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Development of motor skills through movement games

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Abstract

Introduction. The new requirements and conditions formulated by the development of society impose on the didactic process of physical education its enrollment in the idea of modernizing the activity, imposing a richer content and a complex methodology based on a deep knowledge of the level of development and growth of the organism at a given moment. **The goal.** In the paper, I set out to investigate whether the effort made in systematic and correctly dosed physical education lessons has the role of optimizing and perfecting the development process (physical, motor and mental) of the students' bodies, as well as to find out whether the consistent practice of games of movement in the school activity (class and optional lessons) and independent activity contribute to strengthening the spirit of discipline and organization, to the easy practice of physical exercises performed with a greater effort in the lesson, as well as to the faster development of qualities motor skills (speed, skill, endurance, strength and mobility). **The hypothesis.** By using movement games in a rhythmic way within physical education lessons, after a judiciously elaborated planning, I believe that they will contribute essentially to the faster development of motor qualities (speed, skill, resistance, strength and mobility), to strengthening the spirit of discipline and organization, to a faster adaptation to the effort in the physical education lesson. **Work methodology.** The subjects are between 7-8 years old. The research took place over a period of 6 months, using two experimental and control groups. The initial measurements were carried out in the first semester (September 2022), and the final tests took place in February 2023. During the experiment, we used movement games, which gave a pleasant character to the physical education lessons. **Results .** Through the use movement games, lessons have become

may pleasure and efficient, increasing the interest manifested by children in the the process instructive-educational. **Conclusions.** The movement games used in the physical education activity had a positive influence in obtaining the results of the experiment.

Keywords: movement games, qualities motor, development physics harmonious, measurements, analysis.

Introduction.

The current stage of society's development places physical education with particularly great responsibilities in relation to the contribution it can bring to improving health and increasing the capacity for effort and, implicitly, to the harmonious development and personality formation of children (Colibaba , D.E. , Bota , I., 1998). During the development of the body, the different body elements show a generally uniform development accelerating towards the end of the period (Bota , C. 2000).

That is why the task, the obligation that falls in principle to the teacher and then to the physical education teacher, but also to those who take care of the health and training of the young generation, is to make direct contact with reality, to get to know the collective as well as possible, because each student represents a unique community of which he is a part (Dragnea A., 2001). In the didactic strategy, the forms of organization of the physical education activity occupy an important place. They create the methodical-organizational framework for achieving the objectives of the school physical education system (Tudor, Bompa ., 2002)

In a class of students there are as many individualities as there are children (G. Rață , BC Rață, 2006). Thus, the direct knowledge of schoolchildren helps to distinguish the healthy and well-developed ones from those with problems in physical development, to check the stage of development of motor skills according to age, to the efficiency of the means used in the physical education activity to achieve the above-mentioned objectives (Emilia Florina Grosu, 2009).

The new requirements and conditions formulated by the development of society impose on the didactic process of physical education its enrollment in the idea of modernizing the activity, imposing a richer content and a complex methodology based on a deep knowledge of the level of development and growth of the organism at a given moment (Epuran Mihai, 2005).

That's why I stopped on this topic in order to penetrate and know its secrets better and to know how to act according to the pluses and minuses obtained so that I can adapt in the future activity to the content, strategies and differentiated forms that determine increasing the efficiency of the didactic process (Tudor, V., 1999).

Considerations for which I chose this work are also related to the need to have the greatest possible efficiency in teaching physical education in grades I - IV, from the desire to clarify some aspects regarding the development of motor skills at the level of 7-11 year old students and to establish effectiveness (Bitang, Viorel, 2009), the place and duration in the structure of the lesson of the most significant movement games for the above-mentioned purpose, the development of motor skills and the education of young schoolchildren (Horghidan, Valentina, 1997).

The goal the work.

In the paper I set out to investigate whether:

- the effort made in physical education lessons, systematically and correctly dosed, has the role of optimizing and perfecting the development process (physical, motor and mental) of the students bodies;
- the consistent practice of movement games in the school activity (class and optional lessons) and independent activity contributes to:
 - strengthening the spirit of discipline and organization;
 - facilitating the introduction of greater effort into the lesson;
 - faster development of motor skills (speed, skill, resistance, strength and mobility);
 - increasing the conscious effort in the direction of obtaining educational effects, having a beneficial influence on all sides of the personality.

