

THE DEVELOPMENT OF MOTRIC QUALITY SPEED AT THE HIGHSCHOOL CYCLE THROUGH THE HANDBALL GAME AT THE TIME OF SPORTS TRAINING

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Abstract

This paper attempts to make a contribution by enriching the methodological material at its disposal (still insufficient) those who opted for the noble mission of initiation in the handball secrets. We have tried to be as close as possible to the practical needs by providing some means mainly focused on the operating structures, by providing to those who are interested in a methodical material that can be processed and adopted under the current conditions.

I tried to train the handball team of the "Forestry College of Bucovina" handball to participate in the ONSS competitions and to compete with Ștefan cel Mare Military Highschool, the results of this game being not extraordinary, and I think, according to my own opinion, that the training is essential in this game.

The hypothesis of the work

If we use these appropriate methods and means in preparing the handball selection of the "Forestry College of Bucovina", we will achieve an increase in the value of the players.

Under the hypothesis we assumed that in the selection of the handball team of the "Forestry College Bucovina" we will develop the motoring qualities such as strength, strength, skill and the speed that is basic in a team because after the experiences we found an increased coefficient of quality Drive the speed by using the appropriate methods.

Drawing from these aspects, we can also formulate the following issues:

- if the morpho-functional and psychomotor peculiarities of the handball selected by the "Forestry College of Bucovina" can allow reaching and even exceeding the values corresponding to the final model.
- if appropriate methods and means are applied?

Paper's objectives

1. Amplification of the indices of the fundamental motric qualities, accentuating the specific manifestations during the handball game.
2. Improvement of the basic techniques and of the special procedures that are part of the technical content of the basic position occupied in the team.
3. The process of harsh specialization of the base position occupied within the team and the extension of the effective action area to other positions.
4. The mastery of the conception of the game.

PAPER'S METHODOLOGY

The purpose of the paper

In the hypothesis we will develop the speed that is one of the main driving qualities that underlie the handball team.

Technical-tactical training must be done at the same time as the development of motor skills, and the treatment of it separately can hamper performance improvement.

Working methods used

- documentation, remark, test method, experiment method, the statistical - mathematical method, graphic method

Samples and measurements used in the research

The samples to which the athletes of the selected handball team of the college were subjected were those regulated by the Romanian handball Federation for this age category, namely:

Speed running on 30 m

To test the travel speed, five repetitions with top start, free starting over 30 meters were performed. Each test was timed, with an arithmetic mean being recorded

Dribbling among the balls - 30 m.

To test the skill - coordination, two repetitions were performed and the best one was noted

Pentasalt

In order to test the strength of the lower limbs, two attempts were performed, without any prior impulse, and the best attempt was recorded

Hand throwing away the handball

To test the strength of the arm, two throws with the handball ball from the distance were made, using the skillful arm, with the best shot being recorded.

Technical proof

To test the individual technique of the players, the technical structure required by F.R.H was performed time being recorded for its execution

Own training model for the handball selection at the Bucovina Forestry College

For the category targeted in the current study of the Forestry College of Bucovina, the speed training needs to be programmed over several seasons and the really important changes do not occur after a few exercises. Progressive progresses are step by step through adherence to planning and periodization principles.

We have opted for various combinations of alternation and change of legs, so the range of exercises can enrich it from one workout to another.

The operational models used in the training

For the handball player, the following driving skills are specific to be developed during training:

1. reaction rate;
2. direction and execution speed;
3. detenta.
4. the throwing force
- 5 skill

Exercises to develop reaction speed, travel speed and execution speed

A. Exercise without ball

- Beep sounds from different positions, 5 -10 repetitions over 5 - 15 meters;
- Starting from the basic position with accelerated running 6-8 x 10-20 meters;
- Moving with the steps added sideways, left and right, over 6 meters (the distance between the handball line and the 6 meter semicircle);
- running at an accelerated pace of 10-15 meters, followed by light runs and accelerated runs over 10-15 meters;
- sprints from 10-15 meters distances;

