

## CONTRIBUTIONS OF THE MOVEMENT GAMES TO THE DEVELOPMENT DRIVING SKILL SPEED IN THE PRIMARY SCHOOL

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**Keywords:** speed, movement games, primary school, pupils

**Abstract:** Using of the movement games motion during physical education classes should be taken into account as they engage in activity as many children, and on the basis of their stay the contest. In the choice of movement games we took into account the objectives, means and material resources available to the school and the age of the pupils to whom they were addressed. The hypothesis in the spirit which runs research is that, if they use mainly in the physical education lesson at primary movement games, on objectives formative will get better development of driving skills, in particular speed, compared with the situation which are used mostly traditional the analytical exercises. Using the movement games as a method and means of developing driving skills, particularly the speed, led to a positive development indices of speed to all students enrolled in research, assessment test results clearly highlighting this.

### **Introduction**

The education responds to training needs in various fields of human personality: the intellectual, physical body, sociomoral, aesthetic etc. Key areas of education are essential dimensions of the human being and physical education contributing to the harmonious development by creating balance of the psychophysical being of the individual (Cucuș C. et al, 2009, p.110).

Physical education activities affecting output in all fields, in all professions, whether it is based on productive labor, physical or intellectual, conditioning health, ability to work and contribute to restoring forces.

Romanian education reform proposed changes that are necessary and require essentially passing from one informative education to one formative. The curriculum of physical education for primary scholl

express the vision underpinning the Romanian educational system, in pursuit of the aims laid down by the national education law, relating to the free, integral and harmonious human individuality and formation of autonomous personality of the pupils.

Using of the movement games motion during physical education classes should be taken into account as they engage in activity as many children, and on the basis of their stay the contest. In the choice of movement games we took into account the objectives, means and material resources available to the school and the age of the pupils to whom they were addressed.

From experience we have found that physical education classes are the most appreciated and enjoyed by pupils when they are praised for correct movements they make, for skilled movement correctly and completely, when children move freely and effectively eliminating downtime during entire activity.

The specific of the movement games consists of using physical exercises. They are games with rules and are the primary means of development and physical education of the children. Associate the music helps develop a sense of rhythm and shape the aesthetics feelings. As means that they seek in a way as pleasant to improve driving skills base to develop driving skills to contribute to the psychomotor education (Epuran M., 1974, p.89-91).

Acting on driving skills development is performed before and during the process of forming the habits of different categories, thus constituting one of the most important finalities of school physical education in terms of physical harmonious development and combating the defective attitudes.

In the physical education class each driving skills has a special location. Speed and skill develops after "selective influence of the musculoskeletal system" and the force or resistance before "recovery after exercise."

The speed is one of the driving skills of expression whose value is highlighted mainly based on genetic background that benefit every individual, having forefront qualities of the nervous system that facilitates frequency movements. This should not lead us to the idea that the speed can not be educated. Education of speed implies sustained action on the factors perfect on those less perfect and the development of other qualities, particularly strength and coordination.

### Material method

This research aims to highlight the effectiveness of movement games as a means to develop driving skills speed at at 4<sup>th</sup> grade pupils.

The hypothesis in the spirit which runs research is that, if they use mainly in the physical education lesson at primary movement games, on objectives formative will get better development of driving skills, in particular speed, compared with the situation which are used mostly traditional the analytical exercises.

The experiment was conducted between September 23, 2014 and June 12, 2015 at Corocaiesti Secondary School, Suceava County. Physical education classes were held in September-June, from April to June outdoors and from November to March in the classroom equipped for this period of cold weather. The research we conducted an in classes IV A and IV B with a sample of 38 pupils, boys and girls, including 19 pupils from Class IV A, representing 6 girls and 13 boys and 19 pupils from class IV B, representing 5 girls and 14 males.

Both groups had the same training conditions and the same materials equipped. Training should be emphasized that the control group was made using traditional methods, while the experimental group was made using mostly movement games.

The pupils in both classes were initially tested during the final 22-26 September 2014 and during 1-5 June 2015. To test pupils' in research were included four control tests: Running speed 25m from a standing start; long jump; shuttle with two balls; passes to the wall with hanball ball in 30 seconds.

