# STUDY ON THE ROLE OF DYNAMIC GAMES IN THE PHYSICAL EDUCATION LESSON AT IV CLASS LEVEL

## PRODEA COSMIN<sup>1,\*</sup>, SZEMES RADU MIHAI<sup>2</sup>

ABSTRACT. The choice of a topic related to the role of dynamic games, on their learning and organization, involves a whole series of issues related mainly to the programming of the lesson systems, as well as the respect of the didactic principles. In this sense, the article aims to review the methodical requirements for the organization and development of dynamic games and their role in the development of the child. By content, form and effects, it presents some advantages over other physical exercises, offering favorable conditions for the simultaneous development of basic or specific motor skills, motor qualities, as well as psychic processes and personality traits. Its multiple educational values explain the inclusion of dynamic play, as a means of physical education, in the content of all lessons, at all classes of students, at all ages. Dynamic games are not only a means of physical education, but also a method of education. That is why we aim to highlight the educational role of dynamic games at the 4th grade level. Due to the influence on the whole personality of the child, dynamic games are the way in which the teacher can respond to the phrase: "Healthy mind in a healthy body".

**Keywords**: dynamic games, lesson systems, didactic principles, the role of dynamic games, qualities and motor skills, means of physical education, method of education, healthy mind in healthy body.

**REZUMAT**. *Studiu privind rolul jocurilor dinamice în lecția de educație fizică la nivelul claselor a IV-a*. Studiul privind rolul jocurilor dinamice, asupra învățării și organizării acestora, implică o serie întreagă de aspecte legate în principal de programarea sistemelor de lecții, cât și de respectarea principiilor didactice. În acest sens, acest articol își propune a trece în revistă cerințele metodice de organizare și desfășurare a jocurilor dinamice și rolul acestora în dezvoltarea copilului. Prin conținut, formă și efecte, prezintă unele avantaje fată de alte exerciții fizice, oferind condiții favorabile de dezvoltare simultană a deprinderilor motrice de bază sau specifice, a calităților motrice, precum și a proceselor psihice și a trăsăturilor de personalitate. Multiplele sale

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#### PRODEA COSMIN, SZEMES RADU MIHAI

valențe educative explică includerea jocului dinamic, ca mijloc al educației fizice, în conținutul tuturor lecțiilor, la toate clasele de elevi, la toate vârstele. Jocurile dinamice nu sunt doar un mijloc al educației fizice, ci și totodată o metodă de educație. De aceea ne propunem să reliefăm rolul educativ al jocurilor dinamice la nivelul clasei a 4-a. Datorită influenței asupra întregii personalități a copilului, jocurile dinamice, constituie modul prin care profesorul poate răspunde sintagmei: "minte sănătoasă în corp sănătos".

**Cuvinte cheie**: jocuri dinamice, sisteme de lecții, principii didactice, rolul jocurilor dinamice, calități și deprinderi motrice, mijloc al educației fizice, metodă de educație, minte sănătoasă, corp sănătos.

#### Introduction

Dynamic play is one of the most effective and important means of education. Movement games and poles largely ensure that the goals of physical education and sport are met. They favor the simultaneous development of basic or specific motor skills and motor qualities, as well as moral-volitional skills and traits and personality.

The right game learned, influences the student throughout the life. Through him he is accustomed to bear with dignity the defeat, to manifest a spirit of "fair-play", and to taste of the spirit of victory. Through dynamic games the spirit of sacrifice and perseverance, the courage, having a stronger effect than the spontaneous one are cultivated, provided that the teacher knows not only basic rules of the game but also the technique of their development, his educational influence, developing visual acuity, hearing, intelligence, the spirit of observation and collegiality.

Students in the primary cycle, before approaching certain topics and elements of movement (of dynamics), must know very well the rules of hygiene, basic in maintaining and educating the health, to learn them and to show them with pleasure, proving that I understand their role and purpose. The need for movement and play is one of the fundamental needs of the child. For optimal physical and mental development, light is required.

Dynamic games have an important role in the multilateral physical development of the students, in maintaining and strengthening the health, in creating a disposition, which is why I recommend including them in the physical education lesson. Well chosen and organized with care and conscience, they can have a profound emotional effect, creating a strong sense of satisfaction for those who participate in their performance.

The term "dynamic game" (or motion game) comes from the Latin word "jocus" and the French word "dynamique".

M. Epuran (1990) argues that dynamic games are total activities, attractive, spontaneous, free, natural and disinterested, having recreational and compensatory valences.

