;

Research has shown that the initial weight distribution is an individual characteristic. However, regarding the way in which the weight will initially be positioned, it has been shown that it will always be moved forward towards the point of impact with the ball (World-Class Tennis Technique).

The power of a service results from the action of the legs by bending the knees and their extension and this power is transferred through the chained system of

the body to the ball (Elliot et al., 1986; 1995 Van Gheluwe et al., 1985; 1986).

When pushing to the feet, the body acquires the direction of the chosen service, ie towards the place of impact of the racket - oblique ball towards the net.

- For the service with cut effect the body is designed obliquely-forward-up
- For flat effect service, the body is projected obliquely towards the net
- For lift service, the body is projected slightly to the left vertically.

The studies of Kovacs and Ellenbecker, 2011 and Sgrò et al., 2013 studied in particular the phases of the service on internships, performing a biomechanical analysis of the service, but without making a difference depending on its specificity.

Pushing can be done with the feet close by coming with the right foot near the left foot (for right-handers) producing a greater horizontal force, favoring a faster advance to the net (Elliot and Wood 1983) or on two legs by jumping. Research has shown that the rotational speed of the racket arm and the impact area with the ball are two essential elements in terms of the difference between advanced and weakest players (Barlett, Piller, and Miller 1995). tennis, leads to the major advantage, so that this process, to become a powerful weapon. A special service technique gives the possibility to execute all three types of shots depending on the playing surface and the opponent's style in order to make the opponent difficult and to create an advantage. The mistakes that appear at the service refer to the launch. defective ball, misalignment of the leg, incomplete rotation of the torso and shoulder, as well as in the lifting and extension of the forearm, pronation, and flexion of the palm with execution errors. To correct some mistakes in the game of tennis, biomechanical improvements are used in the preparation of the shot taking into account the balance, as well as the placement of the legs, incomplete rotation of the torso, throwing the ball is not synchronized with the movement of the arm with the racket. there is a control of the kinematic chain to arrive at an advantageous technique. Correction of technical errors can be done more easily using video analysis, which has the role of rendering the errors of all phases. The correction must start with the initial mistakes in the preparatory phase and only then move on to the removal of other significant technical mistakes. After detecting technical mistakes with the help of advanced technologies, we move on to sports practice, working specifically, using a wide range of specific exercises, thus intervening in the effective correction of technical mistakes. During this stage, the emphasis is on the appreciation of the technical

index of the execution, on the determination of the performance capacity and the comparison of the results with the existing technical models. The elaboration of some technical parameters of the service kick through the video analysis, represents a very important objective, especially since in the tennis game the service shot conditions the final result. The objective of comparing the parameters obtained by video analysis with those of the standard technical model, pursues a double purpose, namely that: on the one hand it leads to findings on and it becomes a weapon in the fight for the victory of the match. Psychologically a good return reverses the loss of strength. " the service will no longer be carried out with the same security, showing a retention justified by the series of successful returns. "

### Service classification

In the game of tennis we meet the technical procedure of the service which has three variants:

- 1- the service with topspin that gives the player a more convenient tolerance to errors, because he passes the net on a higher trajectory, and the ball jumps higher after the contact with the field. This depends on the surface of the ground which is the rougher, e.g. slag, has higher efficiency because the jump is higher;
- 2- the second variant, is the slice service that offers the player the possibility to move the opponent off the field, due to the fact that the ball passes the net and jumps to the side after contact with the field. It is performed on covered ground or on grass, because the smoother the surface, the more pronounced the ball will have a slice effect.
- 3- and the flat service (without effect) is used to obtain the highest speed, often exceeds 200 km / h and is most often performed on the shortest distance (service at "T"). Being executed without effect, the success rate is lower compared to topspin and slice.

After the ball effect - we are dealing with 4 variants: flat, lift, slice, topspin. According to the direction of

sending the ball into the field: - cross service, T service, midfield service, short cross service.

### Material and methods

Its own shortcomings or advantages, and on the other hand it serves as a basis for determining its technical orientation. by discovering new possibilities for improving the technique. Thus, the study of video analysis makes its mark in the elaboration of the technical model, having an important role in the analysis of the player's own movements at the time of the service kick, the player having the possibility to compare his results and representations with reality. The use of the video technique highlights that the use of the video method is effective in sports training, because it has the role of observing and detecting the technique of the basic mechanism (Bostan D. et al., 1987, pp. 37-40).

Therefore, we consider the service to be an individual technical-taxing action, carried out in order to solving a low load, task with a pronounced tactical character and with special psychological implications.

Thus we observe the degree of difficulty of the return, in the series when the opponent has a good service, which is demonstrated by the 14 years the service becomes more routine and more. The return, however, if is well-executed

Tests used:

The player will serve from the bone in the right net 20 times, pause between failures 10 seconds. The same exercise in the left square. (3 series)

The goal of the exercise is to jump on the ball and hit it at the highest possible point.

The player will serve from the bone in the net on the right and outside in an area delimited 20 times, between 10 seconds. The same exercise, but serves at "T" 20 exercises, 10 seconds of reason. The same exercise but in the salt on the left side. (It is served 20 times outside in the delimited area.

The player will serve from the basket in a delimited area 20 times, with a topspin effect between 10 seconds.

The player will serve from the basket in a delimited area 20 times, with a flat effect between 10 seconds.

The player will serve from the basket in a delimited area 20 times, with a slice effect between 10 seconds.

### Technical-test results

		INITIAL TESTING		FINAL TESTING	
Experiment group	X±Ds	11,75±1,832		19±0,926	
	Cv (%)	15,591%		4,874	

Witness group	"t"	9,989	
	P	p<0,0005	
	X±Ds	11,25±2,252	13,25±2,252
	Cv (%)	20,018	16,996
	"t"	4,32	
	P	p<0,005	

The difference in the averages between the two groups demonstrates the difference in the performance of the services and the service.

The control group, although it has higher average values in the final test, is the same as the statistical difference.

The results of the final testing of the technical-tax indices

Testarea finală	X±Ds	"t"	p
Experiment group	19±0,926	6,679	p<0,0005
Service			
Witness group	13,25±2,252		

Comparing the values of the final test of both the cranberry groves, we observe visible differences, the cranberry groves being more successful than the grueling service.

This work is also demonstrated by the value of "t" obtained after the completion of the "Student" test in indentant samples in the final test. Thus, the difference in the environment is statistically significant from <0.0005 in favor of the exercise group.

This report entitles us to state that the program set up in the field of training for the crane has been a major improvement in the number of services and improvements.

### Conclusions

From the analysis and interpretation of the data obtained by the two groups of our research we can conclude the following:

1. Structured and systematized exercises have been carefully selected, their efficiency being demonstrated by the values recorded by the training exercise in the master and technical tests.

2. Approaching the service within a rigorous training system the efficient acquisition of the execution techniques of this technical element.

A. The athletes managed to reduce the number of wrong doubles

B. The number of placement services has also increased,

C. They became more confident at work, the points drop putting them in an attack situation due to the advantage they had at work.

3. It has been shown that the implementation of a training system that satisfies the service during the training of at least 30 minutes, has led to the improvement of this extreme blow based on the results of the final technical-test test.

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