## ATTRACTIVE WAYS FOR THE SPEED DEVELOPMENT BY THE USE OF GAMES AND RELAY RACES SPECIFIC TO ATHLETICS USED IN MIDDLE SCHOOL

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**ABSTRACT**: The development of motoric qualities should stand at the centre of the specialists' concerns, through the use of games and relay races specific to athletics, primarily considering their applicative value more concrete and the need of harmonization of the objectives of physical education with the requirements of the social activity. From the specialized literature studied, organized practice of physical exercises plays a positive role on the growth and the development of children.

Keywords: attractiveness, skills, results.

#### INTRODUCTION.

Practicing physical education is an activity deliberately established and made principally to improve the physical development and motoric quality. Physical education is an activity of national interest which, conducted in an organized way or independently, contributes to the achievement of physical condition and physical comfort of those who practices, establishes civilized social relations and leads to achieving good results in competitions. Teaching physical education in school has an important role both in terms of its favourable influence on the process of development and strengthening of the body and as a teaching tool designed to promote the knowledge of children, their faster adaptation to new school requirements, curdling classes' collectives and forming an active climate of work, of union and mutual help. Physical education is an instrument of instruction and general education that uses physical exercise as a primary means in order to develop physical abilities and skills of the students. [1, 2, 7, 8, 10,

Aim of the study: The discovery of methods and means of athletics for the development of speed motoric skill in 8<sup>th</sup> grade.

### The hypothesis of the paper

It is assumed that the use of movement games and relay races specific to athletics are effective and attractive means which develop speed motor skill in 8<sup>th</sup> grade.

### Tasks of the paper

Making the paper involved the following steps:

- Bibliographic study;
- Collection of data necessary for describing the experiment;
- Presenting the means and methods used to develop speed motoric ability;
- Interpretation of data collected;

- Drawing conclusions.

#### Research methods used:

- Scientific-methodological analysis of specialty literature:
- Comparative study;
- Statistical and mathematical methods of data processing;
- Tabular and graphical method.

#### THEORETICAL BASIS OF THE PAPER

Of all the psycho-motoric skills, speed is considered to be the most dependent on the hereditary factors. This however does not admit the idea that the speed cannot be educated. Speeding requires the sustained action on the perfectible factors, on the less perfectible, but also on the development of the level of other skills, particularly strength and coordination. The use of movement games and relay races specific to athletics is a form of development of motoric abilities and especially of speed, very attractive for students in middle school [3 4,5,9,11,13].

#### **Speed definition**

Speed is part of the skills category, considered less perfectible as being "the ability to practice a movement or series of movements in a short time [1].

#### **Factors that condition the speed**

Speed is a psycho-motoric skill, genetically programmed; its value is influenced by a number morphological, functional. of biochemical, metabolic and psychological factors. Regarding these factors, some are of nervous nature, others such of muscular nature, some are perfectible, some less perfectible [2, 6].

#### **Manifestation of speed**

Theorists, specialists in the field, find for the speed, many ways of expression, determined largely by how they enter into the composition of movements and factors that influence it, [7, 10, 12], differs in what concerns the speed:

- Speed of response;
- Speed of repetition;
- Speed of action;
- Speed of movement;
- Speed of resistance.

# METHODS AND MEANS OF SPEED DEVELOPMENT USED IN RESEARCH

**Method of disability** is based on the use of an advance (a gap) regarding the beginning of a speed exercise. This advance may be of 2-4 m when it comes to distance, of 1 -2 seconds when it comes to working time.

It is a method frequently used in training for speed, since it stimulates attention, willpower, fortitude, concentration, mobilization and perseverance and it is used as a relay race.

- In two rows of four- six students with 3m distance between them speed running at audible signal on 10-30m with the task for the student in the back row to reach the student in the front row.
- In two rows of four- six students with 4m distance between them speed running at audible signal on 50m with the task for the student in the back row to reach the student in the front row;
- From formation in stages with 1m distance between them speed running audible signal on 30m with the task of competing with each other.

The repetition method involves action of multiple replays of exercises performed freely, in alleviated conditions with speed close and over the maximum used as a relay race:

- 5-6 students in line running speed with up start at audible signal on 30m;
- 5-6 students in line running speed with down start at audible signal on 20m;
- Running distance of 30m with from upright with free start.

**Competitive method** involves the use of competition within groups or between performers. This method requires more both mental components, as well as physical.

- In line of 5-6 students running pawing drill on place, at audible signal speed running, on 10m;
- In line of 5-6 students running with up start, at audible signal, with competition on 30m;
- In line of 5-6 students running with down start, at audible signal, with competition on 30m.

Games used to develop the speed of movement:

- ❖ Catch the squirrel if you can;
- \* Run while you have time;
- ❖ Team competition;

- **❖** Balls conquest;
- \* Race on numbers:
- The net:
- ❖ The last runs;
- \* Running in circles;
- **\Delta** Black and white.

# DATA PROCESSING AND INTERPRETATION

The data collected will be presented in table form in order to provide a synthetic overview on factual material.

From the analysis of the table below, it follows that the experimental group that used during the classes of physical education and sport, for the speed development, specific games and relay races specific to athletics obtained at the task of 50 m flat in the final testing an average of 8.31 sec. compared to the initial test where the results average was 8.74 sec. so a difference of 0.43 sec. The control group, which used for the speed development the classic methods and exercises

development the classic methods and exercises line, achieved an average of 8.69 sec at the final testing with 0.34 sec. less than the initial testing (8.95 sec.).

