Soccer teaching methods in sports training schools in Tunja, Boyacá

R D Merchan-Osorio¹, J Florez-Florez¹ and W F Caro-Cely¹
¹ Grupo LERD, Fundación Universitaria Juan de Castellanos, Tunja, Colombia

E-mail: rdmerchan@jdc.edu.co

Abstract. This study comes from the academic activities carried out by the students of the subjects of Introduction to Sports I and II of the academic degree program in Physical Education, Recreation and Sports of the Fundación Universitaria Juan de Castellanos, Tunja, Boyacá. The purpose of this study was to describe the methods of soccer education that are most used by coaches to train children in the Sports Training Schools of the city of Tunja, Boyacá during the training sessions held along the week. The study involved 20 coaches who belong to sports clubs and sports training schools in soccer categories for children and youth. A methodology with a descriptive quantitative approach was implemented. The information collected was through a semi-structured interview taking as reference a series of questions that were recorded in a file created for such purposes. The data collected were processed using the Microsoft Excel 2016 program for its respective analysis. The results show that the coaches use and apply more, the method of mixed education, which is the combination of analytical and global methods to impart the sports content of grassroots and competitive soccer.

1. Introduction
Soccer is considered one of the most popular sports in the world. The purpose of this is to obtain greater goals than the opponent, is categorized in the cooperation-opposition sports. It can be considered that in this sport the most favorable moment for the child to begin the practice of this sport discipline is in the ages of 6 years and older, since the teaching-learning process depends on the strengthening of the basic motor skills and thus the apprentice can go knowing the fundamental rules and principles of the game that allow him to have a greater degree of independence to solve the problems of the discipline.

In soccer, the child and the young can learn and practice on their own, but for that learning to be correct, the child needs a teacher or coach who knows the process that he or she must follow to assimilate their characteristics, their interests depending on their age, more than that they must know about the sport, the technical and tactical basis, the coordinative development that soccer demands and above all the methodology that the coach must use, so that all these aspects are taken in advance by the child.

According to [1] “In the process of the teaching/learning of soccer, it should be tried to use effective teaching methods, that is, those that make it possible to assimilate learning more and better”

At present, there are different opinions on what the best way to learn a sport, especially soccer, can be. In response to this lack of consensus, several works of research have been developed that aim to demonstrate which approach is the most effective.

In the literature we can find studies that compare the effect of different models and teaching methods on soccer learning that frame it in main aspects such as “the capacity of execution
(technique), the capacity of decision (tactical), the capacity of Interaction (Psychological)” [2-7]. The lack of unanimity in the used designs gives controversial results [8] “And limits the possibility of solving some of the most important questions related to learning sports”.

According to [9] “defines the teaching method as the way to present the student with activities for their learning that can be global, analytical or mixed, although the specialized literature addresses the systemic method and others that are used empirically and that have no relation to those raised by this author. In this way, it allows us to have a more accurate and concrete vision of the conceptualization and aims of each method of teaching that is explained below: “Global or integral method: The player is faced with a problem situation and decides how to solve it, choosing the action that he believes most convenient, instead of using, in a compulsory and directed way, the one determined by the coach. Therefore, the overall method simultaneously affects technical, tactical, and physical aspects, which allows, during a game, to develop them all together, even if it is presented in a generic way” [10].

Analytical Method: In this method, unlike the previous one, the player performs a series of activities specifically aimed at learning, from one or several basics in an isolated way to the game. In this teaching approach the objective of each activity or exercise is clearly defined, therefore, the player deduces consciously and executes each of the movements necessary to reach the technical task entrusted to him. In this method, it is difficult to keep the motivation and performance of the players for long periods of time, since the proposed situations are not very stimulating because they do not have the playful element, which is continually given in the game [10].

Mixed Method: It is about combining both methods, global and analytical, trying to get the positive performance out of each one. It is the most used method by coaches. The development of this method starts with global tasks followed by analytics and ending with global activities.

In relation to the above, the study aimed to describe the methods of teaching soccer that is most used by coaches to train athletes in children and youth categories in the Sports Training Schools of the city of Tunja, Boyacá during the weekly sessions of training.