### Results and discussions

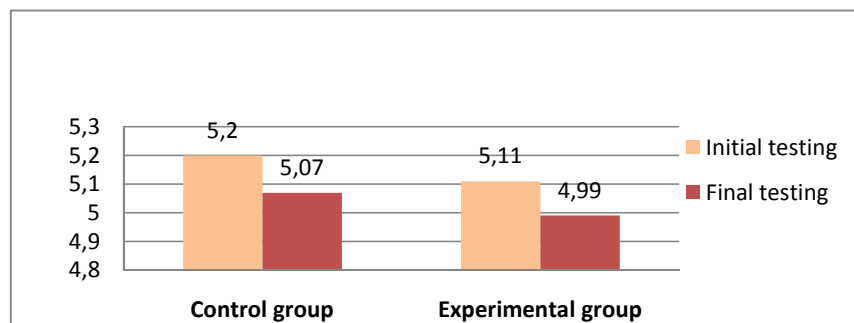
In the two testings applied to experimental and control groups of subjects were obtained the following results (Table 1):

Statistical parameters	Running speed 25m from a standing start (s)		Long jump (m)		Shuttle with two balls (s)		Passes to the wall in 30 seconds (no. of repetitions)	
	IT	FT	IT	FT	IT	FT	IT	FT
<b>Experimental group – class IV A</b>								
Average	<b>5,11</b>	<b>4,99</b>	<b>2,86</b>	<b>3,08</b>	<b>10,19</b>	<b>10,17</b>	<b>16,31</b>	<b>17,42</b>
Minimum	<b>4,71</b>	<b>4,51</b>	<b>2,22</b>	<b>2,82</b>	<b>8,94</b>	<b>8,92</b>	<b>14</b>	<b>14</b>

Maximum	<b>5,68</b>	<b>5,43</b>	<b>3,40</b>	<b>3,40</b>	<b>11,33</b>	<b>11,30</b>	<b>18</b>	<b>20</b>
Standard deviation	<b>0,25</b>	<b>0,24</b>	<b>0,29</b>	<b>0,24</b>	<b>0,63</b>	<b>0,59</b>	<b>1,37</b>	<b>1,77</b>
Coefficient of variability	<b>4,98</b>	<b>5,01</b>	<b>10,13</b>	<b>7,79</b>	<b>6,18</b>	<b>5,80</b>	<b>8,39</b>	<b>10,16</b>
<b>Control group – class IV-a B</b>								
Average	<b>5,20</b>	<b>5,07</b>	<b>2,58</b>	<b>2,79</b>	<b>10,54</b>	<b>10,52</b>	<b>14,84</b>	<b>16,21</b>
Minimum	<b>4,66</b>	<b>4,64</b>	<b>1,80</b>	<b>2,12</b>	<b>9,37</b>	<b>9,35</b>	<b>11</b>	<b>9</b>
Maximum	<b>5,55</b>	<b>5,99</b>	<b>3,20</b>	<b>3,70</b>	<b>12,09</b>	<b>12,12</b>	<b>18</b>	<b>19</b>
Standard deviation	<b>0,43</b>	<b>0,34</b>	<b>0,41</b>	<b>0,41</b>	<b>0,67</b>	<b>0,67</b>	<b>1,77</b>	<b>2,46</b>
Coefficient of variability	<b>8,2</b>	<b>6,7</b>	<b>15,89</b>	<b>14,69</b>	<b>6,35</b>	<b>6,36</b>	<b>11,92</b>	<b>15,17</b>

