

# ***Title: Exercises for Field Hockey goalkeepers in the 11-12 year old category, a proposal***

## ***Abstract***

*Hockey is defined as a sport where two teams face each other in a limited and standardized field, where the performance of the goalkeeper is decisive, and it is essential to focus the work from the beginning based on a technical-tactical development according to the characteristics of the game. . Hence, the objective of this research was: to determine exercises for defensive actions in field hockey goalkeepers in the 11-12 year old school category, essential content for modeling training. Three phases were established for the development of the research: a) analysis of the current state and treatment of the defensive actions in the goalkeepers of the 11-12 year old school category in Villa Clara, where an analysis and bibliographic review of various works on the field hockey theme; b) phase of establishing the exercises, through methodological workshops with 14 field hockey coaches from the province; c) assessment of the result obtained by the criteria of specialists, all of which allowed validating the result obtained, constituting an important element for the work of coaches in this sport.*

*Keywords: technical-tactical training, field hockey, goalkeepers, initiation*

## **Introduction**

Field Hockey is a collective sport of collaboration/opposition, its game is characterized by individual and group actions and is defined as a sport where two teams face each other on a limited and standardized field; commonly classified into four demarcations: goalkeeper, defenders, midfielders and forwards (Sánchez, 2015). Achieving victory will depend on the individual actions of the players depending on the team (Estellano and Paniceres, 2017).

His game is very dynamic and creative, with changing actions characterized by a lot of personal contact that requires high tactical discipline, where periods of different intensities and high neuromuscular demands alternate with periods of less intensity (Taylor, Wright, Dischiavi, & Townsend, 2017). ; (Haro, Torres, Casamichana, Romero, Morencos and Rodas, 2021).

At present, studies on the analysis of the game action in this sport have increased. Various studies have been carried out regarding the goal action in this sport, however, the existing scientific literature on field hockey is not as abundant as in other sports games. Both coaches and researchers emphasize the importance of the goalkeeper's role in the success of their teams. Most of the research carried out focuses on issues related to the player who shoots at the goal in the goal action and the penalty corner (Estellano and Paniceres, 2017); (González, Bermúdez, Martínez and Chiroso, 2017).

The most studied parameter within the goal action in Field Hockey is the penalty corner action, since it is a decisive situation to win a match. Both the winning and losing teams get more than half of their goals from strategic actions, including penalty corners. Although it is possible to find studies carried out on game actions, in which the figure of

the goalkeeper implicitly intervenes, there are few works aimed at addressing exercises for the training of this position in particular (Echevarría, Tamayo and Jeffers, 2020).

The field hockey goalkeeper is the base player of a team and enjoys a privileged position due to the frequency of his interventions and the importance of them. Apart from his stick, he is the only one who can touch the ball with kicks and gloves inside the goal area. His behavior especially influences more than any other player in the performance of the team, which in the final part can influence between 50-70% in the result.

He is in charge of defending his goal preventing the rival team from scoring a goal. He wears special clothing to protect himself and can use any part of his body to stop the ball without obstructing play, but he can only do so inside the goal area.

The field hockey goalkeeper plays a fundamental role in the game, he is in charge of defending against any attack on his team's goal and represents 50% security for himself. As the last defender, his main concern is the player who has the ball and he has a great impact on the failure or success of the team, since the main objective of this game is to score the goal and its function is to avoid it. Therefore, they must have a good preparation (theoretical, technical-tactical, physical and psychological) to be able to fulfill their functions within the game (Estellano and Paniceres, 2017); (Vazquez, 2018).

Such characteristics make the goalkeeper the most important player who opposes the goal action executed by the rivals. However, in the review of the documents issued for the analysis of the results of the 11-12 year old Field Hockey team of Villa Clara, belonging to the Comprehensive School of School Sports (EIDE), it is stated that there are difficulties in the technical actions –tactician of the goalkeepers in their defensive performance, after having obtained or recovered the ball. Remaining this as an important recommendation to be solved by the coaches and the Provincial Sports Association in the province.

In another order of analysis, the Comprehensive Field Hockey Athlete Preparation Program (PIPD) does not contain precise guidelines that enable coaches to develop technical-tactical defensive actions within the process of preparing school goalkeepers. Hence, it is so timely to address the issue of actions that lead to the improvement of technical-tactical defensive actions of goalkeepers, since it is a need derived from the characteristics of competitive activity to face current challenges (Jiménez, 2011); Tamayo, Echevarria, and Jeffers, 2019).

As has been previously evidenced, research on the subject has been directed towards the offensive performance of the game, with defensive actions being more relegated, fundamentally in the figure of the goalkeeper (Anido, 2014).

