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INFLUENCE GAME OF MOVEMENT ON THE PHYSICAL DEVELOPMENT OF PHYSICAL EDUCATION LESSON FROM PRIMARY SCHOOL

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Abstract

Purpose. We addressed this issue with the idea that current teacher, wants to inspire its students modern pleasure to work, to make physical effort to create habits and motivation to be healthy.

Method. This paper aims to implement motion gaming, enhanced, structured and implemented in physical education class at primary level.

The scientific approach we started from the premise that: If you use a program of games, relay races and runs the application will improve motor ability students.

Results. The difference between the two groups of subjects at final testing during Application 1 (experimental group 6.307 ± 1.077 , 6.514 ± 1.099 control group, were not statistically significant at $p \geq 0.05$) during Application 2 - During the course of the journey made application (group experiment 8.428 ± 1.289 , 8.554 ± 0.89 control group, were not statistically significant at $p \geq 0.05$) and throwing the target (experimental group 2.895 ± 0.658 , 0.842 ± 0.688 control group at a significance level $p \leq 0.0005$) improved due to the introduction in physical education classes and sports group experiment the independent variable (relays and pathways applied).

Conclusions. The results of these pathways applied in physical education lessons, we confirm the hypothesis that the effects of the work and in the lessons of physical education and sport active participatory methods in class IV are positive (significant) in children between 10 -11 years.

Key words: students, physical education, movement games.

Introduction

Physical education and school sport activities are of great importance in education of children and students in our country (Octav, 2008).

Physical education is that aspect of education which aims at the harmonious development of body, better health and physical qualities necessary labor cultivating sports activity.

Theory and practice of physical education experienced a continuous development. If at first it was subordinated to the narrow purposes only seen as a means to unwind after an intense intellectual activity, educational ideal considers a vital component that contributes to the child's personality development.

School group is also a group educational setting in which the education of the young generation, the factor that generates itself educational and recipient effects of education (Dragu, Cristea, 2000).

The physical education contribute to the functioning of the nervous system, providing favorable conditions for such intellectual activities. It also has an important role in training and education of conscience and moral conduct in the formation of positive traits of will and character (courage, determination, perseverance, firmness, etc.). It then makes its contribution to the driving qualities such as strength, accuracy, strength, ability, mobility etc. (Yakovlev and Bogdanov, 1950).

Physical education lesson to be understood as the main form of practicing physical exercise in an organized manner, with extended coverage area, starting in kindergarten and ends with the completion of higher education. It can be organized as an activity under the "core curriculum", but also as an activity set out in the school curriculum. As a basic form of the organization of physical education, lesson provides a uniform and systematic implementation of the objectives and content of physical education. The presence of students is mandatory both those working and those exempted medical practice. The activity is led by a teacher in an organized and conducted (Rata, 2008).

This activity, with profound implications for formative, must be understood by all educational factors as a solution, its content, makes harmonious physical development, balanced training students physically and mentally, strengthening health, strengthening and youth recreation enrolled in education (Octav, 2008).

Physical education is always "own creation" must reflect the knowledge, skills, professional skills of the teacher and the student's assimilation possibilities. Decisive manifestation of physical education class efficiency is the ability to adapt particularly teacher to concrete material conditions, the particularities of individual and collective situations occurring within the inherent (Rata, 2008).

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The strengths of this work have long been known and applied in civilized countries, examples are numerous. In our society, however, although they are known, are insufficient to create the organizational work and material to attract interest and to ensure the practice of physical education and sport on a continuing basis (Octav, 2008).

Physical education contributes to the development of student's personality and mental processes. In this direction a particular emphasis on the development of cognitive processes, affective processes of volitional, and the formation of personality traits (Nicola, 1991). Physical education contributes to the formation of interest, such as the desire for self-improvement, willingness to work ceaselessly for achieving results increasingly better (Chivulescu, Benga, 1982).

In conclusion, we can say that physical education contributes to the instances in biopsychic unity of the human personality. In this respect we should mention, first, the role of physical education directing the growth process of the child for a great harmoniously developed physically healthy.

The focus is on strengthening the physical, aiming at: -physiological capacity of the body, harmonious physical development of the child, motility development, skills training sanitary, correcting physical deficiencies, in a word, it is printing ago optimize biological development human being.

