

ASIMINA LEONTARIDOU, ALEXANDROS MAVVIDIS,
KONSTANTINOS MANTIS

*Department of Physical Education and Sport Science in Sport,
Democritus University of Thrace, Komotini*

ABSTRACT

The purpose of the current study was to go through the target and the effectiveness of the service in athletes of high standard. As an example, the No1 player of the world order, the Swiss Roger Federer, was used. 3 matches were carefully studied with the method of careful and repeated observation in a dvd, with the basic aim the detailed analysis of all of the well-aimed services, in connection with the point of their end in the court space which appoints their validity and the maximum number of the balls' exchange, at any time, until the point is judged. Federer's first choice, concerning the direction of his service, was on the left of the opponent in the three matches of register (first match: 51,02%, second: 46,46%, third: 48,69%). He preferred to follow a maybe monotonous and unchangeable tactic in the execution of his service, because: a) the surface of the courts in which he faced his opponents was the same (quick-fast) and b) his three opponents were right-handed. However, when he chose the target «on the body of the opponent» the percentages of point's success were better for him (statistically important, $p < .05$). Generally, it was observed that after his well-aimed execution of the service, he gained the most points either with aces or very fast exchanging with his opponents with the maximum of 2 or 3 balls.

KEY WORDS: *target of the service, method of observation in a dvd, maximum number of balls.*

INTRODUCTION

All of the experts agree, that the tactic has a big importance for the fighting record in tennis, but at the same time there are a lot of and different opinions in the bibliography with regard to the explanation of term of the tactic (3). More generally, with the tactic someone tries to use the individual faculties or exploit respectively the weaknesses of the opponent and more specifically in the technique and the physical condition (2). The tactic and the technique are inter-dependent and the one supplements the other. As an example, the player diagnosed an intelligent solution in the tactic in a granted moment in the game but he does not have as long as he would, the proportional technique of the stroke in order to force his opponent to make an error. Of course, something proportional is also in effect for the physical condition. The choice of the tactic also depends on the weather conditions, on the one hand, and the court where the match is carried out (grass, earth, tartan, quick etc), on the other hand. The psychological condition of the players is also considered as an important factor for the method of the game (tactic) before and during the match (12).

The service is objectively characterized, as the most basic stroke of tennis (10). It is that which determines the result of the match at roughly 50% (14). For this reason, each tennis-player should train on this and try to constantly improve it, both as for its technique and as for its tactic. There are 3 types of service in tennis: a) the flat, b) the slice and c) the twist (11, 13). Therefore, the attention of player and trainer is turned in the sector of the tactic: a) in the placing, b) in the speed and c) in the rotations of the ball.

As concerns the placing of the ball, the flat service (first, without rotations of the ball) is good to be played in the fast courts (plastic, grass) because apart from the speed, it also presents a low bounce of the ball from the ground in front of the opponent. In the slow courts (earth) this is good to target in Backhand, while in the fast courts «outwards» (Forehand-Backhand) but also on the body of the opponent. (Forehand: Stroke of ground that is executed from the right side of the player when he is right-handed). Of course, for reasons to surprise, a change in the target can also become in contrast with these rules, but restrictively.

The use of the slice service (second, with rotations of the ball) is particularly effective in the fast courts because there the rotations of the ball produce the maximum after the bounce from the ground. From the right, it is good for a tennis-player to target in Forehand «out, sideways» (he removes the opponent totally outside the court) and on the body of the opponent. From the left, the target that causes bigger difficulties in the opponent is on his body.

In the slow courts, for the opponent, the twist service has an unexpectedly high bounce. The target here is in the Backhand and on the body of the opponent.

Moreover, it is good for a tennis-player not to perpetually execute the same but different types of service in a match with a view to confuse the opponent, who will not be suitably prepared in order to face them. For each type of the above services, a different «throwing» of the ball high is used before the service is executed. But a world-famous tennis-player should use the same throwing for all of the services with a view to lead the opponent to ignorance as for the type of the service that he will execute.

Moreover, the term «tactic in the service» refers to the point that a tennis-player has in his brain in order to direct the ball, that is to say right or left or on the body of the opponent. It is important for a player to use the tactic in order to be able to complicate the opponent in the return of the service but also in order to attempt to gain the point only with his service (ace) without an exchange of balls being followed after this. The direction and the target of the service are necessary in weak points of the opponent e.g. in forehand. It is also essential for the weak services, e.g. the second services that are less stronger than the first ones to be avoided of targeting in powerful strokes of the opponent because otherwise the advantage is given to the opponent for gaining the point. Lastly, it is good for the direction of the service not to always be executed in a concrete point because if this comes to the opponent's perception, he will be prepared for the stroke that he will execute facing the service.