Gh. Cârstea (2000), says that "dynamic games are fun activities, with special implications on personality development and for which active and creative motor actions are characteristic, motivated by its subject (theme, ideas). These actions are partially limited by certain rules and are oriented towards overcoming different difficulties (obstacles) to achieve the proposed objectives (to win, to conquer, to own certain processes, etc.)".

### **Objectives**

In this sense, we assume that following the use of motion games, within the lesson of physical education and sport, will improve the indications regarding the results of the norms of the motor qualities (speed, skill, strength, endurance, etc.).

Following the experiment, the measurements made and the use of the games, the proposed hypothesis will be verified as follows: based on the data provided by the specialized literature in this field, as well as from my own experience, we have formulated some general and specific theoretical considerations accompanied by proposals whose efficiency will be confirmed later, at the final tests in the paper. The results of the control norms regarding the motor qualities of the experiment were substantially improved, these being presented and detailed later in the chapter on the analysis of the results.

#### Materials and methods

## The place of the experiment







**Figure 2.** The handball field

**The initial and final tests** were carried out both on the sports field of the Andrei Şaguna High School in Deva (running speed 5x5 m commute) and in the school's gymnasium (long jump on site and vertical target throw).

**Anthropometric measurements** were made within the school's gymnasium, using means and materials from the school's equipment, as well as in the school's medical office.

All experiments were performed on a sample of 2 relatively homogeneous student classes, from the "Andrei Şaguna" Gymnational School in Deva, 4D control class with a staff of 24 students (16 boys and 8 girls), and experiment 4B class with one effectively of 30 students (16 boys and 14 girls). We used different anthropometric measurements:



**Figure 3.** Height measurement

**Figure 4.** Weight measurement

**Figure 5.** Measuring the width of the arms

**Figure 6.** Measuring the length of the sole

In the same experiment I conducted a battery of tests at the beginning of the school year and one at the end of the school year from the following tests:



**Figure 7**. Running speed, 5x5 m commute (motor quality speed - running speed)



**Figure 8**. Vertical target throw (motor skill - specific skill)



**Figure 9**. The long jump from the spot (motive force - muscle strength of the lower limbs)

The research methods used and implicitly in the elaboration of this paper are: the documentation, the method of observation, the statistical method, the experiment method, the results of the analysis.

As a structure of the movement games, we presented the type of dynamic games according to: the lesson check, the game title, the objectives pursued, the place of performance,

class, features, number of participants, duration of the game, necessary materials, game description, and the graphic presentation.

In the following we will present some of the dynamic games used in physical education lessons: flower birds, wonder colors, the board, tunel ball, 3 heads, ball in zig zag, flying circle, fight in a foot, the indian dance, colored balls, treadmill, the statues, ducks and hunters, defend the city, the happy country, the airplanes, the border, furious locomotive, never target, destroy the castle, zipper, prepared military, change the side, country country we want to host.

Continuously we will present the graphics of the experience class on height, weight, arm width and the length of the sole:

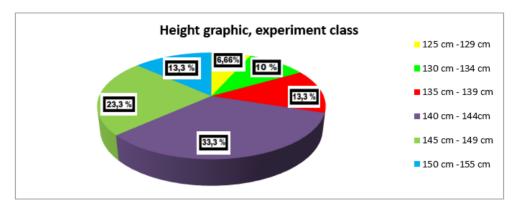


Chart 1. Heigh graphic, experiment class

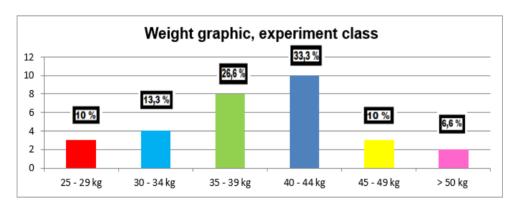


Chart 2. Weight graphic, experiment class

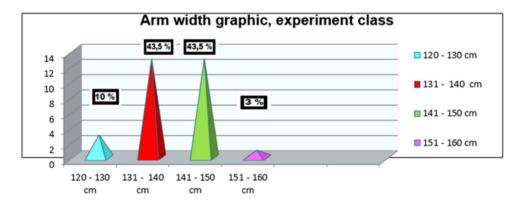
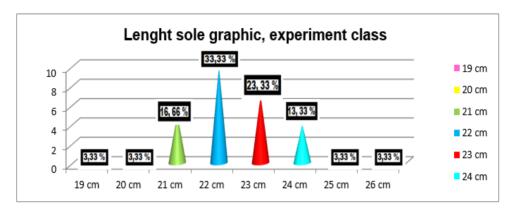


Chart 3. Arm width graphic, experiment class



**Chart 4.** Length sole graphic, experiment class

### Data analysis and interpretation, experiment class

At the initial testing (**speed run, speed race, 5x5 m**), the times was between 7, 37 sec. and 12, 11 sec, and at the final testing (**speed run, speed race, 5x5 m**), the times was improved, and it was between 7, 34 sec. and 12, 01 sec.