The objectives of physical education for primary education are subordinated to the final development process and ensure continuity of children made in kindergarten.

Organizing and conducting physical education, for the period of schooling framework aims objectives deriving from specific endpoints and continues the education of preschool education. They reflect the specific contribution that physical education needs to generate in terms of education at this age.

These objectives are to: maintain health, influencing fair and harmonious development of the body, hygienic skills training, psychomotor skills D center, knowing core basic motor skills, basic applicative and sports; habit of exercising independent training exercise Educate sociability, cooperation, spirit and action sequence based on a system of rules compliance. (Rata, 2008).

Methods

We used in our research the following methods: bibliographic information, observation method pedagogical method records, experimental methods, statistical and mathematical method, graphical method.

Measurement of anthropometric parameters

To highlight the results of the experiment applied in our research were considered the following anthropometric measurements: height, weight and chest area. Methods of measuring the parameters driving

To assess the level of traction we used 2 pass parameters applied to test driving the children in both groups: experimental and control

Data processing means

Population was characterized by estimating the values of central tendency, therefore, in our research the average and standard deviation below mention formula $\bar{x} \pm Ds$.

The differences between populations were obtained by applying the value "t" test for dependent samples (linked) to a small volume, as well as administration of "t" test for independent samples (unrelated) small volume. Differences were considered significant for the following thresholds of significance: $p < 0.05$, $p < 0.025$, $p < 0.01$, $p < 0.005$, $p < 0.0005$.

The research was conducted in weekly physical education lessons. In September 2012 we implemented a set of anthropometric and driving tests that were applied to the experimental and control.

Physical education classes were held every Wednesday and Friday from 11 am to 12 noon.

Initial testing we made at the beginning of the experiment (September 2012), when I started accommodating staff with this type of activity focusing on learning elements designed to develop motor skills, muscles staggered.

Final testing was done in February 2013, when the team was already consolidated applied exercises physical education classes and sports.

All subjects had the same training conditions and drives and tests were conducted at the same times but on different days of the week.

Subjects

Our research was conducted at the School "Nicolae Tonitza" in Constanta, a class IV A, with a mean age

$\bar{X} = 10,8$ years, which was the experimental group consisting of 19 subjects (Table 1), including 12 girls and 7 boys, the control group was represented by students of class IV B, in the same educational

institution, with a mean age $\bar{X} = 10,7$ years, consisting of 19 subjects, 10 girls and 9 boys (Table 2).

Presentation experiment

In the present study were followed for 6 months, several parameters such as active participatory methods of acquiring specific items moving game, height, weight and chest area.

Assuming the work, that: If you use a program games, relay races and runs the application with content moving game will improve motor ability students, we followed the behavior of the dependent variable (paths applied) in the two groups (group experiment and control group), the application of the independent variable was performed only in the experimental group (introduction to physical education class relays and

games pathways applied to specific elements of movement).

The research tracks the evolution of two variables, the dependent variable and the independent variable and the positive or negative influence of these variables exerted by certain factors throughout the research. Evolution of the dependent variable, if the results of evolution paths applied depends on how it is applied to the independent variable in the lessons and the actual test conditions. Testing was done on the first day of the week as the children came after two days without filing specific effort being rested.

Testing the dependent variable (paths applied) was done on the sports field, by performing two tests, whichever is the best result for each subject, resulting in achievement scores for statistical treatment of the data. Children were tested on the following two paths applied, namely:

Applied throughout 1

The child is placed in the starting position with the ball handball handled, will have to go the following route:

Results

Start standing, running with huge among 5 cones placed at a distance of 2 m bypassing latest milestone and return speed running straight . It carries against time. Time is recorded for statistical interpretation achieved.

Applied throughout 2

The child is seated in the middle. Draw a triangle with sides of 2 m based on the middle. The start order will be subject to touch the tips of the triangle leg after running to running with huge semicircle of 9 m, throwing the gate (gate is divided into 4 zones to derive the score if 4 center points, left 3 points right 2 point and the bottom gate 1 pt. outside 0 points) and return to running in the middle. It carries against time. Sports equipment of subjects during testing was identical. There were no reported health problems or injuries (muscular or otherwise) arising prior to testing that could adversely affect the development subjects.