On the basis of these «rules» that are reported in the suitable and the effective tactic of service in tennis, the present study aims to investigate the target of service and its effectiveness in athletes of high standard. That is to say if the athletes aim left or right or on the body of a player who faces the service. The object of the study depending on the target, the player gains the point or loses it and with how many exchanges of balls this happens every time. The player who serves is also supposed to select, according to the opponent, a more or less different target. Also, it will be searched if the gathering of the points becomes in bigger or smaller percentage with one way or the other. In general, the systematic observation and the analysis of a match (via Video or DVD), gives the trainer and the player the possibility of an easy study for the grounding of the ideal tactic (1).

METHOD

Examined

For the present research 3 matches of Tennis of a very high level were used in which the service was studied, the target and its effectiveness. The service

which was studied was of the No1 player of the world classification, of Swiss Roger Federer, who faced players from equally high levels and specifically the American Andy Rodick in the Wimbledon final in 2005, the Russian Marat Safin in the semi-final of Australian Open 2005 and the American Andre Agassi, in the quarter final of the same tournament and the same year.

Process of collection and treatment of data

The 3 matches of the player were studied carefully with the method, initially, of their record in a dvd and afterwards of the personal follow-up of these aiming at the detail analysis of all well-aimed services with regard to the target and their direction.

The analysis of data became with the descriptive statistics, the percentage proportions and the t-test in order to check the statistically important differences in the choice of target of services

Initially, all well-aimed services of Federer were recorded carefully, in regard to the target and the direction that he gave to them. The target and the direction were registered as for the following 3 points: *On the body of the opponent, on left of the opponent and on right of the opponent* (4). Then, the total only of the gained points of Federer were recorded after his each well-aimed service. This record was realised with basis the following variables: a) the direction of service depending on the opponent (e.g. his right or his left etc) b) the number of balls that Federer exchanged with his opponents in order to gain the points. After the concentration of the above results, their analysis followed which became through the transformation of numbers of results in percentages e.g. If Federer executed 32 services on the right of the opponent, this result corresponds in percentage of the 22% of all relative points and c) the aces (points that the opponent does not accomplish to return the service of Federer) on the left and on the right of the opponent. Finally, in percentages only the gained points of Federer were changed, in connection with the type of direction of his service that preceded and the number of played balls that followed up to the conclusion of the point e.g. After the service of Federer on the body of the opponent, he gained the 21,42% of points with the 2nd played ball.

RESULTS

In chart 1 the results of Federer are presented, on average, in the three matches, in percentage proportion, as for the direction of his service. In all matches, a similarity is observed in the target of service. There is not that is to say a statistically important difference in the aiming of service in all the three matches, independent of the opponent. In the first match, which was the

Wimblenton final the No1 player of the world classification, Roger Federer, faced the American Andy Rodick. The particular match elected Federer as a winner after a game of 3 sets (each set contains 6 games).

