

V. C.	1985	182	72	4550	180	6006
M. A.	1991	181	68	4525	170	5973
B.P.	1991	172	68	4300	170	5676
L. I.	1996	180	66	4500	165	5940

Table 9 VC and TLC - F

Name Initials	Birth year	Height (cm)	Weight (Kg)	VC according to height (ml)	VC according to weight (ml)	TLC (ml)
S. L.	1991	172	54	3440	108	4540.8
S. P.	1994	168	53	3360	106	4435.2
N. D.	1996	174	50	3480	100	4593.6
H. A.	1995	163	47	3260	94	4303

CONCLUSIONS

The results of the study confirm, through the values of the vital capacity, the fact that the modifications occurred in the respiratory function depend on the type of effort, the athlete's experience, the event, but also on age and gender. Thus, in the technical events (in this case, the pole vault), the athlete is interested in blocking the respiratory movements, this favoring the technique. During moderate intensity efforts (in this case, the 800 and 1500 m running events), the respiratory rate increases, reaching 30-40 breaths per minute. The volume of air that was introduced in the lungs reached 4550 ml in the males, and 3480 ml in the females. After comparing the results recorded in this study with the ones in the professional literature, one can say that the tested athletes' values are within the referenced ones, the late modifications in the respiratory function appearing thanks to the sustained training.

The total lung capacity (TLC) has varied values, between 5676 ml and 6006 ml in the male subjects,

and between 4303 and 4593.6 ml in the female subjects, numbers that are larger than the reference values by approximately 10%.

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THE ROLE OF THE FOCUSING IN THE TRAINING OF THE GOALKEEPER DURING THE HANDBALL GAME (JUNIORS I GIRLS)

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Abstract

The work proves how important focusing is in the training of the goalkeepers in the handball game as well as a few methods and ways of making it reach its highest efficiency. The main objective of this experiment is to prove that focusing has got an important role in the training of the goalkeepers in the handball game and by developing and improving it we can get a better evolution of the goalkeepers in both the training and the official games. In order to prove the proposed hypotheses and reach the experiment aims and objectives, the following methods were used: the observation method, the individual work method, the experiment method, the statistical-mathematical method, and the graphical method. By studying the results of the first and the final tests, there was an increase in efficiency in both teams but, as far as concerns the experimental team the result went from 50% to 66.5% and as far as concerns the control team, the result went from 48.3% to 58.3%, thus there is a difference of 8.2% between the two kinds of teams. As a conclusion we may say that the hypotheses of the experiment were proved and the results show that by a good development of focusing with the aid of specific methods we get an increase in the goalkeepers' efficiency in both the training process and especially the official games.

Keywords: *focusing, handball, efficiency, training;*

INTRODUCTION

"Sports is a competition activity, built on a set of dynamic actions which are differentiated by branches of sports, taking place in an independent or institutionalised frame, having the main purpose to develop the morpho-functional and mental possibilities, that have the result in performances obtained in contests as: record, personal record or partners' record" (Teodorescu, S., 2009, pg. 20).

The game represents an activity which has become a social phenomenon in which two teams compete, having the purpose to score helped by a game instrument – ball, puck and so on.

The root of sports games is in "competition exercises in general and in movement exercises in particular, to which have joined well-marked sports character", (Colibaba-Evuleț, D., Bota, I., 1998, pg. 12).

Handball is a team game, which takes place in high speed, ordering a highly dynamic character.

High level sports or the high performance sports, implies as a model, a pyramid whose top is represented by the one or the ones who reach the level of performing the high performance sports.

Competition or race has been defined by Hobbes, taking into discussion his opinion about history or human nature, and that is "The comparison between a human life and a running race is not really the perfect fit, but it fits perfectly to our goals, because we are able to fully see almost every [...] emotional condition and we are able to remember them. This contest must have one single target, one and only glory and that is being the first one" (MTS, 1994, pg. 42-43).

"Handball may be considered a happy synthesis of basic human movement skills, such as running, jumping, catching and throwing, which confer to handball the sports features of the competition team game", (Ghermănescu, I., K., Gogăltan, V., Jianu, E., Negulescu, I., 1983, pg. 9-10).

From scientific competition point of view, Romanian handball school studies from technical, tactical and theoretical-mental point of view, the game content and takes action in order to generalise the teams' practice.

These studies and researches have grown the theory and handball methodology, approaching various topics, from the issue of practising handball at early age, from the selection criteria to the players type establishment specialised on a certain position and the representative team type of game.

Handball game as a performance game, requires a great effort from the players as to "cope with some extremely difficult training tasks, which need maximum effort of the entire physical, ethic, strength and intellectual capacities as to be sorted out", (Ghermănescu, I., K., Gogăltan, V., Jianu, E., Negulescu, I., 1983, pg. 9).

