CONTRIBUTION OF DYNAMIC GAMES AND HANDBALL RESOURCES IN DEVELOPING PSYCHOMOTOR SKILLS FOR III-RD AND IV-TH DEGREE PUPILS

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Abstract: The research consisted proper application of control samples for manifestations of speed and coordinative skill by specific handball tests.

The purpose of this experimental research is to find the best ways to increase the speed and skill motric indices to pupils of third - and fourth primary cycle wich belong of Secondary School Miron Costin in Suceava minihandbal team by extensive use of dynamic games and pathways with elements of handball.

Introduction:

The game of handball is a game that takes place between two teams at two gates which requires permanent cooperation between players of the same team, friendship and honesty, devotion, truth and fair - play. The idea of "team" induce students a variety of noble moral traits and that they will follow them throughout their lives.

During III-rd and IV-th classes are used more elements of handball games. It puts greater focus on strengthening and improving the skills base in the game because the basics are actually basic skills. Then it moves to the learning processes and tactics specific to each element of the game.

In the physical education lessons, in addition to other goals the task lies with the teacher to interfere also on the development basic motor skills of students. The degree of their development depends on the motility and harmonious development and health of students.

These basic motric qualities, manifestations of motor functions are determined by physiological factors and physical such as length and weight of body segments, the elasticity of muscle, inertial forces, the plasticity of the cerebral cortex, age, level of training, gender, previous experiences, attention, imagination and memory etc.

Material-method: method of literature study, observation method, experiment, test method, statistical methods of data processing.

The materials used in the training were: handball balls, cones, tennis balls, soccer and other sizes, banks, gymnasium, trellises and circles etc.

Through this research paper there were followed next assumptions:

- Using a game system comprising elements of handball and adapted to the particularities minihandbal group will reach the speed and skill development of motor skills in a short time, default to the correct assimilation of elements and procedures specific game.

- Through the establishment of specific means for handball development and rational planning of medical fitness workouts, athletes will be visible small developments and performance in the near future will be guaranteed.

The purpose and tasks of this work are to help optimize the physical qualities of the student training and increasing the speed and skill by playing containing dynamic elements and processes of handball game.

Research lasted about 6 months, from December 2015 - June 2016, during which students have performed workouts 3-4 times a week, and in some week - weekends were away at competitions.

The tests included:

A. Anthropometric Measurements:

1. Height - from vertex to heel;

2. Weight - using scales reported in kg.

3. Armspan - student stands with arms outstretched sideways angle of 90 degrees under his arms and the length is measured from right medius to left medius;

4. The length of palm - the distance from the wrist medius; student sitting with fingers to palm expansion;

5. The perimeter of the chest - breathes out and measures the circumference of the chest band pass metric axial zones

B. Tests for the assessment of general and specific skill handball game:

1. General Skill: test of coordination and dynamic balance "Hexagon";

2. Skill specific handball game: Throw the ball in target from 6m.

C. Tests for assessing the forms of manifestation of speed;

1. Speed under Skill: 25m dribling run;

2. Speed of Execution: throwing the ball for 30";

3. Travel speed: 5x5m

Results and discussions:

Anthropometric Measurements

Initial testing						
Statistical indicator	Age	Hight	Weight	Armspan	Palm lenght	Chest perimeter
Average	7,96	121,57	34,35	118,89	13,26	60,44
Standard deviation	3,82	58,66	16,20	57,43	6,35	28,76
Coefficient of variation	0,48	0,48	0,47	0,48	0,48	0,48
Final testing						
Statistical indicator	4,09	60,24	17,01	58,93	6,70	29,89
Average	3,74	60,56	16,95	59,22	6,40	30,00
Standard deviation	0,92	1,01	1,00	1,00	0,96	1,00

General and specific handball skill tests

Initial testing					
Statistical indicator	5x5m	Dribling 25m	Throwing the ball	Hexagon test	Throw the ball in target
Average	8.36	6.42	30	18.53	1.26
Standard deviation	0,52	0,95	4,27	1,12	0,71
Coefficient of variation	0,06	0,14	0,14	0,6	0,52
Final testing					
Average	7.46	5.30	35.4	16.68	2.53
Standard deviation	0,43	0,67	3,00	0,46	0,39
Coefficient of variation	0,05	0,10	0,08	0,02	0,1