- 10-meter sprints, 180 ° turns and back-running;
- Sprinters with change of direction in the marked predefined places;
- Starts preceded by other activities (shifts in the basic position, fenders, jumping);
- At the beacon the players sprinted to the middle of the court, turned and raced back to the opposite line, then backed back, forward to the center area and then face up to the starting line initial;

- Movement game: "Leap in two";

- "pairing":

B. Ball Exercises

- Running with the maximum speed across the field with the grip and bird of the ball with the players placed close to the edge line.
 - Multiple dribble at high speed over distances of 15-20 meters
 - the defense movement in the fundamental position, to my signal running speed to the ball and returning to very fast dribbling;
 - running on the counter and catching the ball near the opponent's goal and throwing at the goal;
 - running on the counterattack and grip of the ball at the center of the field, continuation of the counterattack using the multiple dribbling;
 - Direct counterattack using two peaks. Both players leave at the same time, the goalkeeper pointing to one of them:
 - two-point counterattack ending with a cross;
 - Counterattack with a tip and an intermediate;
 - two-point and intermediate counterattack
 - "run after the ball"
 - from the position sitting in line 4 with the back of the ball at 2 meters: at the moment of the signal, the first to reach the ball;
 - three players are placed in the shape of a triangle or line; two of these have balls they place by the alternation of the ballless, the one who does not have the ball as soon as he catches and passes the one he has just received;
 - fast blasting of balls by two teammates to the same player;
 - Strong throws in the reflection panel and safe grip of the bouncing ball in the unexpected way;
 - Strong throws to the wall on which the number gate is drawn.
- At the last minute the coach shouted the number in which he would have to throw the player;

- the passes on the next two positions, with the exchange of seats.

Obtaining results, statistical interpretation of data.

In order to validate the research hypothesis, we organized the present study in the handball selection "Forestry College of Bucovina", on a number of 16 athletes, in the practice of coaching.

The research took place between **1 September 2016 and 15 May 2017**, including the following stages:

Stage I, 1st - 10th September 2016.

Stage II, 10-20 September 2016.

- Initial testing based on pre-established tests at the beginning of the research

Stage III, 20 September 2016 - 30 April 2017:

- the implementation of the operational models in handball handouts "Forestry College of Bucovina"

Stage IV, May - May 15, 2017:

- final testing

Stage V, 15 - 30 May 2017:

- final processing of the data obtained and drafting the paper.

The weekly training course for the handball selection of the "Forestry College of Bucovina" involves two training sessions per week, sometimes a maximum of 3 hours per training.

After processing and interpreting the results obtained at the four physical and technical samples, following the data obtained at the initial and final tests, we can state the following:

Run speed 5 x 30 meters

- Each player ran five times 30 meters, each race being timed, and the average of the five results was finally recorded;

- On the basis of the data presented at this test, at initial testing, the best result was 4 "1, and the worst result was 4" 6, and the arithmetic mean was 4 "37;

- In the final test - table no. 3, the best result was 4 "0, recorded by the same subject, and the worst result was 4" 3, the number of five subjects was recorded and the arithmetic mean was 4 "21;

- In this test, the progress registered was 0"16, in the final test compared to the initial test, it is not too big, but quite significant, considering that the speed is the most perceivable driving quality.

- Noteworthy is that the difference between the lowest and the best result in the final test, 0'5 vs. 0"3, has diminished.

Dribbling among the balls - 30 m

- As a technical skill, speed skill, no spectacular progress was made in this test, but they were nevertheless significant;

- The best result in this test was obtained from the same subject, both in the initial and the final test, respectively 6"3 and 6"0;

- The difference between the best and the weakest results was reduced to the final test against the initial one, namely from 0'7 to 0"5, making progress on the arithmetic mean of the sample, from 6 '60 to 6"33.

- These results show that both the speed of movement and the technique of execution were improved, and the exercises chosen and used in training were most appropriate.

