Individualized exercises to improve the technique of the stops of the school Handball goalkeepers

Abstract

The present work aims to apply individualized exercises to improve the technique of the saves of the school handball goalkeepers of the EIDE of Villa Clara. It originates from the difficulties presented in the December 2018 Cup, whose statistics of both goalkeepers are taken as a diagnosis to compare the data with those obtained in the fundamental competition, after applying the individualized exercises. Methods such as analytical-synthetic, observation, survey, mathematical-statistical and especially case studies are used to analyze the performance of the team's goalkeepers in terms of the technique of stops. In the first stage, the insufficiencies that the goalkeepers under study present in the technique of stops are verified, in the second stage individualized exercises are proposed to improve the technique and in the third stage it is verified by comparing the results of the two moments of the investigation, that the technique of the stops of the school goalkeepers of Handball of the EIDE of Villa Clara is improved.

Keywords: individualized exercises, technique, saves, goalkeepers

Introduction

Handball is included among the so-called sports games and constitutes one of its most dynamic indoor sports, in addition it provides, through its multiple demands, favorable conditions for the training and development of motor skills, as well as for the improvement of abilities. physical.

The game of Handball observed from the outside is an activity of high physical demand, which involves movements of mastery of the body and movements of handling the ball. But always dependent on the interaction or meaning of the game itself, which is defined by the uncertainty produced by the ball, the situation of the opponents and the situation of the teammates.

Sports specialists have put science in function of sports activity and have obtained relevant results. Scientific research actively supports the work of improving sports mastery to guarantee high performance and sports excellence. This generates the need to continue perfecting work styles with increasingly larger theoretical - practical projections. In this sense, the technical - tactical preparation of the athlete takes on greater importance and significance within the sports training process.

Hernández, J and Hernández A (2010) affirm that at present the purpose of this sport is technical and tactical, so the players depend to a great extent on tactical situations both on offense and defense, but it is necessary above all in defense, a great technical action to execute the actions since if they are not executed in the regulated way, the player can be sanctioned, so reflecting on the defensive activity it is necessary that the technical action be subordinated to the tactical action in order to guarantee effective action.

According to Aróstica O. (2018), the sports practice of contemporary Handball requires the use of training models that are based on different variables such as: age, experience, level of physical capacity, motivation to practice this sport, knowledge and mastery of the technical-tactical actions, personality and preferences of the teacher, objectives and type of tasks to be carried out during planning.

It is the criterion of Morales (2016) that variability has been the source of numerous studies that have tried to explain the reasons why this phenomenon occurs, the main question of study being learning and improving motor skills. Variability has been studied from different perspectives, each granting a different point of view on which are the possible characteristics that can explain its appearance during the execution of different technical gestures.

In this same sense, Aróstica O. (2018) considers that variable practice is an element that characterizes the training process in sports games, sufficient motivation for the authors to enhance the benefits of this theory, based on practice. quality.

In accordance with Contreras, P (2019) it is considered that when you cannot compete a lot, you should train as you compete and that is when the games and exercises should approach the competition situations. In addition, this author adds that for the use of exercises in training, it must be taken into account that these are not usually liked as much as games or matches, but teachers need them to achieve the objectives.

In the last national championships, the province of Villa Clara has managed to place itself in prominent places, in addition to having an excellent promotion of goalkeepers to the national teams.

One of the defensive functions of the goalkeeper is the stops of the balls thrown by the opponent from different angles of the field, which by fulfilling it effectively can prevent a goal from being scored and at the same time contribute to the continuity of the offensive transition of the team for the sake of victory.

On this subject, ball stop, it was found in the bibliographic review that most of the articles published on the internet are related to the soccer goalkeeper, and others such as those by Buligan A. (2003). The goalkeeper: training and learning, places more emphasis on the development of coordinative and conditional capacities. Other research such as that of the Handball coach Carrero, R. (2010) proposes exercises in the absence of guidelines on how to deal with work with goalkeepers, which allows them to develop skills to achieve their goal: to stop balls, in order to enrich the work in teaching goalkeeper saves in Handball. González R. (2020) also proposes exercises to improve shooting stops from 6 meters but in goalkeepers aged 11-12 years and in the case of Díaz R. (2020) he does it in this last category but for shots from 9 meters.

In the School category (13-15 years) the transition is made from general learning to more specific learning. The maturation of the player, thanks to his physical evolution or the development of motor skills, together with a qualitative increase in mental abilities gives us the possibility of increasing training both in volume and quality. The coach must guide the training, promoting this variability, so that the goalkeeper acquires a great experimental baggage.

Through the observations made to the training sessions, interviews with teachers and coaches, the review of documents such as: the Handball Athlete Preparation Program, the Subject Selection book, the document on the Organization and Development of Goalkeeper Training in High Performance provided by the Cuban Handball Federation, as well as the updated bibliography related to exercises for the improvement of the goalkeeper stops technique; It has been found that the coaches have very few individualized exercises to improve the technique of the stops of the school handball goalkeepers girls of the SIS of Villa Clara.