It can be noticed in worldwide schedule a continuous change and evolution on the matter of all the handball game elements but also in the process of training through practice.

It has come to light and continue to show up when it comes to game, numerous new elements that lead to visible progress of the game but also to its improvement, some elements being new in the game and some being procedures that are brought to light again or readapted to some already known to superior parameters.

As an effect of these changes the competition has become more and more tight leading to a continuous research of the methods and ways that are used in order to make the training but also the game perfect.

Following and analyzing the teams' game, the teams that compete to the world and European contests, we can see the most important aspects of modern handball.

The main tendency of handball game that reflects in individual actions but also in collective tactical of the players, in technical executions, is that of

increasing the speed on all the aspects, of movement, of game, of ball movement, all of these resulting in the increase of the game rhythm.

For every position it has appeared, developed and enhanced a special technical tactical luggage, participating in shaping the player specialised on that position being in charge with managing in an efficient way other two-three positions without damaging his main position.

The mechanisms, the field and the players' technique are very well known and that requires a special adaptability to the concrete game conditions and that materialises in a great variety of using the game's system of attack and defence.

The practice and certain parts of that focus on physical training, are used nowadays at the majority great teams, not taking into account the training method, being of main importance the resistance in strength and speed.

The second phase and the counterattack have become a main and constant concern, a quick and efficient weapon, of all the valuable teams, this is a continuous and assertive attempt of disorganised and vulnerable defending.

All this game content can be taught and improved to masterliness in the training process or in the sports practice, which represents the main organisation and training form for the teams and players.

THE SPORTS TRAINING

The sports training is an instructive-educational process, based on the relationship that the coach ought to have with the player, a relationship in which the coach's aim is to develop the player's performance capacities and to have the best results; this is a process of transformation and development, transforming the performance in results and developing the performance capacity, a process of adapting, having the goal of improving the effort skills, the movement qualities, improving the technical-tactical side, the artistic side but also the psychological one; it is a process that refers to the morpho-functional and movement branch which points out the features and characteristics of every sports chapter, it is an informational process because it implies the permanent and continuous information between the coach and the player and it is also considered a control process for reaching a good end – the performance that means weaving all the changes that the player suffered in a certain period of time and efficiency which implies maximum results and a minimum effort.

As we can figure out from the facts presented, the handball teams training has a variety of problems, that refer to every value and age skills that are connected to this sports matter and that is why approaching and dealing in a tiresome way is an extremely difficult matter.

The experiment target presented in this work is aimed to demonstrate that the attention has an extremely important role in the training and evolution of handball team goal-keepers and by the means and methods chosen we can optimise this position players training.

We have started from the hypothesis that by certain means applied at an optimum level as to increase attention, we can reach an efficiency higher for the handball team goal-keepers.

An important point, in having high quality sportsmen for the currently scheme, at Juniors I, is an early selection.

The selection represents an organised process, repeatedly and continuous from early ages of born or hereditary possibilities of children with a complex system of biological, medical, sociological and mental criteria etc., as to practice a branch of sport and his future training in this sports field or sports test .

Selection is a continuous process, a progressive process tightly connected to growth and functional development of children and connected to the handball progress tendencies on international level as well as the progress stage of Romanian handball, naming the numerous measures that are 'a must have' in improving the training and performance, we ought to mention the importance of choosing and training the children and juniors.

When it comes to goal-keepers the selection must have special values taking into account the difficulty and complexity that come together with this position .

Although the game of the entire team si good and the opponent creates opportunities to score and if the gate si efficiently "defended" by a goal-keeper that has special qualities and is well trained, the efficiency of the entire team will instantly grow and that is a step ahead to victory.

The goal-keeper has the hardest role, that of resisting the assaults and the opponents, who will try to score by treacherous moves and well-directed and powerful throws.

The selection for this position in modern handball has become an extremely difficult job that implies a multitude of operations, criteria and most complex characteristics.

GOALKEEPER

The goal-keepers are first of all chosen by physical appearance and that means well-built, with good physical skills persons and with an armonious compatibility between the body parts.

The difference between height and weight "shows that the goal-keeper must be a slim player, who can easily do the most complicated moves, even when he is not in perfect balance" (Ghermănescu, I., K., Gogăltan, V., Jianu, E., Negulescu, I., 1983, pg. 142).

Another condition in goal-keepers' selection is a great opening of hands and the scale arms.

If we are to refer to movement, the goal keepers must have a great reaction rate, quality that can't be compensated, a great speed, general physical strength, great amount of mobility in coxo-femoral joints, ability as well as physical resistance.