Pentasalt on the spot

- Two attempts were made, the best result recorded;

- The progress of these subjects, from the average of 12.95 meters in the initial test, to the average of 13.45 meters in final testing, shows an increase of 0.50 meters, which is quite high, Combined motor quality - Force - Speed is extremely important for handball players,

The amplitude value in the final test against the initial test was reduced from 1.80 meters to 1.40 meters;

Throw away the handball ball at a distance

- Two attempts were made, being recorded the best;

- In the initial testing the best result was 45 meters obtained by subjects number 7,8 and 13, and the lowest score of 38 meters, obtained by subject number 15;

- In the final test, the best score of 48 meters was obtained by subject number 7 and the lowest score of 42.00 meters by the subjects of positions 5, 9, 11, 15 and 16;

- Progress recorded between the average of the initial test of 41.68 meters and the final average of 44.25 meters being 2.57 meters is the most significant of the five samples.

- Reduce the amplitude value to the final test, only 6 meters to 7 meters at the initial test.

Technical proof

- The progress made in the original 17"9 test against the final test 17"3 confirmed that the improvement of the motor quality has positively influenced the level of execution of the technical-tactical procedures in the handball game.

Compared with the initial testing, the final one made a clear progress from 4.37 to 4.21. What is to be done in the future is that the

exercises performed are very well designed so that they can be favored at maximum speed (not to focus on details of execution but necessarily on achieving the maximum speed). At the same time do not use exercises that will not favor maximum speed. We will also apply repetitions starting from 5-6 seconds (such as those for upgrading starts).

At the trial of speeding, the exercises will be applied in a combined manner, with oscillations between an exercise or another simulated game sequences, rapid attacks, counterattacks, technical procedures structures, involving a lot of dynamism;

At pentasalt, the duration of exercises should be set so that the speed does not decrease towards the end of the exercises. Execution times will be determined depending on the shape of the speed we want to develop.

We also know that the pentasalt belongs to the main means of developing handball strength, but the correct application of these exercises leads to the double development of both strength and speed.

When throwing a handball ball, all player-specific motor skills must be developed. We need first of all throwing speed, throwing power and skill.

In the case of the pivot due to advanced defenses, which create larger movement spaces, the pivots often go up to 9-10 meters to alternate with the combination of torque (interior or center), then return to the semi-circle in other areas. Also in many cases throws from 8-9 meters out of the envelope.

At the technical test we also recorded the improvement of the results from 17.9 to 17.3 seconds.

Formulation of conclusions and proposals

- Training is one of the very important and essential factors of handball training at this age;
- The development of motric skills as an integral part of the training, which is expressed in executions that are the components of handball training, occupy an important part at this age;
- Based on the results of the final test, compared to the initial testing, two aspects related to the development of the motoring qualities are outlined:
 - Growth indices of all motric skills in all their manifestations;
 - a clear increase in the values of some evidence whose results can be improved by exercises.

Based on the results obtained after the current study, we concluded that the psycho-morpho-functional peculiarities of players aged 17-18 years allow high values to be achieved, allowing them to integrate into the future in the future , to compete with the main opponents at the regional level but also with the possibility to be included in the national youth teams.

We can conclude that the operational models that have been presented in this paper, and what have been experienced during the training process at the collective handball selection, ensure the achievement of the highest performances, and can be indicative materials for teachers-coaches handles the training of handball players.

The material and planning could be used as a guide for other high school training.

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**DEZVOLTAREA CALITĂȚII MOTRICE VITEZA LA CICLUL
LICEAL PRIN INTERMEDIUL JOCULUI DE HANDBAL IN
TIMPUL ANTRENAMENTULUI SPORTIV**

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Cuvinte cheie: Handbal, viteză, calități motrice, antrenament

Rezumat

Prezenta lucrare încearcă să aducă o contribuție prin îmbogățirea materialului metodologic pe care îl are la dispoziție (încă insuficient totuși) cei ce optat pentru misiunea nobilă de inițiere în tainele handbalului. Am încercat să fim pe cât posibil cât mai aproape de necesitățile practice asigurând câteva mijloace în principal axate pe structurile de acționare, punând la dispoziția celor ce manifestă interes un material metodic ce poate fi prelucrat și adoptat actualelor condiții.

Am încercat să antrenez cât mai bine echipa de handbal a “Colegiului Silvic Bucovina” pentru a participa la concursurile ONSS și pentru a concura cu liceul militar Ștefan cel Mare, actualmente rezultatele din acest joc nefiind extraordinare, iar după propria mea părere consider că antrenamentul este esențial în acest joc.