For this work we have established the following tasks:

- studying the theme in specialized literature;
- testing the level of physical development and the level of development of motor qualities;
- the choice of exercise structures and movement games used in physical education lessons;
- making measurements and final tests;
- data processing and their interpretation.

The hypothesis of the work.

By using movement games in a rhythmic way within physical education lessons, after a judiciously elaborated planning, I believe that they will contribute essentially to the faster development of motor qualities (speed, skill, resistance, strength and mobility), to strengthening the spirit of discipline and organization, to a faster adaptation to the effort in the physical education lesson.

Work methodology.

I did the study and personal research for the preparation of the paper at the College National "Vasile Goldiș" Arad, which has a properly equipped physical education room and a sports field.

The study was carried out during the 2022-2023 school year, between September and February, including second grade students. Children who participated in three physical education lessons per week (2 from the common core + 1 optional) were co-opted in the experimental group with a number of 11 students, of which 6 are boys and 5 are girls. The students in **the control group** did not participate in the optional lesson, but only in the 2 hours of the common core. Its staff is 11 students, 7 boys and 4 girls. The subjects are between 7-8 years old. The initial measurements were carried out in the first semester (September 2022), and the final tests took place in February 2023. During the experiment, we used movement games, which include the following: "Go the ball", "Treadmill", "Traction in the stick", "Hit the ball", "The ball on the tower", "The race with three legs" (Septimiu Florian Todea, 2002). These games were used during the experiment in physical education lessons.

Anthropometric measurements were performed: height, body weight, chest circumference. To assess the general physical development, the degree of development, the motor qualities, we used the following tests and norms (Tudor, Bompă, 2003):

- a) Speed running over a distance of 20 meters;
- b) Throwing the ball away from the spot;
- c) Running for the duration at a uniform moderate tempo (as much as everyone can);
- d) Vertical clearance;
- e) Application course (a combined test for testing general skills).

Research methods use in the development job

In the development the work I used next methods (Gagea A., 2010):

- e) Bibliographic study;
- f) The experimental method;
- g) The statistical-mathematical method of data processing (Stefan Tudos, 2000). The indicators we used in this research are: arithmetic mean, amplitude, standard deviation, coefficient of variability;
- h) Graphical method.

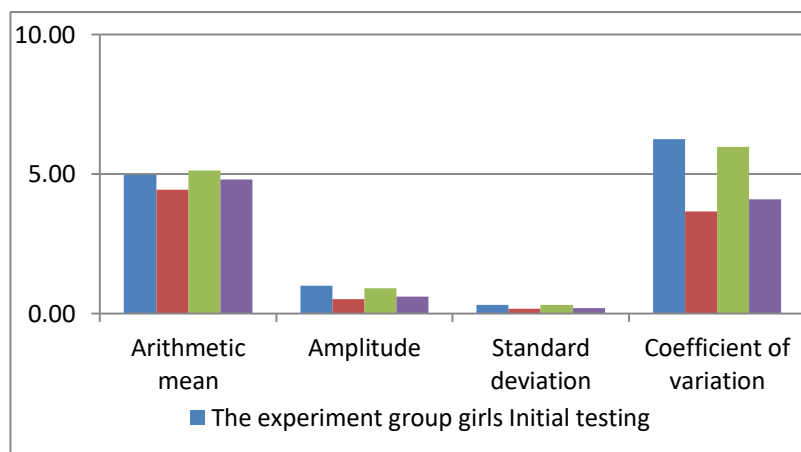
Results.

From the analysis indicators statistically looking performances experimental at speed running (experimental group/control group), the following can be formulated conclusions:

- been stabilized arithmetic mean, in the experimental group - speed run 20 m, for test originally it was 4.96 again for final test of 4.43, and for control group in the test initial the value average was 5.12 again for final test value being 4.81.

Table no . 1 - Dynamics performances experiment obtained in the 20 m speed run test

Arithmetic mean	4.96	4.43	5.12	4.81
amplitude	1	0.5	0.9	0.6
Standard deviation	0.31	0.16	0.31	0.20
Coefficient of variation (CV)	6.26	3.65	5.98	4.10

