

**COMPARATIVE STUDY ON SPEED AND STRENGTH
DEVELOPMENT OF THE STUDENTS FROM ELEMENTARY
SCHOOLS IN VILLAGES AND CITIES**

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Abstract:

Continued growth of sport performance is primarily due to the perfection of the preparing process. This is in the result of introducing the practice of the achievements made in sports science or other approaching sciences. The improvement process of physical qualities is of decisive importance in sport practice activity. The whole variety of physical fitness that is manifested in sport it can be focused to four main physical qualities: speed, skill, strength and endurance.

Introduction

The strengthen of health, the correct and harmonious physical development, the training and improvement of motile skills needed in life and sport activity, motile qualities, moral and will, are goals of physical education activity in our country who train in carrying out the physical education by using various means and methods as closely interrelated and complementing each other.

Assessment in physical education and sport of motile qualities occupies a primary place as they give evidence and note the objectification of this process.

How to influence the motile qualities of students is the practice of some specific content themes and lessons of its other links, in terms of specific motile qualities effort. For example, practice passing in two thirds of the running or the counter-attack in basketball, handball, soccer, with the imposition of requirements for speed, number of repetitions and recovery breaks, may contribute to the development and execution speed of travel.

Materials and methods

Aim is to demonstrate that the use of the physical education lesson of the combined exercises, help develop motile qualities, largely through them can improve motile skills, getting the desired importance of

different parts of the lesson. The hypothesis that I left shows that the development of motile qualities, the speed and the strength contributes significantly to increasing academic performances by physical education activity and participation in various competitions organized by the County School Inspectorate and helps create conditions that will facilitate learning and enhancing motile acts.

Also use in physical education lessons combined exercises, help develop motor qualities, largely through them can improve motor skills, getting the different parts of the lesson content and desired importance.

I used to experiment with classes I-VIII, from the Elementary School - Miron Cristea – Toplita, a fifth grade class A- students with a group of 22, 10 girls and 12 boys - as the experimental class, and the control class, another fifth grade class- B, from the Elementary School - O. C. Taslauanu – Bilbor, (classes I-VIII) with a group of 22 students, 10 girls and 18 boys.

I first started with an initial assessment at both schools with the experimental class group(from the school "Miron Cristea" - Toplita) and the control class group,(from the school "O. C. Taslauanu "- Bilbor) then using the same control events, followed by an intermediate evaluation and at the end, the final assessment. We started from the premise that the development of basic motile qualities, speed and strength helps increase academic efficiency by developing pupils' interest in school physical education activities by participating in various competitions organized by the County School Inspectorate, ensuring success and prevent failure, but a large contribution to develop motile qualities such as speed and strength helps create conditions that facilitate learning and enhance motile skills and motile acts.

The activity done with the two classes of both grade fifth, from the school "Miron Cristea" – Toplita, and from the school "O. C. Taslauanu" - Bilbor, was conducted in three stages: observant stage, experimental stage and verification stage, the content of physical education lessons and exercises for developing the use of means or exercises for development of motile qualities, speed and strength but also the forms of organization of the students that served largely to verify the hypothesis from which we started, meaning that the use of proper and systematic exercises to develop motile qualities, leads to the development of motile qualities, regardless of geographical area and the sport facilities, ensuring a higher level or a lesser level.

I found that using the physical education lesson exercises to develop systematically motile qualities and a good organization of the students lead to solve certain problems, developing and perfecting the

knowledge, skills and motile skills, developing intellectual qualities as knowledge about different concepts of sports and the wish of movement but not least to start relief of initiation activity of the students in practicing different sports, encouraging them to high performance.

Results and discussion

As I focused on developing motile qualities, speed and strength, we have chosen both for the experimental group and the control group as control events: the sprint, the rounders ball throws, long jump and standing long jump with one and a ½ steps of flight. All these control events showed the development of each pupil at the beginning of the experiment until its final conclusion. Control events were given after each stage, namely: initial evaluation, intermediate evaluation and final evaluation.

a) Sprint

Testing this event was performed by running the distance of 50 m flat, respecting also the school programme. The start was given individually from standing.

b) Standing long jump

In these control events, students performed each of three jumps with feet placed behind a drawn line on the ground, with the tips of toes, placed at the drawn line on the ground.

c) The rounders ball throws

On this evidence it was needed an area previously outlined in meters. Students have made two throws taking into account the best.

d) Long jump one and a ½ steps of flight

These control events students performed: three jumps of each at the hole with sand to a momentum of 20 m, to mention that the track was not a concrete surface but the grass, the momentum was in grass, taking into account the best jump.