A goal-keeper must have the sense of balance, of an accurate control of movements, of coordination and attention, these qualities are being perfected and developed only by a well planned training in a long period of time.

As well as these functional skills there is another group of 'must have' skills for the goal-keeper – the physical skills, a goal-keeper must show a lot of self-control, calmness even in the worst situations, he must have a lot of will and spirit of 'war', he must trust his own strength, to evolve in actions, to fight the enemy on psychological field and to discover his intentions through anticipation", (Ghermănescu, I., K., Gogăltan, V., Jianu, E., Negulescu, I., 1983, pg. 142). A goal-keeper must be brave, with a great sacrifice spirit for the team, and must have a positive influence towards the other players.

Because in handball game the gate throws are made especially from short distance, by technical procedures and also by the goal-keeper's technique which is a special and a good one.

Some elements and technical variants are identical with the one of field players but many other elements such as the fundamental position, the movement towards gate, catching the ball, rejecting the ball with the arm, with the foot, trecherous moves, the header or the release of the ball, are actions specific to the goal-keeper.

The main position, useful because it helps the quick execution of other moves, is with the legs distant at shoulder-width, and the weight distributed on both legs on the entire surface of soles, the toes facing outwards, the knees slightly folded and pushed outside from the ankle, the body slightly arched outwards and the gaze towards ball, the arms bent from the elbows and apart of the body and the palms facing forwards.

The movement towards the gate is realised with added steps, in front of the bar, embracing the fundamental position, catching the ball is made as in the field game, rejecting the balls is made by raising the arms in the right direction and hitting it with palms, in the same the body and the arms are moving in the right direction by pushing in the opposite leg of the movement direction, the release of the ball is made by a throw thrust on the bottom of the elbow with a slight fold of the leg opposite the arms, rejecting the ball at medium height is made with a single arm but can also take place by raising the same side leg.

The scoring moment is in tight connection to the body position and the position that the players have on the ground. The goal-keeper is moving trying to find himself on the bisector of the angle formed by the enemy's arm and the two vertical bars of the gate.

When it comes to the balls thrown from distance the goal-keeper must anticipate and observe the ball's direction, but especially he must focus on the arm that sent the ball.

A well-trained goal-keeper will know in advance what the defencist intend to do and what are the possibilities left for the attacker, so he takes into account the position that each player has he will know the direction the ball come from and he moves in that direction, and sometimes he intentionally leaves a corner with space as to make the player score there and, being prepared, he quickly reacts and hold the ball even though the hit was pretty strong.

In nowadays handball, the goal-keeper is not allowed to completely neglect that side of the gate covered with defencists, assuming the entire responsibility no matter the conditions and the positions that are used to score.

The balls thrown near the semicircle are the hardest to defend, because the "enemy" that throws the ball is no longer stopped, and that is why in circumstances like this the goal-keeper is forced to avoid the player that throws the ball, and to minimise the throwing angle and based on his senses to try to reject the ball by using his arms, legs or his entire body.

When it comes to the throws from the extremes, that are executed unde angles of 30°, the goal-keeper will be near the gate, in the short corner, he won't move with anticipation, forcing the 'enemy' to throw the ball in the long corner, and he will react only after the ball has left the player's arm.

The 7m balls represent a psychological as well as a physical moment in which the goal-keeper must have a special psycho-motrical control and tactics.

It is better for the goal-keeper to "own" the 2-4m distance in front of the gate, a fundamental and stable position and to have a good balance as to react in any direction.

Taking into account that the 7m balls has increased and that the final result may be influenced by that, it is necessary to practice it at every training by different technical procedures, the goal-keeper being in a physical and mental state.

The training must be made individually as possible and by using a variety of means.

The whole evolution of goal-keepers in official games but also in the training process, altogether with the movement qualities that implies depends very much on the goal-keeper's mental qualities and most of all on attention.

The brain reflection of reality ,has a selective character, and that explains the fact although we are in the middle of a multitude of objects and phenomena, we see and we can trace only a part of them, and we can say that we are in the center of attention, and the rest of objects are reflected less and less.

“The physiological base of attention is the existence of some regions of maximum excitability in the brain.

The activity of forming and update of the temporary bounds is made at high level of effectiveness in the optimum excitability corners, that represent the creative part of brain. Because of this, the objects that are situated in the center of attention are perceived with great transparency; the material attentive memorised is very well stocked; the ideas are developed easily and in a natural order; the moves attentively made are distinguished with great precision” (Roşca., A., Chircev, A., Roşca, M., Mare, V., Radu, I., 1962, pg. 159).

In order to highlight the attention role in sport training, when we speak about goal-keepers, we can stick to some of the attention characteristics.

“Attention is limited by the way we pick the information from the outside world. At a certain point we can think at one single thing” (Epuran, M., Stănescu, M., 2010, pg. 236).