At the second control task, 4x10 m "shuttle", the experimental group achieved a value of average of 19.43 sec. at the initial testing and 10.01 sec. at the final testing, so a difference of 0.42 sec between the two tests.

The control group, obtained at this task of the final testing an average of results of 20.19 sec., with 0.12 sec. better than the initial testing (20.31 sec).

Values of standard deviation and the coefficient of variation indicate a reasonable dispersion of the values and a good homogeneity of students' collectives concerned in our study.

#### NAME NAVETA 4 X 10 m NO SEX 50 m plat E INITIAL FINAL INITIAL M FINAL TEST TEST TEST TEST M M M E M Е $\mathbf{E}$ 1. A A.S M 8,7 8,7 8,2 8,5 19,5 20,8 18,2 20,0 G B A A.F. М 8,9 8,9 8,4 8,6 20,4 21.4 19,6 20,5 2. 3. ΒL B.D M 8,5 8,6 8,1 8,5 18,9 19,8 17,5 19,1 C D C.A M 18,2 19,5 4. 8,3 8,6 7,9 8,3 20,1 17,3 5. D.L 8,5 8,9 8,0 20,1 19,9 18,9 19,3 $\mathbf{C}$ M 8,6 $\mathbf{E}$ DS E.F M 8,1 8,4 7,8 8,2 17,7 20.5 16,8 19.7 7. ΕO G.R M 8,4 9,0 8.1 8,7 18,3 21,2 17.4 20,5 8. RS P.D M 8,2 9,1 7,8 8,7 18,8 19,5 17,9 18,9 9. ΤL R.S M 8,8 8,9 8.4 8,7 19,6 20,2 18,5 19,4 10. A R B.C F 9,3 9,4 8,9 9,1 23,1 22,8 22,1 21,9 11. B A C.S F 9,1 9,3 8,7 9,0 22,1 23,1 20,9 22,1 21,4 12. O F E.C F 9,0 9,0 8,5 8,8 22,2 20,3 21,3 13. N D F.T F 8,9 8,9 8,4 8,6 20,4 21,5 19,3 20,4 14. SM I.E F 9,1 9,2 8,6 8,9 20,9 22,6 19,7 21,6 15. S.A R.A F 8,8 8,9 8,3 8,7 20,5 21,9 19,6 20,6 T.F 8,9 20,2 20,2 16. S.D $\mathbf{F}$ 9,3 9,4 9,2 21,7 21,5 8,95 20,31 20,19 8,74 8,31 8.69 19,43 19,01 1,10 0,97 0,28 0,26 σ 0,34 0,34 3,13 1,42

0.03

0,04

#### EXPERIMENTAL AND CONTROL GROUP - INITIAL AND FINAL TESTING

### **CONCLUSIONS**

After the study made the following conclusions can be drawn:

- ❖ The hypothesis from which it started was confirmed;
- ❖ The methods and means used can be used as means of developing speed;
- ❖ The application of specific means and methods to athletics (motion games and relay races) in physical education and sport lessons in 8<sup>th</sup> grade

#### **REFERENCES**

- [1]. Ardelean, T., (1982) Particularitățile dezvoltării calităților motrice în atletism, I.E.F.S., Bucuresti.
- [2]. Cârstea, Gh., (1997) Educația fizică-teoria și bazele metodicii, Ed. ANEFS, București.
- [3]. Cătăneanu S., Dan D., (1997) Jocuri de mişcare, Ed.SITECH, Craiova.
- [4]. Chiriță, G., (1983) Educație prin jocuri de mișcare, Ed. Sport-Turism, București.
- [5]. Corogeanu, T., (1992) Exerciții și jocuri aplicative pentru școlari, Ed. Stadion, București.
- [6]. Demeter, R., (1981) Bazele fiziologice şi biochimice ale calităților motrice, Editura Sport-Turism, București.
- [7]. Dragnea, A., (1996) Antrenamentul sportiv, Ed. Didactică și Pedagogică, București.
- [8]. Dragomir, M., Albină, A.E., (2009) Atletism în Şcoală, Ed. Universitaria, Craiova.

increases the speed of all forms of speed manifestation.

0,05

0,05

0,07

❖ During school age can be used within the lessons of physical education and sport all means, but with sufficient recovery breaks.

In the 8<sup>th</sup> grade the focus must be set on:

0,16

0,03

- ❖ the development of speed of reaction to visual and auditory stimulus;
- of execution, in single motoric actions and in motoric actions with portable items;
- of movement in a straight line and turning.
- [9]. Ilca, I., (1972) Jocuri dinamice pentru clasele I-IX, Ed. CJEFS, Timișoara.
- [10]. Mitra, GH., Mogoş, Al, (1980) Metodica educației fizice școlare, Ed. Sport-Turism, București.
- [11]. Niculescu, Al., Cruli, M., (1987) Exerciții și jocuri în scoală, Ed. Sport-Turism, București .
- [12]. Rață, G., Rață, B., (1999) Aptitudinile motrice de bază probleme teoretice, Ed. Plumb, Bacău.
- [13]. Rinderu, I., Dragomir, M., Dragomir, M., (1997) Predarea atractivă a atletismului prin folosirea jocurilor șia exercițiilor pregătitoare cu caracter de întrecere, Reprografia Universității din Craiova.
- [14]. Tatu, T., Alexandrescu, D.C., Ardelean, T., (1983) Atletism, Ed. Didactică si Pedagogică, Bucuresti