The average running time, the shuttle race was as follows: at the initial testing, experiment class, the average running speed being 9.32 sec. and at the final test, experiment class, the average running speed is 9.18 sec.

The general time improvement is observed, the average per class decreases from 9.32~sec. at 9.18~sec, thus obtaining an improved value with 0, 14~sec / general.

At the initial testing (**vertical throwing**), the average of 2/4 throws was 13.33%, the average of 3/4 throws was 50%, and the average of 4/4 throws was 36.33%.

At the final testing (**vertical throwing**), the average of  $\frac{3}{4}$  throws was 46.66%, the average of  $\frac{4}{4}$  throws was 53.33%.

It is observed that those who succeeded 2/4 throws, obtained better results, increasing a step, to 3/4 throws, and those who had 3/4 successes throws, increased to 4/4 throws, so that the percentage of success 4/4 throws increased from 36.33% to 53.33%, obtaining as follows: **17** % **progress**.

At the initial testing (**long jump**), the results was between 110cm and 170cm.

The percentage of jumps was as follows: between 110 - 119 cm, with a percent of 6.66%, between 120 - 129 cm, a percent of 10%, between 130 - 139 cm a percent of 40%, between 140 - 149 cm a percent of 16.66%, and more than > 150 cm, a percent of 26.66%.

At the final testing, (**long jump**,) the results has improved, thus: between 120 and 175cm.

The percentage of jumps was as follows: between 110 - 119 cm a percent of 3.33%, between 120 - 129 cm, a percent of 6.66%, between 130 - 139 cm a percent of 33, 33%, between 140 - 149 cm a percent of 26.66%, and more than > 150cm, a percent of 30%.

It is observed that the jumps were improved in some of the students, so that the class average increased from 138.5 cm to 142 cm, thus obtaining an additional value **3.5 cm / class average**.

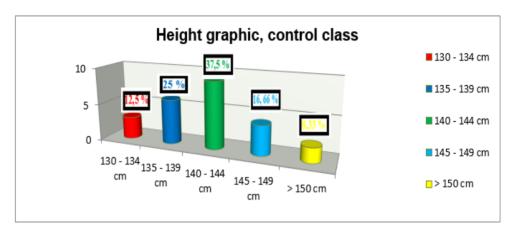


Chart 5. Height graphic, control class

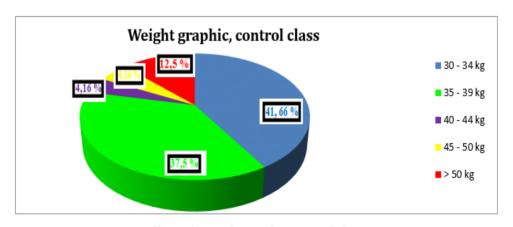
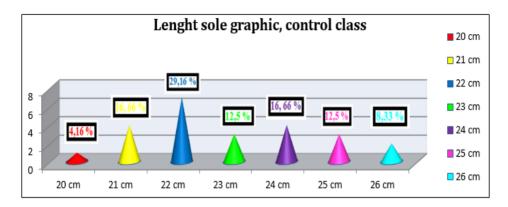
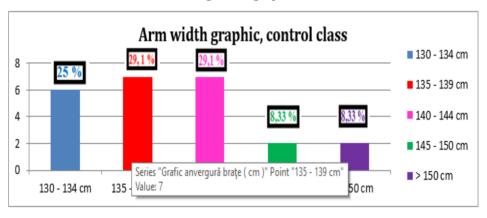


Chart 6. Weight graphic, control class



**Chart 7.** Length sole graphic, control class



**Chart 8.** Arm width graphic, control class

## Data Analysis and interpretation of results, control class

At the initial testing, **speed running, shuttle race, 5x5 m**, the times were between 7, 72 sec. and 12, 39 sec. At the final test, **speed running, shuttle race, 5x5 m**, the times had improved and it was between 7, 27 sec. and 12, 18 sec.

The average running time, the shuttle race was as follows:

At the initial testing, control class, the average running speed being 9.37 sec. At the final test, control class, the average running speed is 9.19 sec.

