

The importance of modifying the equipment for beginner tennis players: Tennis Play and Stay development in Spain

David Sanz

Royal Spanish Tennis Federation

ABSTRACT

This article discusses the importance of using the appropriate material when coaching beginner tennis, especially, by means of modifying the material (balls, rackets, and size of the courts) and with methodologies based on exploratory approaches, which help to solve problems without a direct solution from the coach. At the Royal Spanish Tennis Federation we considered it was very important to intervene in the beginners' processes, both, at the methodological level, with courses to train the trainers, and at the sport development level, with some constraints in the competition formats. We have made a number of proposals we expect can contribute to tennis growth, and to make the beginners' experiences more rewarding and healthy for our players.

Key words: development plan, Tennis Play and Stay, adapted material, skills acquisition

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Corresponding author: David Sanz, Royal Spanish Tennis Federation.

Email: david.sanz@rfet.es

INTRODUCTION

In Spain, spreading the methodological research and the benefits that adapting the materials to the different learning stages entails, we have started to develop and promote the use of this modified equipment progressively.

In our case, the first initiatives of the Royal Spanish Tennis Federation (RFET) were implemented through the Coaches Education Department, that designed a single subject mini-tennis course, using the game based approach, with adapted material, but besides, given the reluctance of some tennis schools, we decided to support these benefits by means of a Research Project that started in 2012. In this regard, after different pilot projects, with tennis players between 5 -10 years of age, we decided to present a national project with a sample that could be representative, but not biased by the coaching methodology in the clubs. We selected a sample of 100 tennis players, all of them 10U, and with an important geographic distribution, since four different Autonomous Communities were selected for the study.

This project has three objectives:

- To compare the traditional methodology with the alternative methodology.
- To value the effect of Tennis Play and Stay practice (adapted material) with beginner players.
- To create a methodological proposal for the intervention.



This way, players in the 4 geographic zones were divided into 2 intervention groups (7-8 years olds, with orange ball and court, 9-10 with green ball and court) and 2 control groups (7-8 and 9-10 years old, conventional court and yellow ball). They worked over a 3 month period and the research was made with a Test-Retest design, after an intervention process.

At the initial and final evaluation, both technique and tactics during play were assessed. The technical variables in the evaluation sheet designed "ad-hoc", focused on ground strokes and service. These were analysed, and in a closed situation, the coach feeding the balls, and the efficacy and efficiency of the strokes were indirectly evaluated by means of video analysis.

Tactical variables and decision making were studied in controlled situations, rallying with the coach, and then, consistency, direction control, depth and height of the strokes were evaluated, using first, the adapted ball and then, the conventional ball. By means of observational analysis of the video recordings we compared the duration of rallies and the variable tactics mentioned before.

During the intervention process, the players attended 2 sessions per week, and after 20 sessions, we evaluated them again and compared these with the initial evaluations. Sessions during the process were organized in such a way that they all worked with the same structure, targets and content in the session, same times for exercises, both for the control and the experimental group, each group with their material scaled and not scaled.

Apart from the technical and tactical control test, they were given a satisfaction test (perceived efficacy).

Preliminary results confirmed our hypothesis, and just as detected in previous studies, we could prove improvements in experimental groups, as to technical execution (mechanics of the movement), but, as to tactical action in rallies, a greater number of strokes were hit before making an error, and, of course, this impacted on the perceived efficacy. Therefore, at the RFET we decided to start a campaign concentrating on a methodological model that favours learning in the first stages, and where the material used is a key tool to consider.

ACTIONS AND PRACTICE

The activities carried out at the RFET to implement Tennis Play and Stay can be summarised as follows:

- Training the trainers
- Communication and promotional activities
- Long-term player development plan
- Competition

For more information refer to the following link:

(http://www.rfet.es/noticias/det/Cambios_en_la_clasificacion_nacional_para_infantiles_alevines_y_benjamines_a_partir_del_1_de_enero_de_2018/7941.html)

OTHER PRACTICAL APPLICATIONS

With certain populations, the use of this material can be, no doubt, of great help and a great methodological resource. We are referring to the adult and the special populations, that is, those who need some kind of adaptation, like disabled persons, those who have undergone transplants, or suffer from metabolic diseases, etc.

The resources provided by this equipment helps to meet the targets in this recreational environment, a way of exercising in a healthy way (Torralba, Braz, & Rubio, 2014), with a controlled demand and physical commitment and through a progressive learning of the skills that tennis demands. It also covers other aspects like functional independence (Gil, 2011) and the motivation that practice entails, from the point of view of integration and social inclusion (Gutiérrez & Caus, 2006).

Some considerations to bear in mind with these populations, concerning escalated material:

Wheelchair tennis

Some studies, like Sindall et al. (2014) show the benefits of using this equipment, especially in the first stages of wheelchair tennis. The fact that in wheelchair tennis the ball can bounce twice, somehow conditions the second bounce, with low pressure balls, particularly red and orange; the second bounce is too low, making it more difficult, especially for players with spine injuries to make impact with the racket. For this reason, we suggest using the green ball, even if the court is orange, or even red, in such a way that the second bounce may be high enough to allow impact at hip level.

Development disorders

There is a great variety of development disorders, so we must specifically know the characteristics of the players, in order to make the relevant adaptations. Starting from the methodology to teach persons with some kind of development disabilities (Sanz & Reina, 2012), we agree that the equipment that allows for a longer reaction time to provide a response, will clearly benefit the decision making process, which is tougher in the case of persons with these injuries.

Transplant and cardiac condition

In Spain, a research group, from Extremadura University, presented different papers using protocols with modifications of real situations (using two bounces), the possibility of using the green ball for rallies..., and tennis practice is prescribed, of course, with the control that the physiological injuries of the person entails, or the physical activity in the setting of cardiac rehabilitation. (Fuentes y Cols., 2010, 2013), so, we must point out that the use of adapted material in cardiac populations can

be very efficient, controlling the intensity of the activity, and keeping the intensity and physiological levels within the parameters recommended by cardiologists.

CONCLUSION

The practice with equipment adapted to athletes, mainly over the beginner stages, using modified resources favours learning processes, and practice to take place in environments that are similar to tennis, in collaboration and opposition situation rallies. In fact, modified equipment is specially recommended for the development of more open methods, adapted to athletes, game based, so as to achieve both, technical and tactical targets. Along these lines, the paper presented by Ishihara et al. (2017), compared a game-based learning model with another model, based on classic training of technique through repetition. In the first case, the time of inactivity was shorter, such as the time for ball retrieval, the time invested in games applied to tennis and the rallying times. Therefore, we favour the use of adapted equipment and methodologies based on gamebased- practice, so as to encourage implicit learning, and it is along these lines that the RFET is organizing player development models for the first stages of tennis in Spain.



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