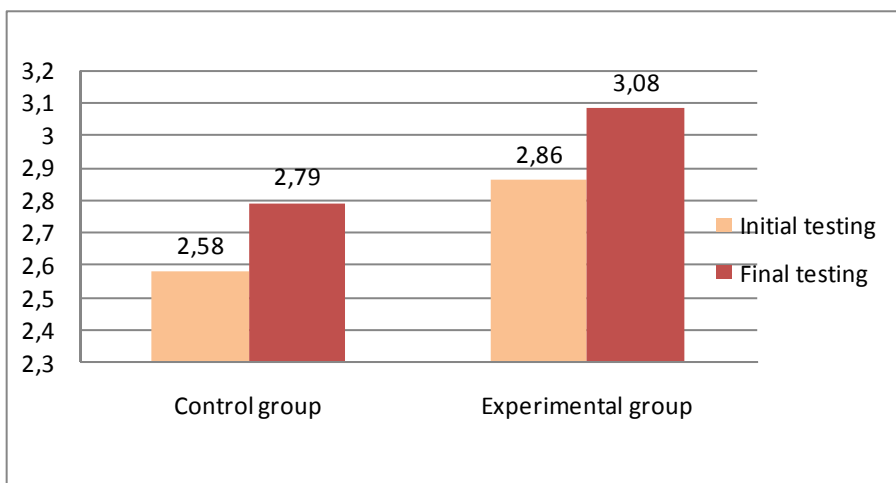
**Table 1 Results from control tests**

At the running speed of 25 m from standing start, the arithmetic average of initial testing the control group (5.20 s) is weaker than the experimental group (5.11 s). If we follow developments in final testing times we see that progress is approximately the same (0.13 s in the control group, the experimental group was 0.12 s), but the experimental group has a better result (4.99 s) than the control group (5.07 s) (Figure 1). The standard deviation in the experimental group, the initial test has a value of 0.25 and 0.24 in final testing, the control group is 0.43 and 0.34 respectively. The coefficient of variation is a high homogeneity of the two classes as the initial testing of 8.2% (control group) and 6.7% (the experimental group) and the final testing of 4.98% and 5.01%.



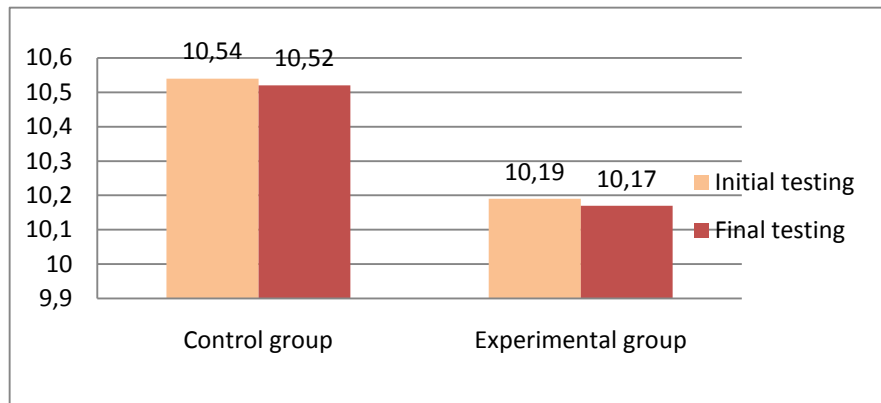
**Figure 1 Evolution of results at running speed on 25 m from standing start**

The average of initial testing the control group (2.58 m) is weaker than the experimental group (2,86m) at the long jump. The final testing control group has an average of 2,79m (progress 31cm) and the experimental group 3,08m (progress 22 cm) (Figure 2). Even if progress is less experienced group purely mathematical value ( $22 < 31$ ), the length of the jumps this group is superior to the control group. Is observed progress at the both groups. The standard deviation in the experimental group, the initial test has a value of 0.29 and 0.24 in final testing compared to the control group which has 0.41 and 0.41 respectively. Values are low which demonstrates a low dispersion values from the mean. The coefficient of variation present values easily interpreted in two classes, initial testing experiment with 10.13% and 7.79% in the final. The control group showed values of 15.89% initial testing and 14.69% to the final. Here we see a decrease in homogeneity.



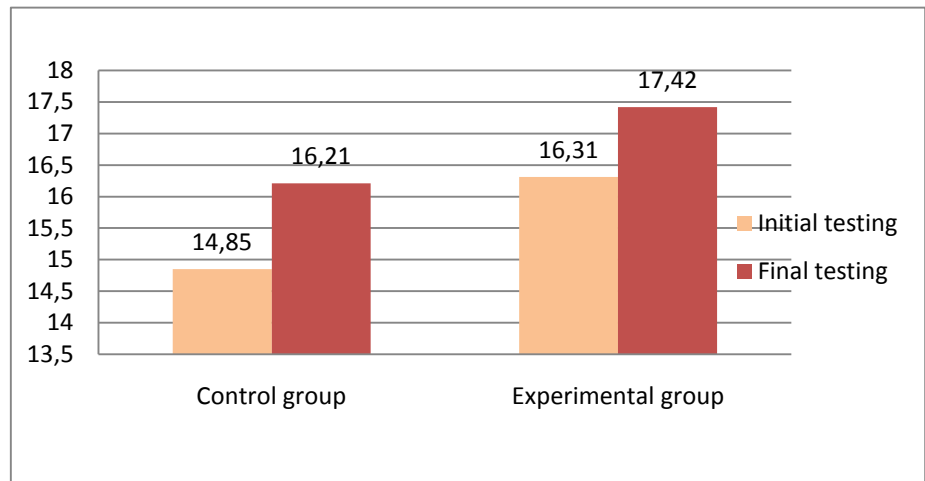
**Figure 2 Evolution of results in the long jump**