The general time improvement is observed, the average per class decreases from 9.37 sec. at 9.19 sec, thus obtaining an improved value with  $\mathbf{0}$ ,  $\mathbf{18}$  sec / general.

At the initial testing, **vertical target throw**, the average of 2/4 throws was 16.66% percent, the average of 3/4 throws was 37.50% percent, and the average of 4/4 throws was 45.83% percent. At the final testing, **vertical target throw**, control class, the average of 3/4 throws was 41.66% percent, the average of 4/4 throws was 58.33% percent.

It is observed that those who succeeded 2/4 throws, obtained better results, increasing a step, to 3/4 throws, and those who had 3/4 successes throws, increased to 4/4 throws, so the percentage of success 4/4 throws increased from 45.83% to 58.33%, thus obtaining a **progress of 12,5%**.

At the initial testing, **long jump**, the results between 110cm and 170cm.

At the control class, the jump percentage was as follows: between 110 - 119 cm - 4.16% percent, between 120 - 129 cm - 12.5% percent, between 130 - 139 cm - 33.3% percent, between 140 - 149 cm -16.66 % percent, and more than > 150 cm - 33.33% percent.

At the final testing, **long jump**, the results have improved, between 115cm and 175cm.

At the control class, the percentage of jumps was as follows: between 110 - 119 cm - 4.16% percent, between 120 - 129 cm - 4.16% percent, between 130 - 139 cm - 37.5% percent, between 140 - 149 cm - 20.83% percent, and more than > 150 cm - 33.33% percent.

It is noticed that the jumps were improved in some of the students, so that the class average increased from 141.25 cm to 143.95 cm, thus improving with the **2.7 cm/class average**.

## **Conclusions and proposals**

As a result of the obtained results, it is observed that the indices of the basic motor qualities of the work have been substantially improved, namely:

## The experiment class:

- Speed indices are improved by 0.14 sec;
- Within the target throw, a 17% progress is observed;
- In the long jump from the spot, the progress with 3.5 cm. In the witness class:
- Speed indices are improved by 0.18 sec;
- In the target shooting, there is a 12.5% progress;
- In the long jump from the spot, you can see the progress with 2.7 cm.

I propose both from the point of view of a physical education and sports teacher, and from the point of view of a physical therapist, that in the physical education lesson, different attractive exercises, competitions, sports games, applied sticks, and especially dynamic games, will be used. To lead to the creation of a good mood and well-being of the students, an atmosphere of relaxation, joy and good will.

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#### PRODEA COSMIN, SZEMES RADU MIHAI

## **APPENDIX**

			Г		
Name	Initial test class	Initial test class	Initial test class experiment		
and surname	experiment running	experiment vertical	jumping in		
	speed race 5x5 m	throwing at the target	length		
A.L.	7,99 s	4/4	170 cm		
A.A.	9,41 s	3/4	150 cm		
B.A.	9,28 s	3/4	130 cm		
B.R.	10,01 s	3/4	125 cm		
B.I.	8,62 s	4/4	145 cm		
B.L.	9,22 s	2/4	130 cm		
B.R.	9,34 s	3/4	130 cm		
C.A.	9,36 s	4/4	135 cm		
C.C.	8,83 s	3/4	140 cm		
D.A.	10,41 s	2/4	120 cm		
D.A.	9,43 s	3/4	145 cm		
D.I.	10,46 s	4/4	130 cm		
I.I.	10,18 s	2/4	130 cm		
J.A.	10,33 s	3/4	125 cm		
K.I.	8,18 s	3/4	135 cm		
L.R.	8,38 s	4/4	140 cm		
M.B.	9,23 s	3/4	140 cm		
M.R.	8,93 s	4/4	150 cm		
M.R.	8,77 s	4/4	165 cm		
O.R.	8,57 s	4/4	155 cm		
0.D.	9,24 s	3/4	130 cm		
0.D.	10,20 s	3/4	135 cm		
0.D.	8,90 s	4/4	150 cm		
P.L.	8, 43 s	3/4	135 cm		
P.I.	11,89 s	2/4	115 cm		
P.A.	9,16 s	3/4	130 cm		
S.L.	8,71 s	3/4	135 cm		
S.T.	7,37 s	4/4	170 cm		
S.D.	8,70 s	4/4	150 cm		
V.I.	12,11 s	3/4	115 cm		
A.L.	7,92 s	4/4	175 cm		
A.A.	9,31 s	4/4	150 cm		
B.A.	9,22 s	3/4	135 cm		
B.R.	9,88 s	3/4	130 cm		
B.I.	8,52 s	4/4	150 cm		
B.L.	9,11 s	3/4	130 cm		
B.R.	9,11 s	3/4	130 cm		
יווים	7,103	3/4	130 (111		