In correspondence with what was previously planned, the objective is: to design individualized exercises to improve the technique of the stops of the school handball goalkeeper girls of the SIS of Villa Clara.

This research means a great contribution to the Handball coaches by giving them a series of individualized exercises that allow to improve the stops technique of the school goalkeeper girls.

Materials and methods

For the development of this research theoretical level methods such as analysis and synthesis were used; from the empirical level, the observation to corroborate the errors of the subjects' technique, the documentary analysis to know the antecedents of the problem; the survey to verify the knowledge related to the work with the handball goalkeepers; from the statistical level, the empirical frequency distribution from which only the percentage values were taken for the data analysis, and the case study to obtain information before and after the application of the proposed exercises to improve the technique of stops in the two school handball goalkeepers girls of the SIS of Villa Clara. The measurement was used through the number of stops made by the goalkeepers in each game and is evaluated according to the parameters indicated by the National Handball Commission for this category. Finally, a methodological triangulation was made.

Results and Discussion

In the observations made, it was possible to verify at the beginning of the general preparation stage little predominance of individualized exercises to improve the technique of stops with movements in the goal, movements towards all angles, it is not emphasized in the correction of errors more common in the movements so that the goalkeepers master the technique well with the necessary repetitions, for which this will influence the work with the stops before the launches through the different attack zones.

Among the documents reviewed is the Comprehensive Sportsman Preparation Program: Handball. Hurtado, A. D.; (et.al.). (2016) where methodological guidelines and work objectives are appreciated, as well as didactic games, but none of them reflect exercises to improve the technique of handball goalkeeper stops, which is corroborated by the coaches of this sport in the province, which state that it is a necessity to have them.

The document Organization and Development of the Goalkeeper In High Performance, by the authors Hurtado A. and Reyes R. (2013), belonging to the Cuban Handball Federation, was also revised, in which examples of tactical-technical exercises for different ages appear. of goalkeepers in this sport, but they are not enough for the entire macro-cycle of training.

After having carried out a detailed analysis of the responses expressed by 6 handball coaches from different provinces, four of them from the national team, including the 8 from the Villa Clara SIS and the provincial commissioner in the survey, the following is summarized:

Four of the 15 coaches, representing 26.6%, state that they do know of research related to goalkeepers, but these are not very up-to-date. 73.3% are unaware of them. So the work in the provinces is a bit difficult due to the lack of bibliography in this regard. Only two of the respondents, which represents 13.3%, state that in their provinces there is a coach only for goalkeepers with an individualized plan but they do not have a bibliography with specific systems of exercises for the development of this position.

By triangulating the data acquired by different sources, it can be stated that both the review of documents, the survey of coaches and the observation of training sessions, show that the teachers do not have enough individualized exercises for the work of the goalkeepers' saves and count with little sport-specific bibliography that addresses this issue.

Below are the results obtained by the SIS Villa Clara school handball goalkeepers, in each of the stops made in the 1st Preparatory Cup in commemoration of Moisés Casales, carried out in the general preparation stage in December 2018 in Santa Clara. In addition, it refers to the goals against received, the stops made, the total of shots, the percentage of effectiveness and the evaluation according to the parameters indicated by the National Handball Commission for this category.

Table #1 (Initial Diagnosis)

Goalkeeper 1	Goals	Stop	Total Shots	% Effectiveness	Evaluation
High stop	62	18	80	22	W
Middle stop	48	21	69	30	R
Low Stop	53	23	76	30	R
Total	163	62	225	27	W

Table #2 (Initial Diagnosis)

Goalkeeper 2	Goals	Stop	Total Shots	% Effectiveness	Evaluation
High stop	82	8	90	9	W
Middle stop	50	19	69	27	W
Low Stop	43	20	63	32	R
Total	175	47	222	21	W

The statistics were taken from the 5 games played by the province of Villa Clara and the data of each goalkeeper were added to work with the percentage of effectiveness of both in the different stops. To obtain an evaluation, the values were substituted in the following equations:

 $Total\ Shots = Goals + Stops$

% Effectiveness = Stops x 100 / Total Shots

 $Good \ge 34\%$

Regular between 30% and 33%

Bad $\leq 29\%$

On an individual basis, goalkeeper 1 presented more problems at the high stop. With an evaluation of bad (M) for having an effectiveness lower than 27%. This mainly lies in the bad technique of the stop and in the bad movement in the goal. The medium and low stops are in the 30%, so her evaluation is regular (R). In general, when finding the% of effectiveness of the total in this technical element, its performance was bad.

In the case of goalkeeper 2, the results are similar. It also presents difficulties in the high stop, with the lowest% of effectiveness, so it must be better positioned at the time of the shot at goal and donot lose sight of the trajectory of the ball. The best value was in the low stop with 32%, but due to the evaluation range it obtained a regular (R). With the results obtained in the cup, it is generally evaluated as bad (M).

Proposal of individualized exercises to improve the technique of the handball goalkeepers stops.