Tabel 1

**Analysis of somatic parameters
 Experiment group - Testing the initial and final testing**

Nr. crt	Parameters Compare	P	Experiment Group	
			Testing initial	Testing final
1	Height (Cm)	M ± Ds	140,842±7,697	143±7,594
		CV	5,465	5,31
2	Weight (Kg)	M ± Ds	33,768±8,466	33,042±7,618
		CV	25,071	23,056
3	Thoracic perimeter (cm)	Insp. M ± Ds	76,789 ± 7,576	77,789 ± 7,576
		Exp. CV	9,866	9,739
		Exp. M ± Ds	71,842± 7,794	70, 842± 7,794
		Elas. CV	11,099	11,256
		Elas. M ± Ds	2,474±0,612	4,421± 0,607
		CV	24,737	13,73

Somatic indices registered in the experimental group revealed a significant increase statistically between the two tests, initial testing and final testing, the subjects progress is normal for their age and in full compliance with national averages school population.

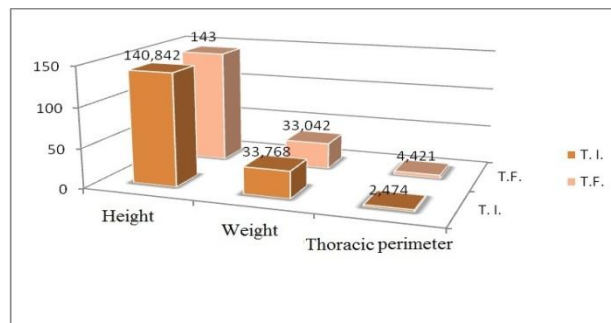


Figure 1 Dynamics of somatic parameters - experimental group

Tabel 2

Analysis of somatic parameters
 Control group - initial testing and final testing

Nr. crt	Parameters Compare	P	Control Group	
			Testing initial	Testing final
1	Height (Cm)	M ± Ds	140,474±6,415	141,789±6,52
		CV	4,567	4,598
2	Weight (Kg)	M ± Ds	34,532±6,457	34,816±6,174
		CV	18,699	17,733
3	Thoracic perimeter (cm)	Insp. M ± Ds	75,842±6,882	76,842±6,882
		CV	9,074	8,956
	Exp. M ± Ds	73,421± 6,777	72,421±6,777	
		CV	9,23	9,358
	Elas. M ± Ds	2,474±0,612	4,421±0,607	
		CV	24,737	13,73

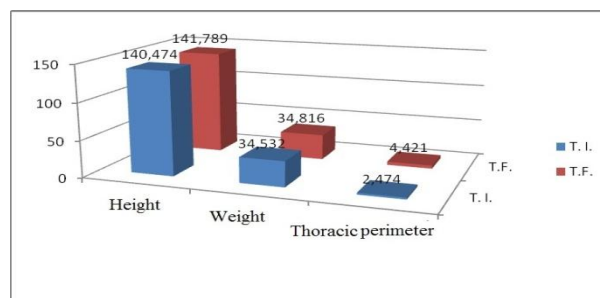


Figure 2 Control group, the dynamics of the somatic

The results achieved in the control group as shown in the table 2 are statistically significant, demonstrating that the control group subjects had the same trend, positive, harmonious physical development at puberty.

Tabel 3 Group Experiment, Analysis of the driving parameters, initial testing and final testing

Nr. crt	Parameters Compare	P	Experiment Group	
			Testing initial	Testing final
1	Application 1	M ± Ds	6,522±1,094	6,307±1,077
		CV	16,744	17,076
		Running M ± Ds	8,971± 1,576	8,428± 1,289
2	Application 2	CV	17,568	15,294
		Trow M ± Ds	1,842±0,958	2,895±0,658
		CV	52,009	22,729

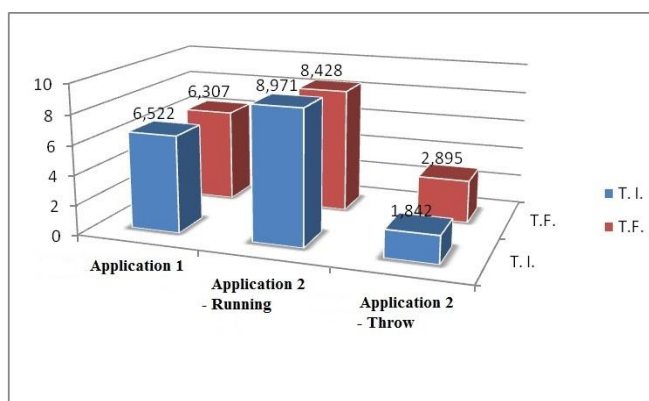


Figure 3 Experimental group dynamics of the driving, initial testing and final testing

