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DEVELOPING THE COMPETENCES OF STUDENTS AGED 11 – 12 – RURAL AREA – BY TEACHING ATHLETICS

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Abstract: *The aim of the study was to highlight the importance of athletics as one of the sports that provide effective means of action to achieve the objectives set in the physical education lesson..The study was conducted on a sample of 20 students, male and female, aged 11-12, from a secondary school in Iasi county, rural area. After the initial evaluation of the subject, was applied the final evaluation to highlight the results obtained. Following the analysis of the results, it has been concluded that the effects of the means proposed by us are statistically significant in case of all events (p=<0.0001). We can see that the independent variable through specific training programs, contributes to improving the movement and functional indices of students and implicitly to the development of general and specific skills.*

Key words*: training, athletics, assessment, monitoring*

1. Introduction

Today, athletics is experiencing a spectacular development on all the meridians of the globe.

This amazing evolution of athletic performance is determined by the daily efforts of field technicians (teachers, coaches and athletes) [1].

The creators of educational systems of all times considered physical and sports education as a basic component in the field of education. Physical and sports education, as a component part of integral education, acts not only on the biological side of the human being, but also on his personality as a whole [11].

The physical sports activities offer a great variety of means through which the aim is to reach objectives set according to the area of interest. Thus, the sports activities have the content structured for different age levels and social needs, namely: physical sports activities for preschoolers, for small school children, for children, for adolescents, for adults, for persons of the third age, for persons with special needs, for persons with specific

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aptitudes for certain sports branches. They have as common objective, the maintenance, the obtaining of an optimal state of health as well as the prevention of the appearance of deficiencies, of the obesity and the degenerative diseases, determined by vicious positions, sedentarism and the appearance of the problems determined by the aging of the organism [8].

Modern athletics has an organized existence of over 100 years and it not seems to be at all a capped discipline. Its path is still upward, powered by the perpetual aspiration of human being to perfection and self-improvement [1]. Running is a natural movement with a high accessibility among people, no matter the age. Being a natural movement, running is the base of all activities with a dynamic content [2].

Athletics is an important specific means of school physical education in achieving its objectives through the set of specific motor skills and abilities, used on the one hand for the formation of the general motor sphere and for the education development of all motor skills [6].

Athletic all-around competitions are a series of consecutive athletic competitions which include precisely defined disciplines in which all the ability of the competitors come to the fore [7].

According to the middle school programs, the sports and physical education teacher must rely on physical practices and sports which are in the society. This leads the teacher to develop teaching and learning strategies to make choices. Such choices include content choices which focus on learning modes, group formation, and input modes in the activity as to whether or not to manage the heterogeneity of students [3].

Success; is a measure or indication of how much an individual benefits from a particular course or academic program in the school setting. Success in school; it can be considered as the average of the scores of the students from the courses in an academic program. Academic success; it is considered successful if the goals set in the teaching process have been attained, and unsuccessful if not. The exams in schools that determine the level of learning of students are actually successful [5].

The lesson of physical education and sports cannot have a recreational character; this must contribute to the exercise of the body's capacity for effort that determines appropriate changes and adaptations in the activity of the organs, systems and functions of the students' body [10].

Athletic sport training is the complex process of training athletes that can be defined as "an instructive-educational process, carried out systematically, continuously, under the leadership of specialized staff, in order to achieve athletic performance".

Athletic training is a methodical, gradual, systematic, practical and theoretical training process that aims at the physical and mental adaptation of an athlete to the specific demands of athletic events [9].

Through athletic training, the results obtained are improved or maintained. The formulation of a value judgement of an appreciation about a human being, an object or a phenomenon must (necessarily) have as support a very good knowledge. Knowledge and appreciation consist of a series of operations of gathering, processing and interpreting a

considerable volume of information (data) [12].

2. Objectives

The objectives of this study were:
- Highlighting athletics as one from sports that provide effective means of action to achieve the objectives set in the physical education lesson;
- Designing an exercise programmed and its application in these lessons.