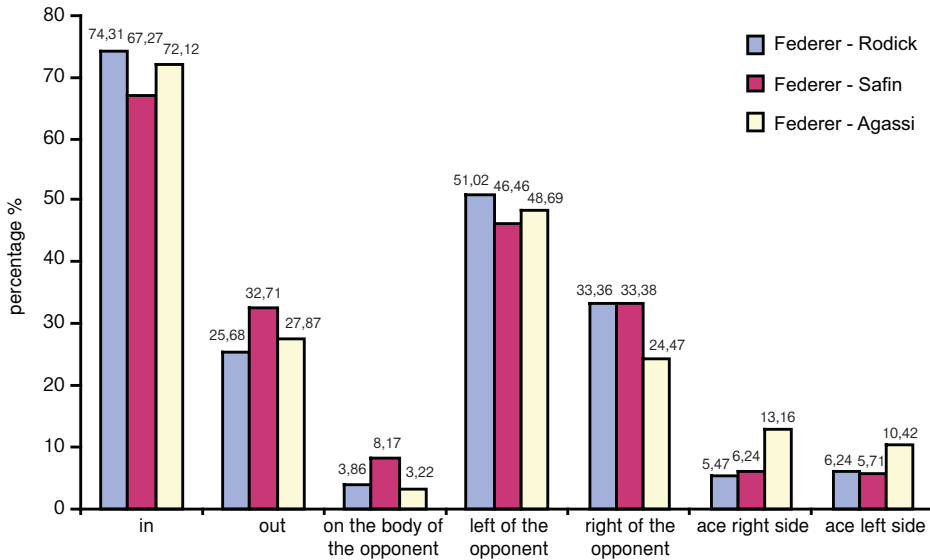


Chart 1: Target of service of Federer, in three different matches with different opponents.

The second match was the semi-final of Australian Open between Federer and the Russian Marat Safin. The particular match was completed after 5 sets electing this time Safin as a winner.

In the third match, Federer in the quarter final of the Australian Open faced the American Andre Agassi. This match was played in 3 sets and Federer was elected as a winner.

The choice «on the body of the opponent» possesses of course the smallest percentage in the aiming of the service. First choice is on the left (that is to say in the backhand of opponent) and the second one on the right in all the three matches.

The next chart (2) shows us an other parameter of the target of service, the percentage of that is to say gained points, on average, of Federer depending on the direction of his services and the number of played balls with his 3 above-mentioned opponents until the conclusion of the point, e.g. the 21,42% expresses the percentage of the gained points of Federer after implementation of his own services on the body of his opponents and after 2 played balls that he exchanged with them until he gains the points.

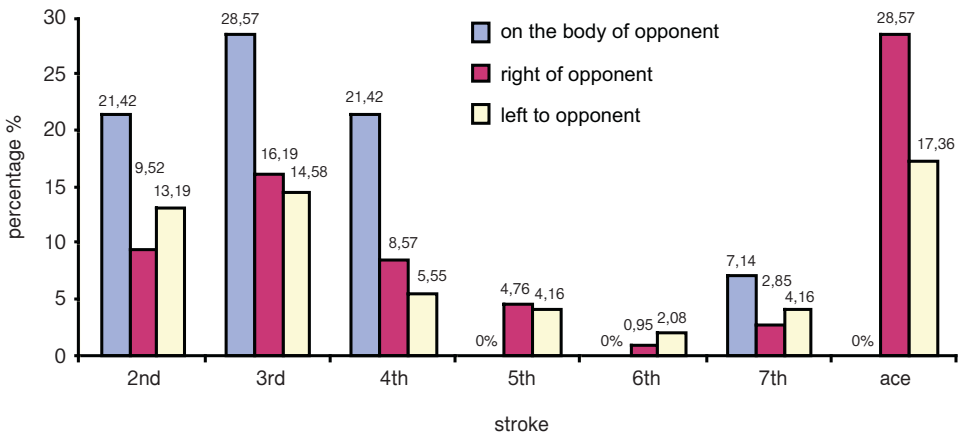


Chart 2: Rate of gathering of points, with different total number of strokes.

From chart 2 it becomes obvious, that with the target «on the body of the opponent» the rates of gathering of points for Federer are of course bigger (statistically important, $p < 0.5$). In general, the player gains many more points, when the point is judged, with up to 4 strokes. More aces were achieved on the right, with the percentage of 28,57% (in the forehand of the opponent) even if the choice on the left possessed bigger percentages (chart 1).

DISCUSSION

From the results that resulted from the present study, the choice of target of service of Federer was not an accidental fact but a studied action. Before the reasons of this choice are reported, it is required to be pointed out that all opponents with whom Federer was found confronting were right-handed. All data, as to the tactic, perhaps would have been differentiated, if the player had faced a left-handed opponent, but because this is a more infrequent phenomenon, the present research dealt with the prevalent situation, that is to say of a right-handed opponent. Moreover, the 3 matches were carried out in fast courts (quick). The player, therefore, selects to direct his services more on the left and on the right of the opponent, leaving «on the opponent's body» as last choice. This happened because it is good for the flat service to aim more «to the sides» that is to say in Forehand or Backhand and less on the body of the opponent in the fast courts. Furthermore, the achievement of aces is remarkable here, that becomes on the right and left of the opponent, because the im-

plementation of aces on the body of the opponent, is almost unfeasible. Consequently, Federer, as an excessively experienced tennis-player, generally speaking, followed this basic rule with his flat service.