Despite the fact that technical-tactical actions constitute a determining direction in the defensive performance of school goalkeepers in field hockey, there are no guidelines for their defensive technical-tactical training in this category, which limits coaches in this regard, as well as the quality of the preparation.

School sport creates the bases for the relay for national teams, to achieve this it is necessary to develop a whole series of aspects that are implicit from the time the child enters a sports facility for the first time, until his consolidation as a player (Calero , 2019). In sports initiation, the assimilation of sports technique for its improvement must be

worked very carefully (Castejón, 2002). Therefore, this brings with it the need to dedicate more time within the annual preparation to the technical-tactical training of players, especially field hockey goalkeepers (Echevarría, Tamayo and Jeffers, 2020b).

However, the methodology used by coaches when working with goalkeepers in the Villa Clara province is insufficient (Estellano and Panicerres, 2017); (Tamayo and Echevarría, 2020). In the field hockey learning process, despite having the PIPD, there is no logical order of the basic fundamentals of teaching according to this specific function, showing deficiencies in the goalkeepers of the Villa Clara province.

The present study on the figure of the hockey goalkeeper is adjusted to the need to contribute to the improvement of their performance. Therefore, the objective of the work was: to determine technical-tactical exercises for defensive actions in field hockey goalkeepers of the Villa Clara team category 11-12, in correspondence with the specific characteristics of their performance in the game.

The importance of the research lies in the fact that exercises are proposed for the teaching-learning of the technical-tactical actions of the Field Hockey goalkeeper 11-12 years old, based on the real actions of the game that this player faces, to fulfill with his offensive and defensive performance efficiently in the match.

## **Materials and methods**

To develop the research, a descriptive level and bibliographic review approach was used on the defensive training of the field hockey goalkeeper in training categories. The research was developed in three phases, similar to others with similar characteristics. The first aimed to analyze the situation of the current state of knowledge and treatment of defensive actions in goalkeepers in the school category, as well as the needs of coaches in the initiation category (11-12 years) of Field Hockey in the province of Villa Clara, covered a period between September 2018 to February 2019.

An analysis and bibliographic review of studies that describe the theme of goalkeeper training were carried out, and these actions have been addressed in a general way. In this phase, an interview was also conducted with the coaches of the Villa Clara province, with five open questions, which allowed determining the conception used in the technical-tactical defensive training of goalkeepers. The analysis of the demands of the game and the training protocols used by Beach Volleyball coaches at this level in the province was deepened.

The second phase of the process aimed to establish technical-tactical exercises for defensive actions in goalkeepers in the 11-12 year old category, which spanned the months of March - April 2019. An exchange was developed in the form of a workshop, with the 14 coaches of the province, which includes the two coaches of the EIDE of the territory, which constitute 100% of the technical force that works in this sport in the province of Villa Clara. All Graduates in Physical Culture and aged between 25 and 55 years. In addition to having experience as field hockey coaches between 4 and 28 years. These trainers were used to structure the exercises.

Two Methodological Workshops were held within the framework of provincial technical updates developed by this sport. The first of them was held in the month of March, this first work session aimed to update current trends in the game of field hockey and analyze the studies that constitute background. Here the principal investigator served as moderator and conductor. The purpose was to update the technical force on the subject and current trends in sports training, so that they could later make accurate assessments for the establishment of exercises.

The second workshop was held in April 2019, this time the work session aimed to establish characteristic exercises of the goalkeeper's defensive actions in the 11-12 year old category. At first, six matches of this category were observed in film projection, corresponding to the discussions of the two final matches of the 2016, 2017 and 2018 championships. Here the coaches made their notes, identifying the main characteristics of the game of the goalkeepers, based on the prior knowledge provided by the antecedents.

In a second moment of the workshop, there is a discussion, debate and exchange with the coaches on some important issues previously seen. As a result of the work sessions with the coaches of the province and through the Brainstorming technique, exercises were established for the defensive technical-tactical training of field hockey goalkeepers in the 11-12 year old category.

In the third phase of the process, a consultation meeting was held with specialists to assess the result of the exercise proposal. For this, the characteristics or requirements that these should have, to be used in the investigation, were determined. The concept of specialist was established as those people who had as a requirement: to have 20 years or more of experience in the field of Physical Culture and Sports, to hold the scientific category of Master or Doctor in Physical Culture Sciences, to have worked with Basic initiation field hockey, or having been linked to it in some way for at least 5 years, having knowledge of the works that constitute the background of the research and having taught or carried out research related to the Theory and Methodology of Sports Training .

**The group of specialists was made up of 11 members and they were used to obtain their assessment of the work carried out, in terms of the following aspects:**

- ✓ Formal quality, if the result is appropriate to the characteristics of technical-tactical training in field hockey for beginners.
- ✓ Practical utility, its use allows defensive technical-tactical training for field hockey goalkeepers in the 11-12 year old category in a contextualized manner and make decisions or establish measures to improve training.
- ✓ Specificity, if the result is characteristic of the structural and functional actions of field hockey goalkeeper players in category 11-12.
- ✓ Possibility of generalization, if they considered that the result has possibilities of generalization in other similar scenarios.

