

IMPROVING THE MOVEMENT QUALITY „SPEED” IN SECONDARY SCHOOL THROUGH THE AGENCY OF THE MOVEMENT GAMES

CRISTIAN ȘANTA^{1*}, CORNELIU ROȘ², ONELA ȘANTA³

ABSTRACT. The importance of physical education and implicitly of the development of the movement qualities in the general process of instruction and education of pupils is revealed by the fact that it represents the only subject in the curriculum which mainly has the role of acting in the field of development and physical preparation of establishing and realizing a corresponding equilibrium between the intellectual and physical effort – an element of great importance in the normal growing and developing of pupils. Starting from the premise that the secondary school pupils have a low level of the movement quality – speed, I come with the *hypothesis* that through acting with appropriate means and movement games on speed, it is a factor of progress in the amelioration of this, having as a result the improvement of the speed ratings, an important objective in the scholar physical education.

Keywords: *sport, sports activities, exercises and specific tests*

REZUMAT. *Îmbunătățirea calității motrice „viteza” la ciclul gimnazial prin intermediul jocurilor de mișcare.* Importanța educației fizice și implicit a dezvoltării calităților motrice în procesul general de instruire și educare a elevilor este relevată de faptul că reprezintă singurul obiect din planul de învățământ căruia îi revine, în principal, rolul de a acționa în domeniul dezvoltării și pregătirii fizice de a stabili și realiza un echilibru corespunzător între efortul intelectual și cel fizic – element de mare importanță în creșterea și dezvoltarea elevilor. Pornind de la premiza că elevii din ciclul gimnazial prezintă un nivel scăzut de dezvoltare a calității motrice – viteza, am formulat *ipoteza*, că prin acționarea cu mijloace corespunzătoare și jocuri de mișcare potrivite asupra vitezei, se poate contribui la îmbunătățirea indicilor vitezei, obiectiv important în educația fizică școlară.

Cuvinte cheie: *sport, activități sportive, exerciții și teste specifice*

¹ University of Babes-Bolyai, Cluj-Napoca, Faculty of Physical Education and Sport, Romania

² Turda Technical College, Romania

³ High School „Onisifor Ghibu” Cluj-Napoca, Romania

* Corresponding Author: santa.cristian@yahoo.com

Introduction and reason for choosing the theme

The improvement of speed in secondary school pupils through movement games is important because, through its specific particularities, the movement game is different from the other means of the physical education because it supports:

- ***Simultaneously forming and consolidating the basic movement skills*** (walking, running, jumping, throwing and catching);
- ***Developing the movement qualities*** (speed, resistance, force and skilfulness);
- ***The moral-volitive features and skills.***

The study of speed is important because it is one of the most important qualities of the human body and, together with the other movement qualities, it is frequently used in the movement activities

In the present study I want to find and apply the best and the most interesting movement games for improving the basic movement quality "speed" in secondary school pupils in the physical education lesson

The practical fundamentation of the study

The research was conducted in *Călăraşi Secondary School*, Cluj County. The study of the research contained a total number of 66 pupils from 4 secondary school different classes, a class from each level: the Vth form: 15 pupils, the VIth form: 20 pupils, the VIIth form: 16 pupils, the VIIIth form: 15 pupils. From the total of 66 pupils, 37 were boys and 29 were girls.

Objective: finding and applying the best movement games used in the learning units in the physical education lesson for improving the moving quality – speed in secondary school pupils.

Hypothesis:

- The development particularities of secondary school pupils impose the using in the physical education lesson of some *structures of varied exercises* which grow their interest and active participation
- *The appropriate choosing of the movement games*, of the means and procedures which allow the selective influence of the improvement of the movement quality – speed, with its ways of manifesting leading to its improvement

Objectives:

- establishing the specific competences, the reference objectives;
- knowing the initial morphologic-functional, physical stage and the movement quality – speed in secondary school pupils;

- elaborating the units of learning, the acting systems, the models containing the used means in concordance with the reference objectives of the lesson;
- checking the efficacy of the means, procedures and movement games used in the lesson;
- the initial testing, the final testing, recording the pupils' data from a morphologic-functional point of view of the movement quality – speed;
- the statistic-mathematical interpretation of the data;
- establishing the conclusions and elaborating proposals

Implementing the research (Mackenzie, 2005):

For having a successful outcome of the research I took into consideration the following organizatoric measures:

- I used the existing sportive materials: balls, gymnastics benches, rib stalls, sticks, stakes, jump ropes, gymnastics equipment's, mattresses, circles;
- All the objectives were in the calendaristic plan for being realized through the selected means for improving the speed through moving games

The antropometric measures aimed at: measuring height, measuring the body weight, the chest perimeter.