Tabel 4 Control group, the driving parameter analysis, initial testing and final testing

Nr. crt	Parameters Compare	P	Control Group	
			Testing initial	Testing final
1	Application 1	M ± Ds	6,522±1,095	6,514±1,099
		CV	16,789	16,871
		Running M ± Ds	8,851± 0,884	8,554±0,89
2	Application 2	CV	10,302	10,404
		Trow M ± Ds	0,789±0,631	0,842±0,688
		CV	79,975	81,71

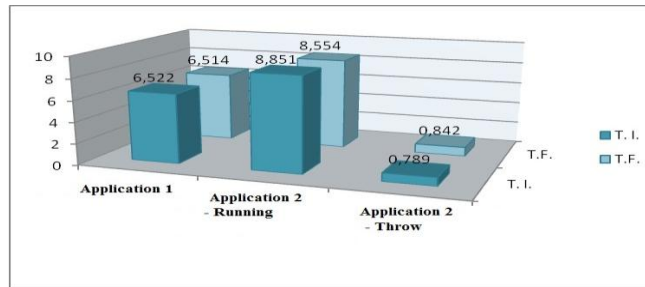


Figure 4 Control group, the dynamics of the driving, initial testing and final testing

Discussions

On the experimental group (Table 3) we see that the results of the 2 pathways applied subjects, during Application 1 (6.522 ± 1.094 initially and after 6 months the final testing 6.307 ± 1.077 , at a significance level $p \leq 0.0005$) during the application 2 regarding travel time (8.971 ± 1.576 initially and after 6 months the final testing 8.428 ± 1.289 , at a significance level $p \leq 0.0005$) and throwing the target (1.842 ± 0.958 initially and after 6 months to final testing 2.895 ± 0.658 , at a significance level $p \leq 0.0005$) improved due to the independent variable, application in physical education lessons and pathways applied to relays.

The results of the control group subjects (Table 4) applied to the two paths, the path Application 1 (6.522 ± 1.095 initially and after 6 months the final testing 6.514 ± 1.099 , is not statistically significant at $p \geq 0.05$) during application 2 in terms of travel time (8.851 ± 0.884 initially and after 6 months the final testing 8.554 ± 0.89 , is not statistically significant at $p \geq 0.05$) and disposal of the target (0.789 ± 0.631 initially and after 6 months 0.842 ± 0.688 in final testing, is not statistically significant at $p \geq 0.05$) were statistically insignificant improved only by application programs that do not contain the independent variable. The difference between the two groups of subjects at final testing during Application 1 (experimental group 6.307 ± 1.077 , 6.514 ± 1.099 control group, were not statistically significant at $p \geq 0.05$) during Application 2 - During the course of the journey made application (group experiment 8.428 ± 1.289 , 8.554 ± 0.89 control group, were not statistically significant at $p \geq 0.05$) and throwing the target (experimental group 2.895 ± 0.658 , 0.842 ± 0.688 control group at a significance level $p \leq 0.0005$) improved due to the introduction in physical education classes and sports group experiment the

independent variable (relays and pathways applied). The results of these pathways applied in physical education lessons, we confirm the hypothesis that the effects of the work and in the lessons of physical education and sport active participatory methods in class IV are positive (significant) in children between 10 -11 years. On materiality thresholds and corresponding average difference between each group on T.I. and T.F. we find that subjects have developed about the same pace, time how long the experiment could equally influence, positive or negative, both groups. In other words we can say that height and weight in the same position but insignificant influence both groups means that paths lessons containing relays and applied the principal means to increase the results of the experimental group compared to the control group in the results of the two runs the application.

Richard Bailey, et al. 2009, in the social domain, there is sufficient evidence to support claims of positive benefits for young people. Importantly, benefits are mediated by environmental and contextual factors such as leadership, the involvement of young people in decision-making, an emphasis on social relationships, and an explicit focus on learning processes. In the affective domain, too, engagement in physical activity has been positively associated with numerous dimensions of psychological and emotional development, yet the mechanisms through which these benefits occur are less clear. Likewise, the mechanisms by which PESS might contribute to cognitive and academic developments are barely understood. There is, however, some persuasive evidence to suggest that physical activity can improve children's concentration and arousal, which might indirectly benefit academic performance.