1. Placement:

From the standing position the goalkeeper must stand at the point of intersection of the line of action and the bisector of the launch angle that is offered to the attacker (center of the goal line).

Evaluation:

The coordination of movements and the goalkeeper's placement technique will be observed.

2- Placement:

From the sitting position with arms up, make attacks on both sides up to a meter away, with two balls charged to both sides while still attacking with the trunk.

Evaluation:

The coordination of movements and the goalkeeper's placement technique will be observed.

3- Placement:

From the arched lying position with the lateral arms bent up, attack balls up to a meter away from the sides, including the trunk.

Evaluation:

The coordination of movements and the goalkeeper's placement technique will be observed.

4- Placement:

From the arched lying position with lateral arms flexed up, attack balls up to a distance of 1.5m from the sides.

Evaluation:

The coordination of movements and the goalkeeper's placement technique will be observed.

5- Placement:

From the goalkeeper's initial posture, perform attacks at both upper angles without and with obstacles, to force the goalkeeper to raise his leg on the attacking side.

Evaluation:

The coordination of movements and the goalkeeper's placement technique will be observed.

6- Placement:

From the starting position of the goalkeeper, make attacks at both upper angles without and with obstacles, with movements to the front and to the sides.

Evaluation:

The coordination of movements and the goalkeeper's placement technique will be observed.

This proposal of individualized exercises to improve the technique of the saves of the school Handball goalkeepers, began in the shock mesocycle of the general preparation stage, extended throughout the special, competitive preparation stage and ended with the fundamental competition.

In its implementation, the exercises of stops at the upper angles were used with greater repetition, as they were the ones that had the most problems in the diagnosis. They were also useful in developing different physical capacities and skills to work in the main part of the training and the imitation exercises were used in the special warm-ups.

The implementation of the proposal of these exercises aims to demonstrate their practical effectiveness in improving the technique of the stops of the goalkeepers under study.

After the Fundamental Competition took place in July 2019, the statistics were summarized and the data obtained appears below:

Table # 3. (Fundamental competence)

Goalkeeper 1	Goals	Stop	Total Shots	% Effectiveness	Evaluation
High stop	29	19	48	39	G
Middle stop	25	29	54	53	G
Low Stop	35	37	72	51	G
Total	89	85	174	49	G

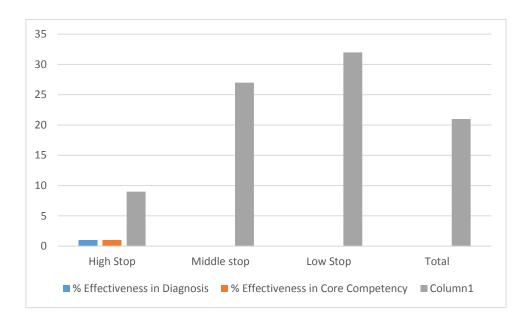
Table #4. (Fundamental competence)

Goalkeeper 2	Goals	Stop	Total Shots	% Effectiveness	Evaluation
High stop	16	9	25	36	G
Middle stop	36	20	56	35	G
Low Stop	18	20	38	52	G
Total	70	49	118	41	G

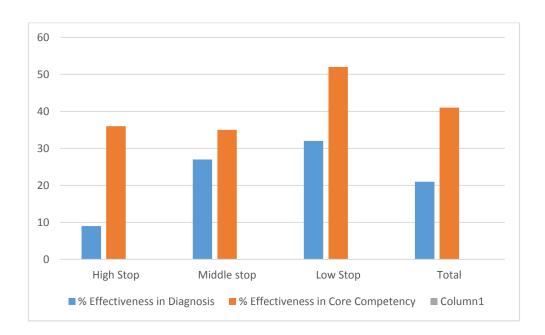
Tables # 3 and 4 show the percentages of effectiveness of each goalkeeper in the Fundamental Competition in the different stops made. As for goalkeeper 1, the improvement in the technique of the stops can be appreciated. Although the high stop is evaluated as B, the values are still lower than the other stops.

In the case of goalkeeper 2, the results are similar, although she is not the regular goalkeeper of the team, she improved a lot in the technique of saves with 41% effectiveness in the total of shots received.

${\bf Goalkeeper 1}$



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When the total values reached by both goalkeepers under study are analyzed, the effectiveness of the proposed exercises can be appreciated because from initial evaluations of fair and bad, both goalkeepers in the championship obtained percentages of effectiveness greater than 40. In addition the province of Villa Clara obtained in the scholar category the second place in the national championship against Guantánamo in a quite close game.

Conclusions

- 1- The results of the diagnosis carried out show that the main deficiencies that the school handball goalkeepers of the SIS of Villa Cara have are in the technique of stops and movements in the goal.
- 2- Individualized exercises were applied based on the technique of the different stops for each goalkeeper and it was verified, when comparing the results of the two moments of the investigation, that the technique of both school Handball goalkeepers of the SIS of VillaClara is significantly improved, after applying them.

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