For evaluating the degree of developing of the movement quality – speed I used more instruments. Testing the movement ability – speed was realized starting from the speed's forms of manifesting: the reaction speed, the running speed, the execution speed and the repetition speed. Taking into consideration the pupils 'age particularities and individual particularities, I grouped the tests in the following way:

For the Vth form and the VIth form:

- *Running for speed on a distance of 30 m, Objective:* Measuring the running speed
- *The Zig-Zag Test, Objective:* Measuring the running and execution speed

For the VIIth form and the VIIIth form:

- *The speed test, Objective:* Measuring the running and reaction speed
- *The ADAMS speed test, Objective:* Measuring the execution speed.

Moving games used in the research:

For the Vth form and the VIth form: Change the rows, Leap frog on palm, Who is the fastest?, Relay race return, The race with numbers, The carter, The third runs, Move the balls.

For the VIIth form and the VIIIth form: The last decides, The long goat, Running on the colour, The goshawk and the pigeons, The chain of jumps, From circle to circle, Change the lines, Runners versus recuperators.

Results

The data interpretation was made on the basis of some statistic-mathematical methods. In interpreting data I used medium values which are characteristic to the mean and the collective homogeneity: the arithmetic mean, the standard deviation and the variability coefficient.

Apart from the movement games organized and made with the pupils, for developing the movement quality – speed, several exercises were implemented with an important role in the activity of focusing attention, realized in a competition format, combined, like, for example, criss-cross, for developing the arms' speed.

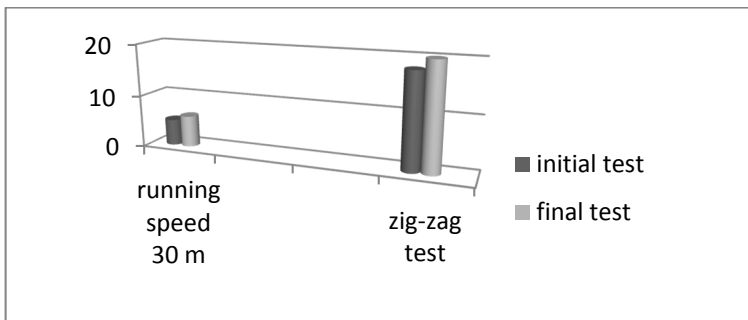


Figure 1. Results in tests and trials for the Vth form pupils

All the **girls** in the Vth form improved their final results comparing to the initial results for both sportive tests. From the 10 **boys**, 8 improved their final results comparing to the initial results in the first sportive test and in the second sportive test, all the boys improved their results.

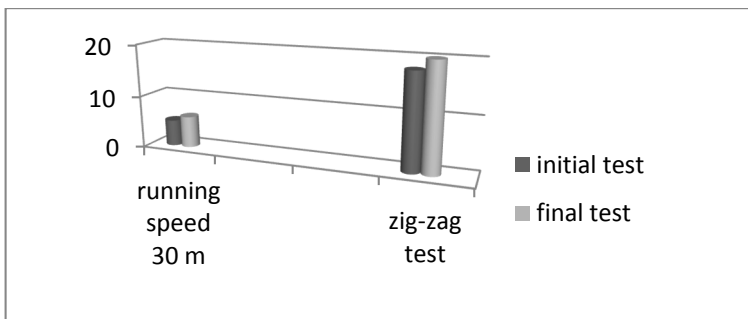


Figure 2. Results in tests and trials for the VIth form pupils

From the 7 **girls** in the VIth form, 6 improved their final results comparing to their initial results in the first sportive test and for the second sportive test all the girls improved their results. All the 13 **boys** improved their final results in the first sportive test and in the second sportive test 11 boys improved their results.