2. Methodology

In the present study, took part 20 soccer coaches from the different sports training schools of the city of Tunja, Boyacá in the categories of children and youth attached to the league of this department. The study has a quantitative approach since a set of systematic stages in data collection was addressed to achieve the proposed objectives. “According to the scope, the research is descriptive, because the data collection was done in a single time allowing knowing and describing the main methods used by coaches in the Sports Training Schools of the city of Tunja Boyacá” [11].

The call for participation was made voluntarily informing previously about the study we would perform. The coaches were informed that the goals were strictly academic support for the educational and research work. The applied survey was designed as a result of the experience and of a rigorous bibliographic revision referring to the teachings that are taught in the Schools and sports training clubs in football. In the same way, the survey was modeled and validated using closed and open semi-structured questions techniques through the contributions of professors and football experts of Tunja, Boyacá.

The survey presented 3 moments for its structuring. The first was called General Data or technical data of soccer which is a systematic method and others that are used empirically and that have no relation to those raised by this author. In this way, it allows us to have a more accurate and concrete vision of the conceptualization and aims of each method of teaching that is explained below: “Global or integral method: The player is faced with a problem situation and decides how to solve it, choosing the action that he believes most convenient, instead of using, in a compulsory and directed way, the one determined by the coach. Therefore, the overall method simultaneously affects technical, tactical, and physical aspects, which allows, during a game, to develop them all together, even if it is presented in a generic way” [10].

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3. Results
The results that were obtained through the sports survey applied to coaches of the children and youth categories of the Sports Training Schools of the city of Tunja Boyacá, were treated and processed by means of statistical tools.

For the description of the results, the three categories established in the Survey Instrument were taken into account, taking as reference and importance for the present study the category called General Data or characteristics of the School or club, 1 item was taken into account, level of academic training of the Trainer, of the category Technical data, 4 items were taken into account, Knowledge of the trainer about a training session and its parts, Knowledge of technique and tactics, and finally the category called Methodology of teaching in soccer, 3 items were taken into account. Know and uses the teaching method in football Analytical, know and uses the global teaching method in football, know and use the teaching method in mixed soccer.

| Students in sports | Professional in sports | Bachelor of Physical Education Recreation and Sports | Certified Trainer | No Level of Training |
|--------------------|------------------------|----------------------------------------------------|-------------------|---------------------|
| 8                  | 2                      | 7                                                  | 2                 | 1                   |

In Table 1 we can see the training level of 20 coaches evaluated. It is determined that there are coaches who exercise their work in soccer with different academic backgrounds from the level of not having a level of professional or empirical training in areas related of sports to the level of the licensed and certified trainer to guide the teaching processes learning soccer in children and youth categories.

In Table 1 we realize that, 20 soccer coaches were evaluated in terms of their level of academic training regarding soccer sport or related areas, we found that 8 coaches are studying in an academic training field, which corresponds to 40% of the population that guides the teaching-learning processes in the Sports Training Schools and Clubs of Tunja. In the same way, we find 2 coaches with a Professional academic level in sports which corresponds to 10%. Then we see that 7 coaches have a degree in Physical Education, Recreation and Sports which represents 35% of the population. There are also 2 certified trainers, which corresponds to 10%. Finally, we can see that there is 1 Coach that guides the teaching-learning processes without any academic training related to football or related to other sports areas which represents 5% of the 20 Coaches evaluated in Tunja.

It is concluded that almost the entire population has levels of certified academic training to work with this type of children and youth categories in the sport of soccer.

| Table 2. Technical data of the sport. |
|--------------------------------------|
| Items                                | Yes | No |
| Learn about the training session      | 20  |    |
| Know the parts of a soccer training session | 17  | 3  |
| Know the sports technique and how it is composed | 14  | 6  |
| Know the sports tactics and how it is composed | 15  | 5  |

In Table 2 we find the results obtained from the category Technical data of the sport, whose surveyed items are of the degree of knowledge that the coaches have about the teachings-lessons they teach in the Sports Training Schools and Sports Soccer Clubs. It can be seen that most of the coaches have knowledge bases and that the training aspects are carried out with reference to the items that make up this category of the applied instrument.