Table 1 - with the students undergoing initial testing at school with classes I to VIII from Elementary School “Miron Cristea”-Toplita, the experimental class group:

Statistical parameters	Sprint - 50m.		Standing long jump		The rounders ball throws		Long jump with one and a ½ steps of flight	
	I.	F.	I.	F.	I.	F.	I.	F.
Sum	197.7	183	32.65	37.5	421.65	507.25	54.14	65.56
Arithmetic average	8.9	8.2	1.48	1.7	19.09	23.05	2.46	2.98
Marks average	6	9	5	9	6	10	6	10

Table 2 - with students undergoing initial testing at school with classes I-VIII from Elementary School “ O. C. Taslauanu – Bilbor, the control class group:

Statistical parameters	Sprint- 50m.		Standing long jump		The rounders ball throws		Long jump with one and a ½ steps of flight	
	I.	F.	I.	F.	I.	F.	I.	F.
Sum	194	186.6	33.5	37.40	412.14	484.02	53.73	59.3
Arithmetic average	8.8	8.4	1.5	1.7	18.73	22.1	2.44	2.69
Marks average	6	8	5	9	5	9	6	9

As shown in the above table after initial testing, the student performance increased in both experimental class group, at the school “Miron Cristea” – Toplita, and the control class group, at the school “O. C. Taslauanu” – Bilbor. The performance obtained on the experimental class at initial testing is of mark 6, and to control class it is also, of mark 6, (at the initial tests).

Final tests on the experimental class achieved superior performance compared to the other two initial tests and obtained mark: 9. The control class obtained mark: 8.

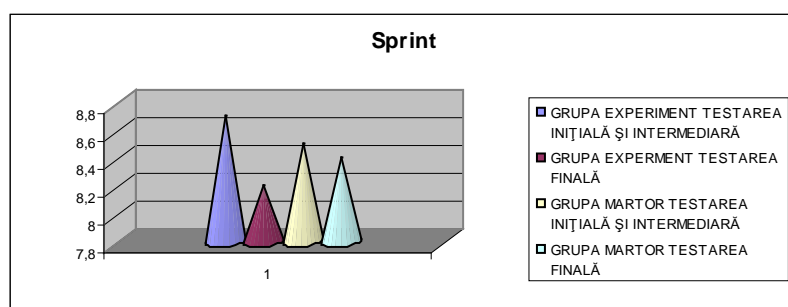


Chart 1. Arithmetic average, the initial, intermediate and the final assessment

Standing long jump

This control event it can be seen at the initial assessment that both groups were scored 5. Final testing on this event revealed the following progresses comparing with the initial and intermediate assessment achieving for the class of the school “Miron Cristea” – Toplita, an average rating equivalent to 9, and at the control class, from the school “O .C. Taslauanu”- Bilbor, also 9.

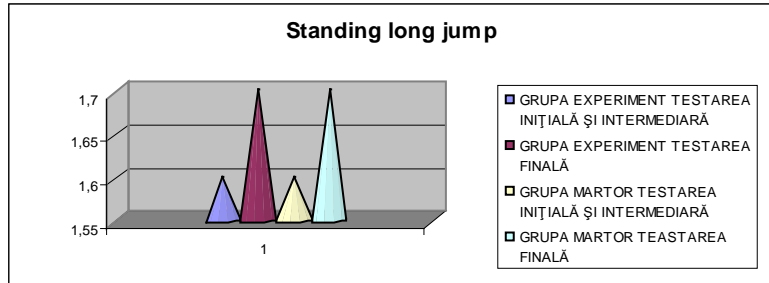


Chart 2. The arithmetic average - the initial, intermediate and the final assessment

The rounders ball throws:

As can be seen from the table above is a small difference between the experimental class and the control class, at all three tests, the difference between them being of a meter.