When it comes to movement teaching it comes to light the fact that we are limited when we have to do some tasks in a given period of time.

Attention is serial, if we talk about the way one solves some problems, the best method being to solve it in a logical order, because the attempt to deal it simultaneously is almost impossible.

This interpretation can't be generalised, because the execution way will depend by the tasks of a certain

moment. The operational definition of attention can be told between two tasks made in the same time.

“If two movement tasks are being made simultaneously as well as differently, we reach to the conclusion that one of them doesn't need attention, and at least one of them is automated. If on the contrary none of them is correctly made, that means that both tasks need attention”, (Epuran, M., Stănescu, M., 2010, pg. 237).

As to conclude all the things presented, we can say that “Attention consists of the orientation and focusing towards the pysical objects and phenomena which, thanks to this fact, are highlighted clearly and fully”, (Roşca., A., Chircev, A., Roşca, M., Mare, V., Radu, I., 1962, pg. 160).

From the attention's characteristics point of view it can have a volume that refers to the multitude of situations or objects perceived from one shot, may be flexible, it can move from one object to another and may be distributive when the child/sportsman does more actions in the same moment but only when it has the same level.

The main training method of goal-keeper is the individual principle, one of the main basic principle of sports training.

“The individual principle means the maximum recovery of the sportsman skills, assuring the optimum development of performance capacities” (Teodorescu, S., 2009, pg. 99).

The experiment took place at the Sports Programme Highschool from Braila on a number of 6 subjects at the performance group of Juniors I girls. The test contest consisted of 20 balls thrown in the gate by field players, and we took into consideration only the good shots.

Table 1. First and final testing results of the two groups

Crt no.	No of shots	Experimental group				Controle group			
		No of good shots				No of defended shots			
		Ti	%	Tf	%	Ti	%	Tf	%
1	20	10	50	13	65	8	40	10	50
2	20	9	45	12	60	11	55	13	65
3	20	11	55	15	75	10	50	12	60
Average	20	10	50	13.33	66.67	9.67	48.33	11.67	58.33
Progress		3.33				2			

Table number one present the results obtained to the initial and final tests of the two groups, efficiency expressed at a percentage, arithmetic average and progress.

After we studied the results of initial and final tests, we can reach the conclusion that the experimental

group has made a real progress if we are to compare it to the controle one, so the work's target has been achieved and the final checked hypothesis and the means of attention development were chosen and applied in a responsible way.

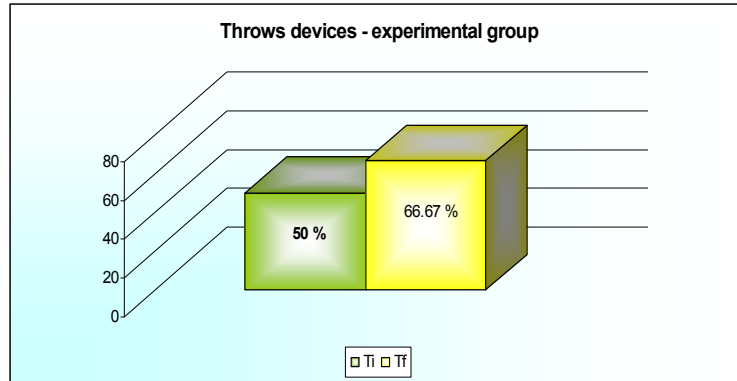


Figure 1. Throws devices experimental group, initial and final tests.

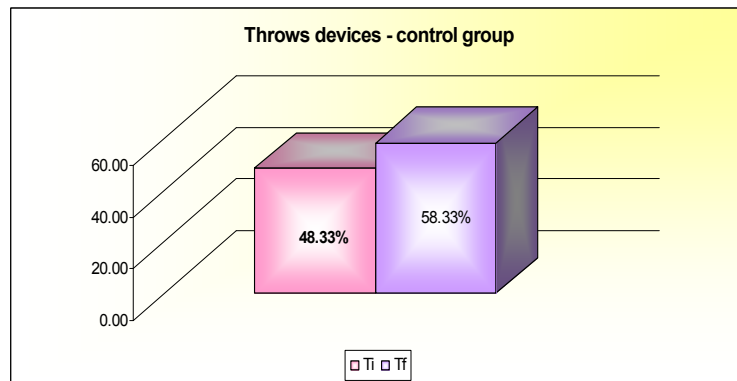


Figure 2. Throws devices control group, initial and final tests.

As a final conclusion we can say that attention plays an extremely important role in training the goal-keepers in handball game.

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CONSIDERATIONS ON COMBATING DELAYED ONSET MUSCLE SORENESS

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Abstract