



Practical proposal for the development of the rhythm with tennis players in training

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ABSTRACT

The importance of training coordination for the development of young players is a well-established area of research. However, rhythm, despite having a crucial importance in tennis, is one of the coordinative capacities less studied and therefore, it is difficult for coaches to obtain information that could allow them to design coaching sessions that focus on these capacities. This article highlights the importance of rhythm in tennis, and also presents series of general exercises (without the use of a specific tennis equipment), special exercises (with the use of specific tennis equipment) and specific exercises (in game situations) aimed at the training of these coordinative capacities.

Key words coordination, rhythm, training, drills, tennis specific.

Received: 18 June 2019

Accepted: 10 July 2019

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INTRODUCTION

The importance of the development of coordination, and more specifically of the coordination capacities – particularly in the earlier years of development–, is widely established. In fact, coordination capacities allow players to control, improve and give pace to movements and actions, which play a major role in the development of movement techniques (Reid et al. 2009).

Within these coordination capacities, based on Meinel and Schnabel classification (2004), a total of seven capacities or skills can be distinguished: coupling, spatial-temporal orientation, reaction, kinesthetic differentiation, adaptation, transformation and balance and rhythm. The present article focuses on this last capacity, given its importance within tennis, as will be seen below.

Fernández et al. (2012) define rhythm as the capacity to sense and reproduce a rhythm imposed from outside, as well as the capacity to use the motor activity itself following an internalized rhythm. Therefore, a distinction can be drawn between: regular rhythm, in other words, rhythms where the cadence or sequence is equal; and, the irregular rhythm, where there are changes of rhythmic sequences.

Meanwhile, Reid et al. (2009) define rhythm as the ability to capture a cadence acquired from an external source and reproduce it in motion.

Lastly, based on Thaut (2005), practicing rhythmic activities not only regulates our movement but also provides opportunities to execute that movement more efficiently and more precisely. Therefore, training sessions with motor tasks

with different tempos, intensity and rhythm offer the opportunity to improve these fundamental skills as well as motor abilities (Gallahue, 1982).

RHYTHM DEVELOPMENT

First, and despite the strong implication of rhythm and term structure in motor control, studies in sports are limited (MacPherson & Collins, 2009) with insufficient research or proposal of exercises referring to the specific training of rhythm in sport (Söğüt et al. 2012).

Söğüt et al. (2012) conducted an 8-week study aimed at analysing the effects of rhythm training in tennis. For that purpose, a total of 30 students were divided into 3 groups: the tennis group (control), the group of general rhythm training and the group of specific rhythm for tennis. The results showed that the participants of the group that trained the rhythm made progress in their level of tennis, improved their consistency in forehands and their rhythmic competence. Moreover, the results also showed that the participants displayed higher values in rhythm in rapid tempos compared to slow tempos. The latter suggested to emphasize to a great extent, the presence of high tempos in our proposal.

Finally, Zachopoulou y Mantis (2001) studied, for 10 weeks, the role of rhythm in the execution of the forehand in tennis. The participants, between the ages of 8 and 10, were divided into 2 groups: control and experimental, and the results showed a major improvement of the rhythmic precision in

rapid and slow tempos. Moreover, the consistency of the forehand improved after the training period.

PROPOSAL OF EXERCISES

Below is a series of exercises aimed at the work of the coordination skills, emphasizing the improvement of the specific rhythm for tennis. In all the proposed exercises, the *software Tempo Perfect Metronome v 5.00 (NCH Software)* was used, allowing to establish the desired rhythm, establish rhythmic sequences and change them manually. Figure 1 is a screenshot of the *software*, in which a tempo of 92 bpm was established and for every 5 main beeps (henceforth a), there is a shorter, sharper one (henceforth b). Moreover, the programme allows to vary the rhythm manually with the computer, which can be useful for students to readjust their motor actions.

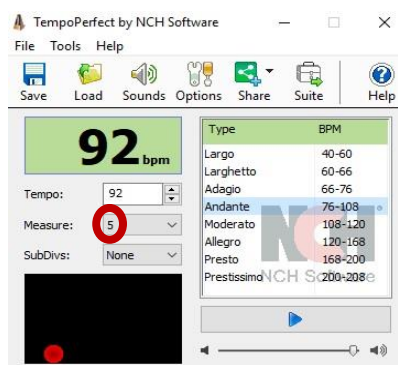


Figure 1. Software Tempo Perfect Metronome v 5.00 (NCH Software)

The exercises are divided into: general (without specific tennis material), special (with tennis material) and specific (in a game situation).