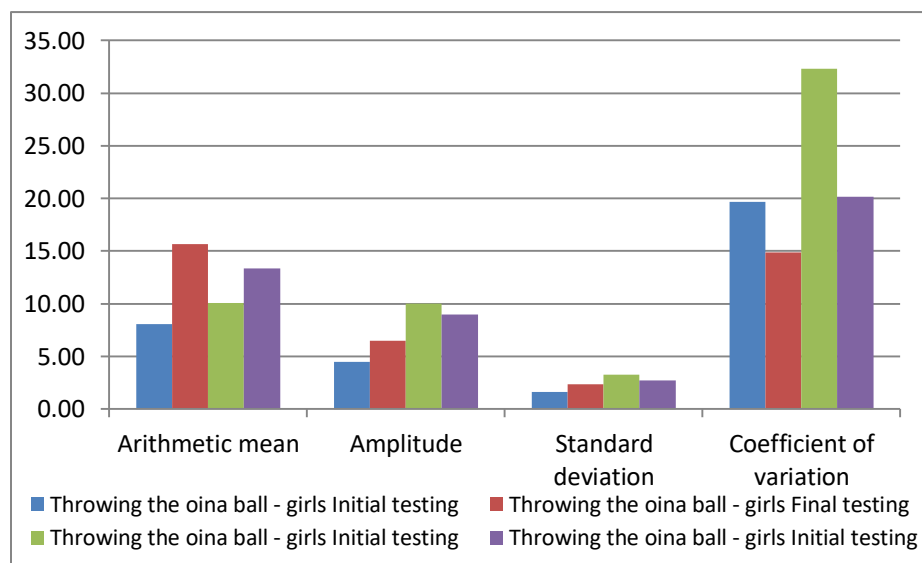


Graph no . 1 - Evolution indicators statistically in the speed run test on the distance of 20m

The arithmetic mean value, in the experimental group - throwing mutton balls, for test originally it was 8.09 again for final test of 15.69; and for control group in the test initial the value average was 10.09 again for final test value being 13.36.

Table no . 2 – Dynamics performances experiment obtained in the sample of **throwing the oina ball**

Arithmetic mean	8.09	15.69	10.09	13.36
amplitude	4.50	6.50	10.00	9.00
Standard deviation	1.59	2.33	3.26	2.69
Coefficient of variation (CV)	19.70	14.85	32.33	20.15

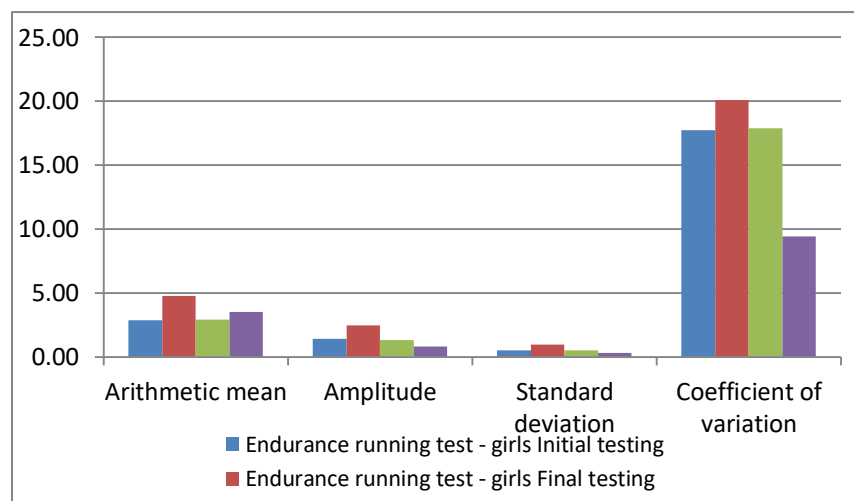


Ggraph no . 2 – Evolution indicators statistically in the **the oina ball** throwing test

The arithmetic mean value, in the experimental group – long run, for test initially it was 2.86 again for final test of 4.75; and for control group in the test initial the value average was 2.89 again for final test value being 3.50.

Table no . 3 - Dynamics performances experiment obtained in the **endurance** running test

Arithmetic mean	2.86	4.75	2.89	3.50
amplitude	1.40	2.45	1.30	0.80
Standard deviation	0.51	0.95	0.52	0.33
Coefficient of variation (CV)	17.72	20.08	17.91	9.43



Graph no . 3 – Evolution indicators statistically in the **endurance** running test

The arithmetic mean value, in the experimental group - relaxation, for test initially it was 15.36 again for final test of 17.92, and for control group in the test initial the value average was 14.88 again for final test value being 16.13.