Name	Initial test class	Initial test class	Initial test class experiment
and surname	experiment running	experiment vertical	jumping in
	speed race 5x5 m	throwing at the target	length
C.A.	9,16 s	4/4	140 cm
C.C.	8,68 s	3/4	145 cm
D.A.	10,34 s	3/4	125cm
D.A.	9,34 s	4/4	145 cm
D.I.	10,22 s	4/4	130 cm
I.I.	10,03 s	3/4	130 cm
J.A.	10,01 s	3/4	130 cm
K.I.	8,02 s	3/4	140 cm
L.R.	8,04 s	4/4	145 cm
M.B.	9,11 s	4/4	140 cm
M.R.	8,65 s	4/4	155 cm
M.R.	8,62 s	4/4	165 cm
O.R.	8,51 s	4/4	165 cm
O.D.	9,14 s	3/4	135 cm
0.D.	9.98 s	4/4	140 cm
0.D.	8,67 s	4/4	155 cm
P.L.	8,41 s	3/4	135 cm
P.I.	11,80 s	3/4	120 cm
P.A.	9,03 s	3/4	135 cm
S.L.	8,58 s	3/4	140 cm
S.T.	7,34 s	4/4	175 cm
S.D.	8,61 s	4/4	155 cm
V.I.	12,01 s	4/4	115 cm

Name and surname	Initial test control class running speed race 5x5 m	Initial test control class vertical throwing at the target	Initial test control class jumping in length	Name and surname	Final test control class running speed race	Final test control class vertical throwing	Final test control class jumping in length
					5x5 m	at the target	
B.C.	8,80 s	4/4	155 cm	B.C.	8,70 s	4/4	160 cm
B.A.	9,81 s	3/4	140 cm	B.A.	9,66 s	3/4	145 cm
B.A.	10,09 s	2/4	130 cm	B.A.	10,03 s	3/4	130 cm
B.A.	9,34 s	3/4	130 cm	B.A.	9,11 s	4/4	130 cm
B.R.	9,01 s	3/4	120 cm	B.R.	8,98 s	3/4	125 cm
B.B.	8,05 s	4/4	145 cm	B.B.	8,02 s	4/4	145 cm
B.B.	12,39 s	2/4	125 cm	B.B.	12,18 s	3/4	130 cm
B.P.	11,17 s	3/4	130 cm	B.P.	11,10 s	3/4	135 cm

#### PRODEA COSMIN, SZEMES RADU MIHAI

Name and surname	Initial test control class running speed race 5x5 m	Initial test control class vertical throwing at the target	Initial test control class jumping in length	Name and surname	Final test control class running speed race 5x5 m	Final test control class vertical throwing at the target	Final test control class jumping in length
B.A.	9,50 s	4/4	150 cm	B.A.	9,32 s	4/4	150 cm
C.R.	8,78 s	3/4	130 cm	C.R.	8,71 s	3/4	130 cm
D.A.	8,85 s	3/4	140 cm	D.A.	8,61 s	4/4	140 cm
G.M.	10,08 s	4/4	150 cm	G.M.	10,03 s	4/4	150 cm
I.L.	9,03 s	4/4	165 cm	I. L.	8.56 s	4/4	170 cm
I.A.	7,81 s	4/4	170 cm	I.A.	7,65 s	4/4	175 cm
I.A.	9,64 s	2/4	110 cm	I.A.	9,44 s	3/4	115 cm
H.J.	10,73 s	3/4	125 cm	H.J.	10,43 s	4/4	130 cm
L.L.	9,48 s	4/4	130 cm	L.L.	9,16 s	4/4	135 cm
N.F.	9,50 s	3/4	135 cm	N.F.	9,22 s	3/4	135 cm
S.A.	9,11 s	4/4	135 cm	S.A.	9,04 s	4/4	135 cm
S.D.	9,31 s	4/4	145 cm	S.D.	9,12 s	4/4	145 cm
T.A.	8,86 s	3/4	135 cm	T.A.	8,68 s	3/4	140 cm
T.T.	7,72 s	4/4	170 cm	T.T.	7,27 s	4/4	175 cm
V.B.	8,74 s	2/4	165 cm	V.B.	8,61s	3/4	165 cm
Z.D.	9,21 s	4/4	160 cm	Z.D.	9,01 s	4/4	165 cm