## **Results and Discussion**

As a result of the first phase of the investigation, it was possible to appreciate, in the interview carried out with the 14 coaches of the province, that they present deficiencies in relation to the treatment provided, from the methodological point of view, to the

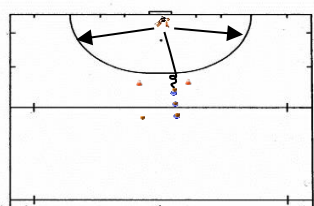
defensive technical-tactical exercises of the field hockey goalkeepers in the 11-12 year old category.

The fundamental conception used by them lies in conceiving the actions of goalkeepers in correspondence with the characteristics of competitive activity. On the other hand, with the bibliographic review it was possible to verify that the works related to the subject do not address the category of initiation 11-12 years.

In the second moment of the workshop, the following characteristics are summarized: the goalkeeper needs great reaction speed and reflexes to be able to stop or stop the ball in advance, damping force to achieve a precise reception, concentration of attention to coordinate his movements and volume of attention so that it can be accurately represented where it is easier to clear or see which of his teammates is in the best position to receive the pass and go on the counterattack, coinciding with Echevarría, Tamayo and Jeffers (2020a).

In the second phase, technical-tactical defensive exercises were established for field hockey goalkeepers in the 11-12 year old category, which are shown below.

### Exercise 1.



**Name:** Clearance to free space.

**Objectives:** Clear a ball thrown by the attacker into free space.

**Foundation:** Based on a real game situation, the goalkeeper clears a ball thrown by the attacker into free spaces, trying to keep it as far away as possible.

**Methodology:** The goalkeepers clear a ball thrown by the attacker to the free space distant from the opponent, with displacement.

Aspects that are accentuated.

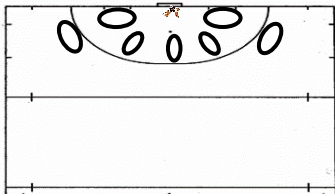
The goalkeeper who clears the ball must:

- ✓ Move the foot closest to the direction of the hit, to direct the ball towards the target or free space.
- ✓ Visual contact with the attacker and the place where he should clear the ball.
- ✓ Appropriate technique to clear the ball.
- ✓ It serves as the basis for other exercises and more complex variants in their execution. With mark, 6-8 repetitions. 6 players participate.

**Materials:** Ten balls, two teams of goalkeepers, terrain, six obstacles.

**Variants:** They can be 1 vs 1, 1 vs 2 or in a 3 vs 2 situation.

## Exercise 2



**Name:** King goalkeeper.

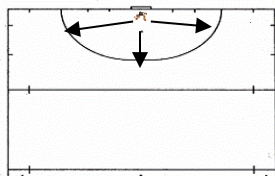
**Objectives:** To develop displacement and anticipation skills.

**Foundation:** Based on a real game situation, it allows more time to react to the actions of the opponent, allowing the goalkeeper to have more time to decide the action variable in the game situation.

**Methodology:** Two goalkeepers are separated by a distance of 6 meters, a ball is placed between them, both are placed in basic position at the voice of the coach, they run to take the ball and the one who does not take it must touch the partner's back before he passes the catcher's starting line. It is repeated several times.

**Materials:** Ten balls, two teams of goalkeepers, terrain, six obstacles.

## Exercise 3



**Name:** Varied clearance.

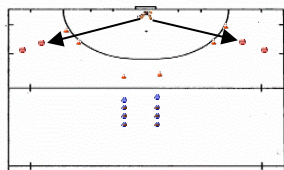
**Objectives:** To develop displacement and anticipation skills.

**Foundation:** Based on a real game situation, the goalkeeper clears a ball thrown by the attacker into empty space or sidelines.

**Methodology:** A specialized obstacle is placed longitudinally behind the penalty-stroke point, the goalkeeper is placed in the goal, the coach is placed on the opposite side separated by one meter. When the goalkeeper is ready, the coach begins to throw balls against the obstacle, the balls take effect in such a way that the goalkeeper must apply an appropriate clearance technique according to the type of ball. Batches of 10 balls are made.

**Materials:** Ten balls, two teams of goalkeepers, terrain, six obstacles.

## Exercise 4



**Name:** Directed balls.

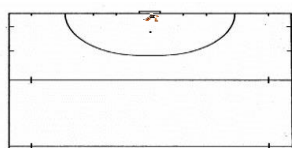
**Objectives:** To develop displacement and anticipation skills.