Table no . 4 – Dynamics performances experiment obtained in the sample of **vertical detachment**

Arithmetic mean	15.36	17.92	14.88	16.13
amplitude	2.50	2.50	4.80	4.50
Standard deviation	0.78	0.99	1.51	1.40
Coefficient of variation (CV)	5.06	5.54	10.17	8.69

The arithmetic mean value, in the experimental group - sample path application, for test initially it was 15.36 again for final test of 17.92, and for control group in the test initial the value average was 20.62 again for final test value being 19.80.

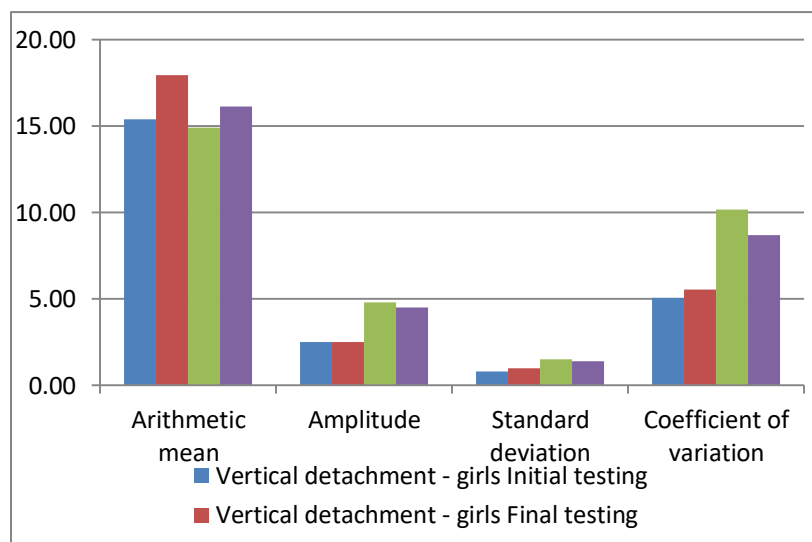
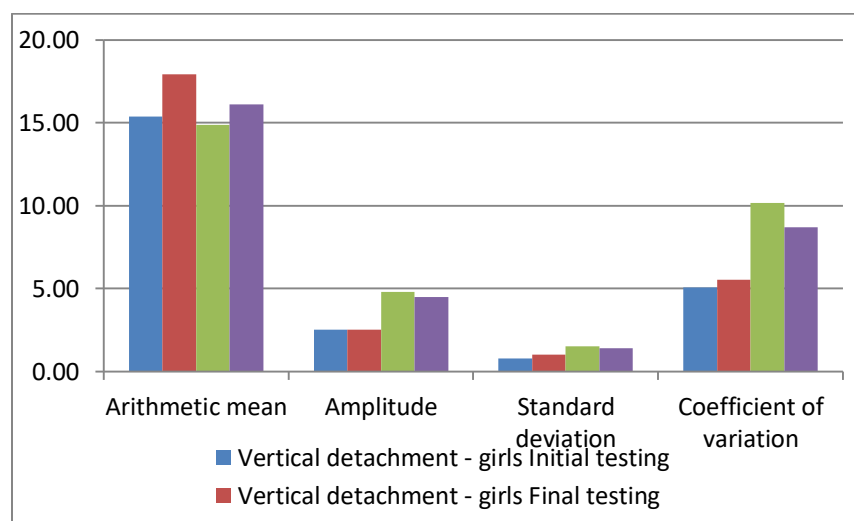


Table no . 5 - Dynamics performances experiment obtained in the the test of the application course

Arithmetic mean	15.36	17.92	20.62	19.80
amplitude	2.50	2.50	12.40	6.00 am
Standard deviation	0.78	0.99	3.34	1.70
Coefficient of variation (CV)	5.06	5.54	16.18	8.59



Graph no . 4 – Evolution indicators statistically in the the test of the application course

Conclusions.

The most important measure for the teacher or physical education teacher at the beginning of each school year is the performance of the main anthropometric measurements, particularly necessary for an efficient activity. Based on these, teachers and professors can form an image of the degree of development of the students, giving the possibility of the correct dosing of the effort depending on the morpho-functional particularities of each student.

The antepubertal period presents special particularities in terms of growth and physical development. The progress recorded from one test to another is also explained by the development and growth process they went through.

Contributing to physical and motor development, movement games also exert a beneficial influence on all aspects of personality, especially on intellectual development. The educational power of games consists in their contribution to the intellectual education of students, the development of knowledge processes, the formation of beliefs, skills and habits of moral conduct, the education of a positive attitude towards work.

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