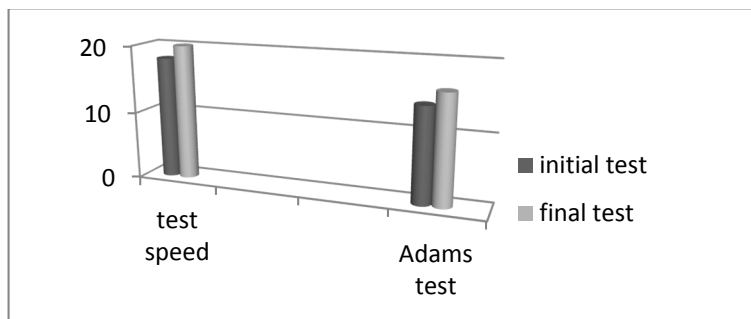


Figure 3. Results in tests and trials for the VIIth form pupils

The results for the entire collective improved in the first sportive test with a mean of 0[”]4 and in the second sportive test with a mean of 2 correct jumps in 15”.

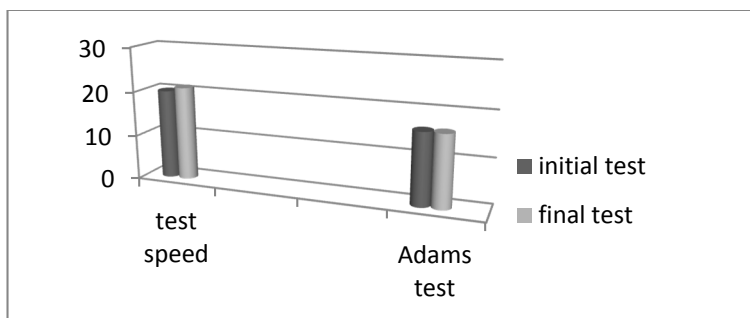


Figure 4. Results in tests and trials for the VIIIth form pupils

The results for the entire collective improved in the first sportive test with a mean of 0[”]1 and in the second sportive test with a mean of 3 correct jumps in 15”.

According to levels of classes and sex categories, ***the percentage of improving the movement quality – speed*** is the following: ***the Vth form:*** girls-100%, boys-99,80%, ***the VIth form:*** girls-99,93%, boys-99,61%, ***the VIIth form:*** girls-99,89%, boys-100%, ***the VIIIth form:*** girls-100%, boys-99,80%.

As one can notice from these pieces of information, the girls were more industrious than boys, so that from the 29 girls in the 4 classes involved in the research, 28 improved their movement quality – speed, which is a percentage of 96,55%, and from the 37 boys, 34 improved their movement quality – speed, which is a percentage of 91,89%. *At a global level*, from the 66 pupils from the V-VIII forms in Călărași Secondary School, Cluj County, Romania, 62 pupils of the 66 improved their movement quality – speed, which is a percentage of 93,94%.

The movement games realized with the pupils were periodically planned for each class level so that they knew from the beginning of the physical education and sports lesson what kind of exercises they will do for body heating and also what kind of movement games they will do in groups or individually for improving speed.

Conclusions

In most secondary school pupils I noticed interest and earnestness for the physical education lessons and sportive activities.

The movement games, the trials and the tests were well chosen because they aimed at aspects of the pupils' physical development, the level of development of the ratings for the movement qualities and the level of the specific skills for improving and developing speed.

The movement games selected for the research were implemented during and significantly contributed to improving and developing the movement quality – speed.

The chosen hypothesis for research, elaborating the work steps, choosing and applying the movement games in the key moments of the physical education and sports lesson, of the methods and teaching materials used for the present study were the most appropriate and I consider that the objectives have been met almost entirely, with very few exceptions.

REFERENCES

- Chiriță, Gh. (1980). *Educație prin jocuri de mișcare (Education through movement games)*, București: Editura Sport-Turism.
- Mackenzie, B. (2005). *101 Performance Evaluation Tests*, London: Editura Electric Word.
- Șandor, I. (2008). *Bazele generale ale Teoriei Educației Fizice și Sportului (The General Basis of the Physical Education and Sports Theory)*, Suport de Curs (Course Support), internal use, Cluj-Napoca.
- www.didactic.ro