3. Material and Method

The test included in the research consists of 20 students between 11 and 12 years old from a secondary school in Iasi county, rural area. The physical tests applied to the students were: speed running 50 meters, long jumping from the spot, long jumping with momentum, throwing the oina ball and endurance running.

The initial testing was applied in September 2020, and the final test after 12 weeks of preparation.

The means that were used in the experiment were: running with ankle play and switching to accelerated running, running with the knees up and switching to accelerated running; accelerating running in a straight line on the distance of 20-30 meters, tempo3/4, individually, after that it is executed in pairs and groups of 4-6 students; regular walking with the extended step, followed by the transition to running (alternating the extended step with running); running in moderate tempo on distance of 100-150 meters in groups; running on a line drawn on the ground to examine the traces of the length of the steps and running in a straight line; long jumping from the spot in the sandy pit; long jumping from the spot with detachment on one leg; one step long jumping from easy running, long jumping with landing on the ascending leg; throwing away balls, sandbags or other small objects up to the weight of the oina ball, with the right and left hand, on the spot, on the going, on the running; throwing the tennis ball (or rubber) into the wall and catching it, throwing and catching the oina ball, alternately with the right and left hand.

5. Findings and discussions

Following the measurements, the results were recorded on individual sheets. The results are shown in Tables 1 to 5.

Table 1

Results for speed test "Running speed of 50m(s)"– Paired t test

Table Analyzed	Paired t test data
Column B	Running speed of 50m (s) Final
vs.	vs,
Column A	Running Speed of 50m (s) Initial
Paired t test	
P value	< 0,0001
P value summary	****
Significantly different? (P < 0.05)	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=7,906 df=19
Number of pairs	20
How big is the difference?	
Mean of differences	-0,1650
SD of differences	0,09333
SEM of differences	0,02087
95% confidence interval	-0,2087 to -0,1213
R square	0,7669
How effective was the pairing?	
Correlation coefficient (r)	0,9909
P value (one tailed)	< 0,0001
P value summary	****
Significant correlation? (P > 0.05)	No

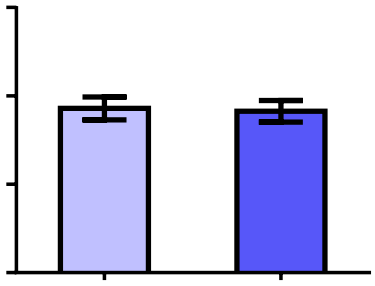

Fig.1. *Results for speed test "Running speed of 50m(s)"– Paired t test*

Significant progress has been made on this test. (t=7,906; p<0,0001).

Table 2

Results for the test "Long jump from the spot" (m)" – Paired t test

Table Analyzed	Paired t test data
Column D	Long jump from the spot (m) Final
vs.	vs,
Column C	Long jump from the spot (m) Initial
Paired t test	
P value	< 0,0001
P value summary	****
Significantly different? (P < 0.05)	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=5,709 df=19
Number of pairs	20
How big is the difference?	
Mean of differences	0,1245
SD of differences	0,09752
SEM of differences	0,02181
95% confidence interval	0,07886 to 0,1701
R square	0,6318
How effective was the pairing?	
Correlation coefficient (r)	0,8344
P value (one tailed)	< 0,0001
P value summary	****
Significant correlation? (P > 0.05)	No

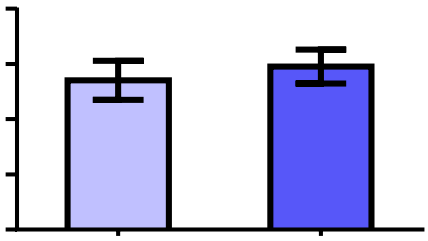

Fig. 2. *Results for the test "Long jump from the spot" (m)" – Paired t test*

And in this case the progress is significant (t=5,709; p<0,0001)