**Foundation:** Based on a real game situation, the goalkeeper develops the ability to guide clearances in different game situations, directing them in directions that do not complicate the defensive tactical situation of the team.

**Methodology:** The goalkeeper stands at the goal, two mini goals are placed in the area where the clearance should be directed, balls are hit slowly from the edge of the area and as soon as it is hit, the goalkeeper is told where to direct the ball. , so you will have to choose the right clearance technique. The number of goals scored by the goalkeeper is counted and a competition between goalkeepers is established. Do not throw more than 10 balls at a time.

**Materials:** Ten balls, two teams of goalkeepers, terrain, six obstacles.

## Exercise 5



**Name:** Displacement and stops.

**Objectives:** To develop displacement and anticipation skills.

**Foundation:** Based on a real game situation, it allows the development of anticipation skills in the execution of shot stops on goal from variable conditions.

**Methodology:** A mark is made with “plaster or tape” on the posts between the squad and the height of the goalkeeper’s shoulders. The goalkeeper stands in the center of the goal and at the voice of the coach moves slowly touching the mark on the tape with the glove of the corresponding hand, quickly returning to the other side to stop a ball that the coach throws with his hand in the middle , low and maximum height according to its possibilities. Return to the center and perform on the opposite side. Do not use series of more than 8 balls.

**Materials:** Ten balls, two teams of goalkeepers, terrain, six obstacles.

### Form of qualification of the exercises

Good (B): If you perform the technical execution with up to 2 errors.

Regular (R): If you perform the technical execution with 3 or 4 errors.

Bad (M): If you perform the technical execution with more than 4 errors

In the third phase, as a result of the evaluation by the specialists, 100% consider that the result shows a high formal quality of its structure, since they include the main movements and stops of the goalkeeper during the action and can be used in their technical-tactical training, giving it a modeled character.

They consider that the result has great practical utility, because it can provide relevant information for coaches based on the characteristics of the actions of these players. Its use will allow establishing reference values for the technical-tactical training of goalkeepers at this competitive level.

They valued that the result has specificity, since its structuring is based on the functional analysis of the field hockey game in the school category, in addition to considering the internal logic and the characteristics of the game in the 11-12 year old category. 100% of the specialists also considered that this result fulfills the purposes for which it was conceived and that it could contribute to the development of technical-tactical skills in goalkeepers.

Finally they stated that, if it has great possibilities of generalization, because the conception that supports the result can be applied in other territories, contexts and other categories. In addition, it is an important element that should contribute to enrich the conceptions of the PIPD, as the governing document of this sport in Cuba.

In the same way, all (100%) agreed that it contributes to the solution of the insufficiencies detected, in the treatment of the actions of the goalkeepers in the defense in the game of Field Hockey, since it allows, on the one hand, , perfect your game on defense; as well as developing goalkeeping skills to play with the feet, the stick and support the ball carrier near the 14.63 meter area.

It was taken into account for the structuring of the exercises, that in the action of the game there is a high number of structural elements such as teammates, adversaries, mobile and spatial goals to defend and/or attack. All of which demands that the players are subjected to constant decision-making, to make their game actions effective, in an environment of constant uncertainty, which may be regarding the information coming from the physical medium, and/or regarding the interaction with teammates and/or opponents.

In correspondence with the approaches of other authors such as Sánchez (2015) and Matías (2018), taking these elements into account by coaches will allow them to choose each exercise and each activity with full knowledge of the facts, depending on the achievement of their objectives. proposed. Generally, the works that address this topic focus on studying the goalkeeper's action from the perspective of the number of goals conceded depending on the shooting zone, the place where the shot enters and the techniques used by the goalkeeper.

The exercises designed to treat the defensive actions of goalkeepers enrich the scarce specialized bibliography that exists on the subject in question, which benefits not only the level of knowledge of the coaches, but also, to a certain extent, allows them to the players, prepare theoretically to better study the game that takes place in this area of the Field Hockey field, so important and decisive in the victory or defeat of the match.

## **Conclusions**

The state of the defensive technical-tactical actions of the field hockey goalkeepers, school category 11-12 of the EIDE of Villa Clara, manifests with deficiencies in the conception of the exercises for the training of the goalkeepers' defensive technical-tactical actions. 11-12 years.

The proposal of technical-tactical exercises for the defensive actions of the goalkeepers in the aforementioned category was determined on the basis of real game situations and the defensive functional demands of the field hockey goalkeeper today. Its foundation and structure favor the development of technical-tactical defense actions of goalkeepers at this level in correspondence with the specific characteristics of their performance in the game.



The conception of the proposal of exercises for the treatment of the technical-tactical actions of the defense in the goalkeepers, has a high practical utility and represents a methodological contribution to the problem that is addressed, according to the criteria expressed by the specialists.

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