In Table 2 shows the percentages of the different items that make up category two of the instrument called technical data. We can see that the 20 coaches have knowledge about what a soccer training session is, which 100% is. Continuing we see that in the second item there are 3 coaches who do not know the parts of a soccer training session which is equivalent to 15% of the studied population. The
remaining 17 are equivalent to 85% have great knowledge of the divisions and components of a football training session in each level or category of sports training of the participants. In item three, referring to the aspects of the technique and its components we observed that 14 coaches equivalent to 85% of the total surveyed demonstrate knowledge of the sports technique and the technical foundations of the soccer player. The remaining 6 coaches that are equivalent to 15% have a hard time having a clarity of the aspects that make up the technique; movements without and with the ball. Finally, in the fourth item, referring to sports tactics, we determined that out of 20 coaches surveyed 15 corresponding to 80% have a good knowledge of the aspects that make up defensive and offensive tactics. The remaining 5 coaches equivalent to 20% have low knowledge in the previous aspects.

**Table 3. Teaching methods in soccer.**

| Items                          | Yes | No |
|-------------------------------|-----|----|
| Know and use the analytical method | 14  | 6  |
| Know and use the global method | 16  | 4  |
| Know and use the mixed method | 14  | 6  |

In Table 3 describes the items that make up the category three of the instrument called teaching methods in soccer. As we observed, we found that of the 20 coaches surveyed, most of them know, define and use the analytical, global and mixed teaching methods used in the teaching of soccer. These coaches use these teaching-learning methods in a planned, orderly and sequenced manner of the specific exercises of each aspect of the technique and tactics. The coaches who answer negatively in the survey do not develop their training sessions in a very generic and empirical way without having a control, systematic and sequenced order in the performance of the teaching-learning exercises of their athletes.

In Table 3 we can see the three types of soccer teaching methods which the 20 Coaches of this sport belonging to Sports Training Schools in the city of Tunja Boyacá were surveyed. We find in the item one on the knowledge and use of the Analytical Method that 14 coaches corresponding to 70% of the established sample possess and master knowledge about how analytical teaching methods and the respective methodologies of exercises used to define and use are used to learn the different sports techniques and tactics of soccer. The remaining 6 correspond to 30% who affirm not to have a clear idea in the use and function that this analytical method fulfills. Next, in item two; regarding knowledge and use of the Global Method, we observe that this type of education is the one with the highest percentage of knowledge and application shown by the population. 16 Coaches corresponding to 80% argue that this type of training allows to be more effective for the player when learning why real plays are presented similar to the games that must be quickly solved by applying quickly the execution of the technique and the decision of the tactics to assimilate a good learning of the aspects that make up soccer. The remaining 4 trainers equivalent to 20% answer that they do not use this type of teaching methods in the training of athletes due to the little knowledge and information of the variability of exercises that can be done and that is worked in this method of teaching for soccer. Finally, we realize that the third item knowledge and use of the mixed method show that 14 coaches corresponding to 70% know how to apply the combination of analytical and global methods for teaching soccer in the children and youth categories. The remaining 6 are the equivalents to 30% are the ones who do not perform this type of mixed method because they find it difficult to integrate the combination of global analytical and global exercises. In addition, they lack knowledge and procedures that make up this type of methodologies for soccer training.

**4. Conclusions**

In the context of team sports, soccer occupies one of the first places that children, young people, and adults practice from different points of view and approaches.
In this way in the present research work, the main objective was to know and describe the methods of teaching football that is used by coaches to train athletes in children and youth categories in the Sports Training Schools in Tunja, Boyacá during the weekly training sessions.

It was possible to corroborate through the instrument applied, survey, that most of the evaluated soccer coaches of the sports training schools of Tunja, Boyacá, have a great knowledge of the methods that exist in the specialized literature to guide the training of children and youth during the training weeks.

It was found that the methods most applied by soccer coaches in Tunja are the global and analytical methods worked out in a separate way each for teaching learning the technical and tactical aspects regarding soccer.

In the present study, it is revealed through the obtained results that the trainers of the city of Tunja, use and use more for their training the Global Method. However, the coaches in certain days of training emphasize the analytical method in children's categories for the work of the technique and emphasis to the mixed method for the work of the tactics in juvenile categories using real play of the game that is presented to the child or player inside the field in a training for the competition.

Finally, this study shows that the global methodology is the most frequented by soccer coaches in the children's and youth categories of the city of Tunja, but we can make the judgment that most coaches believe that training is more convenient than they are carried out by combining several methodologies for the teaching of sports disciplines.

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