For test shuttle with two balls arithmetic average of initial testing experimental group (10.19 s) was superior to the control group (10.54 s). If we follow developments in final testing time we see that the group has a better experiment (10.17 s) to be the control group (10.52 s) although both groups improved their time by 0.02 s (Figure 3). Both groups had the same trend. The standard deviation for the initial test and the final one in the control group is 0.67. The experimental group recorded different results from initial testing to final 0.63 and 0.59, the dispersion is small. The coefficient of variation of the control group recorded the initial testing is 6.65% and 6.35% final testing. The experimental group has the values 6.18% and 5.80% from initial testing to final. There is a better homogeneity in the experimental group.



**Figure 3 Evolution of results at shuttle with two balls**

For the Passes to the wall in 30 seconds the arithmetic average of initial testing the control group is 14.84 and 16.31 of the experimental group, the experimental group improved noticeably. The final testing control group has an average of 16.31 and 17.42 at the experiment group. We can see that the difference is in favor of experiment and should be considered progress. The standard deviation in the experimental group, the initial test has a value of 1.37 and 1.77 in final testing, versus the trainer who has 1.77 and 2.46 respectively. The values indicate a low dispersion values from the mean. The coefficient of variation this time indicates a better homogeneity in the control group. The initial testing has registered a value of 6.36 and 6.35 compared to the final value of 8.39 (control group) at initial testing and 10.16 in the final.



**Figure 4 The evolution results from the passes to the wall in 30 seconds**

### **Conclusions and discussions**

Analyzing the results of the control tstings we see that pupils in the experimental group had better results than those in the control group. Even if some samples values were close, we see that progress is still higher in the experimental group.

Using the movement games as a method and means of developing driving skills, particularly the speed, led to a positive development indices such quality to all students enrolled in research, assessment test results clearly highlighting this.

I noticed that the game movement can be used at all times of the lesson, the less cans the musculoskeletal system for selective influence.

We can say that the primary method of training students in our case pupils from the fourth grade through movement games, gave better results than traditional methods so that the research hypothesis was confirmed.

For a better development and optimum efficiency of the physical education lessons in primary school, I propose:

- in school physical education to carry out a selection of the most effective means and methods;
- in every link of the lesson to use motion games for attractiveness and ensuring children's interest in activities;
- using movement games because they can offer teachers the opportunity to observe the work of each student and correct actions or readjust game situation after children capabilities;
- using movement games that emphasize teamwork and collaboration, desire to improve, for the support towards the weakest and compensate for the shortcomings of some other qualities.

Starting from the finding that the homogenization team of pupils was achieved by significant progress for pupils with initial results weaker propose that planning and implementation of physical education classes in the lower grades provide for the use of the abundance of movements game to develop motor skills and training driving skills.

### **References**

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### **CONTRIBUȚII ALE JOCURILOR DE MIȘCARE LA DEZVOLTAREA CALITĂȚII MOTRICE VITEZA ÎN ÎNVĂȚĂMÂNTUL PRIMAR**

**Cuvinte cheie:** viteza, jocuri de mișcare, ciclul primar, elevi

**Rezumat:** În folosirea jocurilor de mișcare, în timpul orelor de educație fizică, trebuie să se țină seama ca acestea să angreneze în activitate cât mai mulți copii, iar la baza acestora să stea întrecerea. În alegerea jocurilor de mișcare am ținut cont de obiectivele urmărite, de mijloacele și baza materială de care dispune școala, cât și de vârsta elevilor cărora le-au fost adresate. Ipoteza în spiritul căreia se va desfășura cercetarea este aceea că, dacă se vor utiliza preponderent în cadrul lecției de educație fizică la clasele primare jocuri de mișcare, centrate pe obiective formative, se va obține o dezvoltare mai bună a calităților motrice, în particular a vitezei, față de situația tradițională prin care sunt folosite majoritar exercițiile analitice. Folosirea jocurilor de mișcare ca metodă și mijloc de dezvoltare a calităților motrice, în special viteza, au condus la o evoluție pozitivă a indicilor acestei calități la toți elevii cuprinși în cercetare, rezultatele probelor de evaluare evidențiind clar acest lucru.