GENERAL:

Exercise 1: Warm up and overall mobility using the rhythm of the metronome (shift, turn, jump ...).

Exercise 2: All the players, sideways in a line, have to move the foot closest to the line on the rhythm of the metronome. Alternative: they have to move both feet, one after the other and perform a cognitive exercise (addition, give the name of a country or a city) while following the marked tempo.

Exercise 3: Standing over the line, players have to open and close legs at the rhythm of the metronome. Alternative: they must pass from one side of the line to another while throwing a ball between hands as the exercise goes on.



Exercise 4: While skipping, players have to pass the foot on the left and on the right of the line following the sequence of the sounds a) or b). Alternative: when hearing a beep b), they have to turn their position at 90 degrees on the right and continue to pass the indicated foot.

Exercise 5: Place 2 hoops in diagonal, next to a player, and upon hearing the sound sequence, players have to put their feet in the upper or lower hoop.

Exercise 6: With a coordination ladder, players have to perform a footwork pattern at the rhythm of the metronome. Alternative: they have to pass a hoop from hand to hand or bounce a ball following the tempo either with their feet or hands and upon hearing the two sounds (a and b) stick out the left or right foot as indicated.

Exercise 7: Using different songs, students have to adapt their motor actions to the tempo, either with their feet or hands.

SPECIAL:

Exercise 8: Each student with a ball must throw it and catch up at the rhythm set by the metronome. They must bounce it (without holding it) or throw it at the rhythm of the metronome. Alternative: they must perform the same exercises with the racket, hit the ball against the ground, upwards, with the song, etc. Sound a) is equivalent to throwing the ball against the ground, or b) to throwing it upwards.

Exercise 9: Each student with 2 balls, one in each hand, follows the sequence of two sounds. Each sound is the equivalent of the bounce of the right or left hand. Alternative: in front of a wall, they have to throw a ball with the left or right hand following sound a) or b).

Exercise 10: In pairs, facing one another at a distance of 2 or 3 meters, with a ball for each student, players have to perform alternative passes to the rhythm of the metronome. Alternative: they have to throw the ball with their left hand a) or with their right hand b), sound a) bounce pass, sound b) pass upwards without bounce.

Exercise 11: With the coordination ladder, players have to maintain the intensity of the rhythm of the feet (any exercise) carrying the rhythm with 1 ball that we are throwing, throwing upwards, passing it from hand to hand. Alternative: players have to perform the same exercise with a racket.



Exercise 12: With the coordination ladder, each student has 2 balls, one in each hand, following the sequence of two sounds. Each sound is the equivalent of the bounce of the left or right hand.

SPECIFIC:

Exercise 13: They have to play at the rhythm set by the metronome, having to get closer to the net to volley, or to play from the back of the court, depending on the marked rhythm.

Exercise 14: Set the sequence and play with the left hand upon hearing the beep a) in the service box. Alternative: with beep b) we do not perform the action, having to reset the motor action.

Exercise 15: Set the sequence the players must play a) with topspin and b) hitting with topspin on the player's own side of net first. Alternative: beep a) play with a short slice, beep b) with topspin; beep a) play with bounce and beep b) a volley.

Exercise 16: Set tempos that students have to reach playing from the back of the court, always looking for consistency in their hitting.

Exercise 17: Listening to a song, students must find the tempo of the song and then coordinate their hitting.

CONCLUSIONS

The development of coordinating capacities plays a very important role in the acquisition of basic motor skills, specifically in earlier years, with the objective of achieving long term development of players. In this motor literacy, rhythm plays a fundamental role, to achieve a coordinated movement, appropriated to the different situations. Although there are few studies that focus on the work of rhythm in tennis, both coaches and physical trainers should be aware of the importance of this capacity of coordination. This practical proposal intends to provide basic initial information to coaches and physical trainers that will serve as the basis for the work of the capacity of coordination with their players.

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