An interesting question constitutes whether Federer differentiates or not the target of his service depending on the opponent that he faces in each match and if the answer is positive how much the target is differentiated. Beginning from his first opponent, Rodick, the absolute stability is observed in the target of his services, as in all the 3 sets of match he selects to serve more on the left of the opponent, less on the right and very little on his body. With Safin as his opponent, he continues precisely the same tactic, apart from the 5th set in which he selects to differentiate it very little, serving this time more on the right of opponent. His match with Agassi as his opponent is precisely the same case, with the difference that the tactic here changes in 2nd from the three sets of match. It is easily observed that his up to now choice to serve steadily more on the left of his opponents with some very small differentiations benefits a big profit. Therefore, with the implementation of services in this direction, Federer managed to gain most of the points with a very big percentage of aces, of the order of 17,36%. But even when he did not hit aces, he gained most of the points very fast exchanging hardly 3 or even 2 balls with his opponents (14,58% and 13,19% respectively). However, perhaps the particular tactic did not benefit him enough in his game with Safin from whom he finally lost. He should possibly «break» this stability of his tactic in order to achieve something better towards Safin who was, of course, a more difficult opponent than the other two, Rodick and Agassi (Federer played with them 3 sets and with Safin 5 sets, that means longer duration of a match and therefore, bigger pressure for Federer). Therefore, the conclusion that can be drawn for Federer is that despite the continuously similar tactic that he uses in his service with each opponent, he does it almost at all times, gaining most of the matches in his career up to now. It is generally preferable for the player to select to change and differentiate his tactic when «he is pressed» by equal and strong opponents, and for the reason that even in the best choice in the tactic, someone should be differentiated at intervals in order to surprise his opponent but also because if he becomes very foreseeable as for his tactic, in the future, he will be in danger of losing the matches that he gains this period (14).

Object of attention also constitutes the conclusion of points in the 3 matches for the examined player. Examining the results someone observes that after the services of the player on the body of the opponent and when afterwards the implementation of these an exchange of 5 and 6 played balls followed with the opponents, the points finally did not elect Federer as a winner (chart 2). On the contrary, most points were gained by Federer with the 3rd played ball occupying the big percentage of 28,57% against the very small percentage of 7,14% which corresponds in least points that were gained by the player with the 7th

played ball. Moreover, the 21,42% of the points was gained by the player with the 2nd and 4th played ball. In other words, the player gained most points relatively fast or even very fast. With these conclusions an explanation can be given. Federer is considered an aggressive player and the fast courts create advantages because of the speed and the fast course of his ball, afterwards the bounce from the ground, that does not leave time for his opponents to cover the court well, when they are found in the baseline (basic line of the court, which fixes the court at length). For this reason, therefore, the player in the fast courts does not leave the exchange of balls to last a long time because thus he usually gains the points. On the contrary, in the slow courts the earth creates disadvantages in the aggressive players because of the slow course of their ball, after its bounce, and it gives time to their opponents to cover the court better from the baseline. From this explanation we suppose that perhaps our player in the earth is not in the position to gain points with the same facility and the same swiftness as he does in the fast courts.

With the service of the player on the right of the opponent most aces were achieved, which touched upon the satisfactory percentage of 28,57%. Almost the all aces were executed with first flat service of Federer. This service in combination with its satisfactory technique is in a position to complicate the opponent and produce success in the points for the player who serves, because in the fast courts, apart from the speed, it also presents a low bounce of the ball from the ground, in front of the opponent. A precipitation in gaining the points from Federer is also observed here for the same above-mentioned reason, when the player executed service on the body of the opponent. Therefore, most of the points were also gained with the 3rd played ball (with percentage of 16,19%) and least of them with the 6th played ball (with percentage of hardly 0,95%). The number of points that was gained with the 7th played ball was also small (percentage of 2,85%).

The target of service on the left and right of the opponent in combination with the objective of the fast achievement of the point are the main characteristics of the tactic of universally No1 player in tennis, as the present study showed. However, if new players imitate him, in this sector, it does not automatically mean that this tactic will function in the same positive results. Each player should have his own technique, his own repertoire of strokes and consequently his personal individual technique (5), which should be harmonized in these prerequisites.

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Address for correspondence:

Asimina Leontaridou
Gr. Alexandrou 34, Vergina
59031, Imathia
Greece
E-mail: dio21dan@yahoo.gr