Comparing averages of tests

Tests	5x5m	Dribling 25m	Throwing the ball	Hexagon test	Throw the ball in target
I. T.	8.36	6.42	30	18.53	1.26

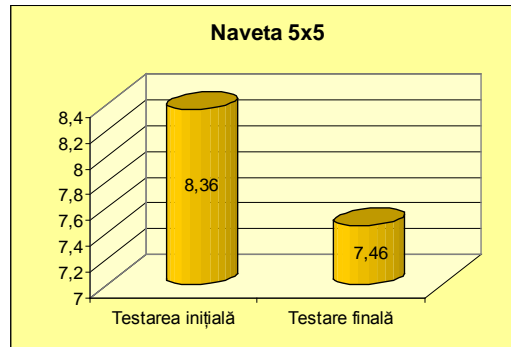|					
F. T.	7.46	5.30	35.4	16.68	2.53

3.5.1 Graphical representation of results

Chart no. 1

To assess speed, we used a test commuting distance of 25 meters. As shown above (Chart no. 1) in the first test students obtained an average of 8.36 seconds.

After applying game of handball, the final testing showed an average of 7.46 seconds. The difference between the two tests (approximately one second) is quite large relative to the distance traveled.
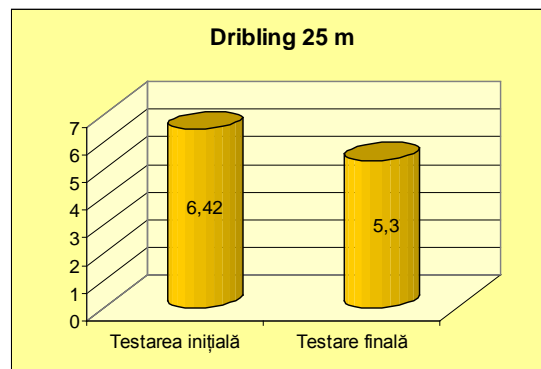

Chart no. 2

In the above chart (Chart no. 2) is shown the speed test that evaluated under ability As can analyze in the first trials, athletes have achieved an average of 6.42 seconds in the 25m drible speed run.

After applying specific games of handball, the second test equipment - the end they got a breakthrough of 5.3 seconds on average, that is a very big difference of 1.12 seconds in view of the short distance.

This result confirms the above assumption, made at the beginning research on this age of speed and coordination evolved the most.
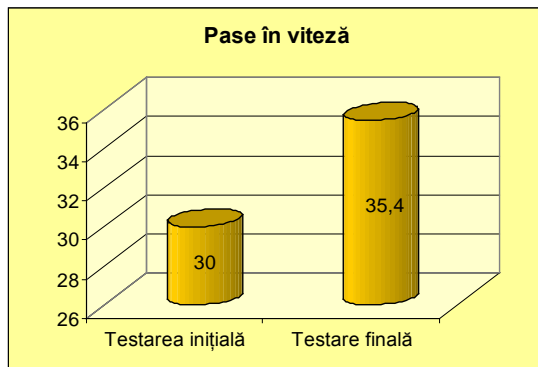

Chart no. 3

Last test - throwing the ball with one hand over her shoulder and aimed at assessing driving ability was applied to execution speed. The present chart (chart no. 3) the difference is very noticeable at first glance.

On initial testing, the beginning of January, students obtained an average of 30 passes for 30 seconds.

After application of the model of training for a period of about 4 and half months, students in final testing in May increased to average 35.4 passes.

The significant difference is exactly the 5.4 passes on average, which also confirms that speed is the most perfect physical quality of elementary school age (8-12 years).