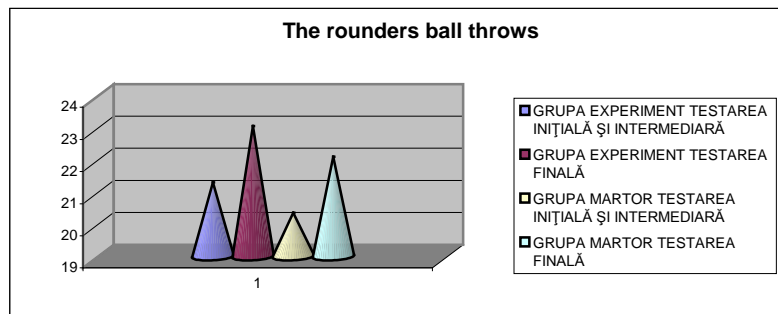


Chart 3. The arithmetic average - the initial, intermediate and the final

As shown in the following two tests both classes, experimental class and control class obtained mark: 8.

At final testing, experimental class obtained equivalent grade 10, while the control class received the equivalent of note 9.

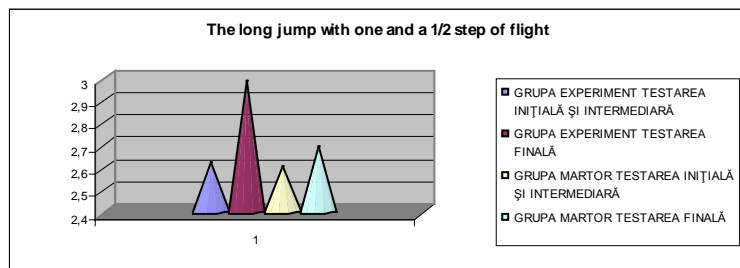


Chart 4. The arithmetic average - the initial, intermediate and the final assessment

The long jump with one and a 1/2 steps of flight, at the initial assessment there were obtained the following modules: the fifth grade class - A, from Elementary School “Miron Cristea” – Toplita - 2.46 meters, and the fifth grade class – B, from the school “O. C. Taslauanu” - Bilbor - 2.44. The difference between the two classes was of 2 centimetres. The final evaluation was obtained following modules: the fifth grade class A, has 2.98 meters, and the fifth grade class B, 2.69 m, resulting in a difference of 30 centimetres between the two classes.

Conclusions:

After analyzing and interpreting the results from both control and experimental groups may be drawn the following conclusions:

- Sprint (running speed), significant evidence for this research has made progress both in the control group and in the experimental group. At the final tests have been registered best values for the experimental group. The results obtained show that at the lessons classes, there were used exercises that led to progress on the development of motile qualities, speed and strength.

- The standing long jump, and the spring, at the initial tests:

Both, control group and the experimental group were shown the same values. At the final tests were scored progresses in both, the control group and the experimental group, but achieving the same values.

- For the rounders ball throws were scored progresses in the control group and experimental group. The experimental group showed higher values than the control group both at initial testing and the final.

- As regards the long jump with momentum and one and ½ steps of flight, there was a progressive increase in both groups. Even if it is influenced more by environmental factors, this index can be considered significant for developing motile qualities (strength). However the difference between groups is not great, but can be significant for developing motile qualities.

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Titlu: Studiu comparativ privind dezvoltarea vitezei și forței la ciclul gimnazial din mediul urban și rural.

Cuvinte cheie: calităților motrice, dezvoltarea fizică, educație fizică.

Rezumat: Creșterea continuă a performanțelor sportive se datorează în primul rând rodul perfecționării procesului de pregătire. Acesta la rândul său este rezultatul introducerii în practică a cuceririlor realizate în domeniul științei sportului sau al altor științe tangente domeniul respectiv. Procesul de perfecționare a calităților fizice are o importanță hotărâtoare în activitatea sportivă practică. Întreaga varietate de aptitudini fizice ce se manifestă în sport poate fi redusă la patru calități fizice principale: viteza, îndemânare, rezistența și forța.

Titre: Etude comparee du developpement vitesse et la force des élèves de écoles primaires de villages et les villes.

Mots-clés: les qualités du moteur, physique, éducation physique.

Résumé: Poursuite de la croissance de la performance sportive est avant tout processus de raffinement en raison de la préparation des fruits. Cette tour est le résultat de l'introduction de la pratique des progrès réalisés dans la science du sport ou autre tangente domaine des sciences. L'amélioration des processus de qualités physiques est d'une importance décisive dans la pratique sportive. Toutes sortes de forme physique qui se manifeste dans le sport peut être réduite à quatre grandes qualités physiques: vitesse, habileté, la force et la puissance.