Darren et al. 1995, given the widespread concern regarding the motivation of students, the paucity of research in education on motivation enhancement is surprising (Arnes, 1992a; Maehr & Midgley, 1991). Recent research from an achievement goal perspective, however, has begun to address this issue. The purpose of this paper is to provide a review of the basic tenets of achievement goal theory and to analyze the research that has been conducted in physical education that focuses extensively on instructional practices and strategies that may improve the quality of school-age children's motivation.

Kenneth, 1996, this paper compares the policies and assumptions in Sport: Raising the Game, with the findings of three recent national surveys. These show, contrary to the assumptions in the government policy statement, that England's schools have been increasing, not cutting back on their sports teaching and facilities, and that young people are now playing more sport in and out of school than in earlier decades. Also, the drop-out rate in late-adolescence has declined substantially over the last generation which seems to be due mainly to the spread of community provisions rather than the school-club links whose importance is emphasised in the policy statement. This statement makes no reference to equal opportunities, which may be considered justified by the research findings that social class differences have become blurred, that girls now receive equal treatment in school sport, and the persistence of sex differences in out of school participation is caused by the sexes' prior orientations rather than their different experiences in school. However, the recent evidence also shows that there are still pronounced social class and gender differences in sport participation, and that equal opportunities issues remain unresolved.

Conclusions

Results somatic indices registered in the experimental group revealed a significant increase statistically between the two tests, initial testing and final testing, the subject's progress is normal for their age.

Results somatic indices registered in the control group are statistically significant, demonstrating that the control group subjects had the same trend,

positive, harmonious physical development at puberty.

Assuming the work, that: If you use a program games, relay races and runs the application will improve motor ability students, we followed the behavior of the dependent variable (paths applied) in the two groups (experimental group and control group) application of the independent variable was performed only in the experimental group (introduction to physical education class relays and pathways applied).

The results of these pathways applied, applied in physical education lessons, we confirm the hypothesis that work well: if you use a program games, relay races and runs the application will improve students' motor capacity, which leads to the following conclusion:

Active participatory methods (relays and pathways applied) improve motor ability of students in class IV.

Bibliography

- Chivulescu, M., Benga, I., 1982, Metodica predării educației fizice, E.D.P., București, p.43-46.
- Darren C.T. & Glyn C.R., 1995, Applications of Achievement Goal Theory to Physical Education: Implications for Enhancing Motivation, Publishing models and article dates explained, Published online: 16 Mar 2012, pages 475-489.
- Dragu, A., Cristea, S., 2003, Psihologie și Pedagogie Școlară, Edit. Ovidius University Press, Constanța, p.25-26.
- Iakovlev, V., Bogdanov, P.G., 1950, Educația fizică a elevilor în clasele I-IV, Ed. Cultură fizică și sport.
- Kenneth, R. 1996, Young People, Schools, Sport and Government Policies, pages 47-57, Publishing models and article dates explained. Published online: 28 Jul 2006.
- Nicola, I., 1991, Teoria educației și noțiuni de cercetare pedagogică, E.D.P., București, p.78-81.
- Octav C., 2008, Metodica predării educației fizice în ciclul primar, Edit. „Gheorghe Alexandru”, Craiova, p. 35-45.
- Rata, G., 2008, Didactica Educației fizice și sportului, Edit. PIM, Iași.
- Richard Baileya, Kathleen Armourb, David Kirkc, Mike Jessd, Ian Pickupa, Rachel Sandfordb & BERA Physical Education and Sport Pedagogy Special Interest Group, The educational benefits claimed for physical education and school sport: an academic review, Publishing models and article dates explained, Received: 5 Feb 2007, Accepted: 17 Jul 2007, Published online: 17 Feb 2009 pages 1-27.
- Șchiopu, U., 1991, Psihologia vârstelor, Edit. Didactică și pedagogică București.
- Weineck, J., 1994, Fundamente generale ale biologiei aplicate sportului la copii și adolescenți – Biologia Sportului, Edit. C.C.P.S., București.