Studies and numerous researches claim that most ideal age for electing develop this qualities is childhood period, when the pupil body still had bouts of growth and development, and the body and its important functions have not been submitted to morphological changes and hormonal changes.
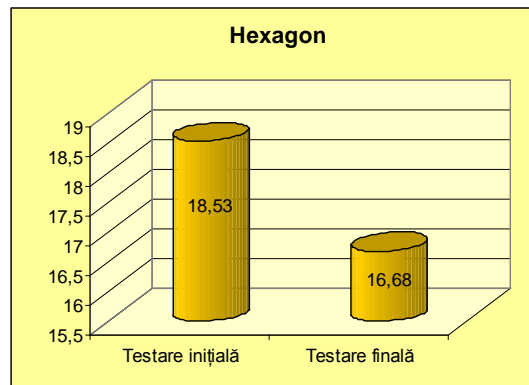
Chart no. 4

Hexagon test in this experiment appreciate students coordonation in the general school age - 10-11 years. In the initial test they hade an average of 18.53 seconds and the final testing have increased by 1.83 seconds in average, which is a average improvement of 16.68 seconds.
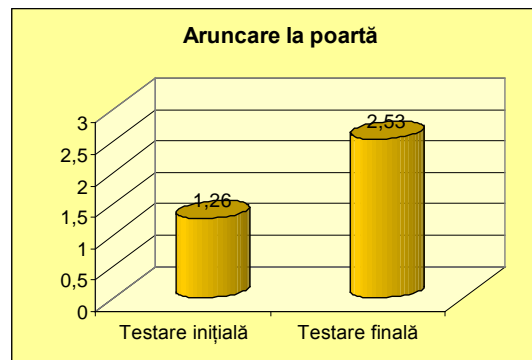

Chart no. 5

Last test applied to students upon which the experiment was conducted which evaluated the specific coordonation handball. At first testing pupils were able to record an average of 1.26 throws in the circle hung in the handball gate and the final testing, a number of successful throws 2.53 averages.

The difference between these tests is 1.27 on average throws. This increase is due to the fact that at this age students are in continuous evolution, physical attributes and skill developing speed is permanent regardless of the the actuating means.

Chosen games have lead to an acceleration of this process, students are much more agile, coordinated and careful training model applied a period of approx. 3 -4 months.

Conclusions:

With the results presented for each sample we can say that using games and relays dynamic form of competition with elements of the game of handball training provided increased efficiency leading to initial hypothesis in our experiment.

Regarding the coordinative abilities and speed capability for all three forms of manifestation is observed that there is an increasing curve once the application work for this purpose

The experiment confirms that all specialists statements for school age is a time for developing speed and coordination of medical fitness because they are dynamic progressive, which confirms that these indicators are perfect.

These physical qualities have continued progress in all subjects but sensitive periods vary depending on the age. Periods with the highest increases were established as grade III and IV, during which subjects fall within to chosen research

References:
[1] Bota I, Bota M.- Handbal- 500 de exerciții pentru învățarea jocului, Editura Sport-Turism, București, 1990
[2] Csudor M. și Csudor G.- Handbal- combinații tactice, Editura Sport-Turism, București, 1989
[3] Kuns Ghermănescu – Handbal, Editura Sport-Turism, București, 1983
[4] Kuns Ghermănescu și Virgil Hnat- Handbal, Editura Fundației Romania de Mâine, București 2006

CONTRIBUȚIA JOCURILOR DINAMICE CU ELEMENTE DIN HANDBAL ÎN DEZVOLTAREA APTITUDINILOR PSIHOMOTRICE LA ELEVII CLASELOR a III-a ȘI A IV-A

Cuvinte cheie: handbal, jocuri de mişcare, abilităţi psihomotrice, dezvoltare

Rezumat: Scopul si sarcinile lucrării sunt acelea de a contribui la optimizarea pregătirii elevilor şi creşterea calităţilor fizice viteza şi îndemânarea prin folosirea jocurilor dinamice ce conţin elemente şi procedee din jocul de handbal.

Scopul cercetării exeprimentale este de a găsi cele mai bune modalităţi de creştere a indicilor calităţilor motrice viteza şi îndemânarea la elevii claselor a III – a şi a IV – a a ciclului primar care fac parte din echipa de minihandbal a Scolii gimnaziale Miron Costin din Suceava, prin utilizarea pe scară largă a jocurilor de mişcare şi a ştafetelor şi parcursurilor cu elemente din handbal.