Table 3

Results for the test "Long jumping with momentum" (m)" – Paired t test

Table Analyzed	Paired t test data
Column F	Long jump with momentum (m) Final
vs.	vs,
Column E	Long jump with momentum (m) Initial
Paired t test	
P value	< 0,0001
P value summary	****
Significantly different? (P < 0.05)	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=9,300 df=19
Number of pairs	20
How big is the difference?	
Mean of differences	0,2315
SD of differences	0,1113
SEM of differences	0,02489
95% confidence interval	0,1794 to 0,2836
R square	0,8199
How effective was the pairing?	
Correlation coefficient (r)	0,9450
P value (one tailed)	< 0,0001
P value summary	****
Significant correlation? (P > 0.05)	No

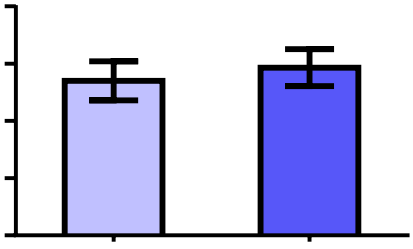

Fig. 3. *Results for the test "Long jumping with momentum" (m)" – Paired t test*

The statistical analysis in table 3 allows to identify a progress between the initial and the final tests. (t=9,300; p<0,0001).

Table 4

Results for the test "Throwing the oina ball" (m)" – Paired t test

Table Analyzed	Paired t test data
Column H	Throwing the oina ball (m) Final
vs.	vs,
Column G	Throwing the oina ball (m) Initial
Paired t test	
P value	< 0,0001
P value summary	****
Significantly different? (P < 0.05)	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=8,543 df=19
Number of pairs	20
How big is the difference?	
Mean of differences	1,100
SD of differences	0,5758
SEM of differences	0,1288
95% confidence interval	0,8305 to 1,369
R square	0,7934
How effective was the pairing?	
Correlation coefficient (r)	0,9936
P value (one tailed)	< 0,0001
P value summary	****
Significant correlation? (P > 0.05)	No

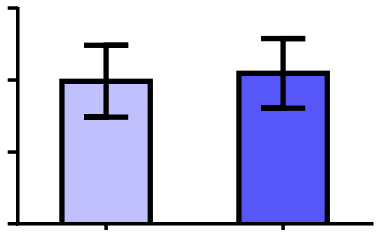

Fig. 4. *Results for the test "Throwing the oina ball" (m)" – Paired t test*

We also identify a progress in the case of the test "Throwing the oina ball" (t=8,543; p<0,0001).

Table 5

Results for the test „Endurance running (min)" – Paired t test

Table Analyzed	Paired t test data
Column J	Endurance running (min) Final
vs.	vs,
Column I	Endurance running (min) Initial
Paired t test	
P value	< 0,0001
P value summary	****
Significantly different? (P < 0.05)	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=6,988 df=19
Number of pairs	20
How big is the difference?	
Mean of differences	-0,2820
SD of differences	0,1805
SEM of differences	0,04036
95% confidence interval	-0,3665 to -0,1975
R square	0,7199
How effective was the pairing?	
Correlation coefficient (r)	0,9679
P value (one tailed)	< 0,0001
P value summary	****
Significant correlation? (P > 0.05)	No

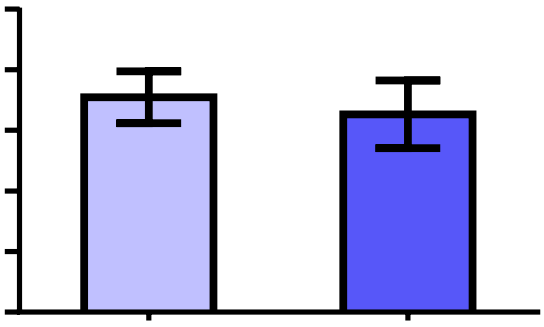

Fig.5. *Results for the test „Endurance running (min)" – Paired t test*

The values of this test show that there was a significant progress between tests (t=6,988; p<0,0001).

6. Conclusions

Following the processing and interpretation of the data obtained at the control tests, through pedagogical observation, studying of planning documents, I reached the following conclusions:

1. The obtained results confirm the fulfilment of the research objectives.
2. Following the judiciously planned, graded activity, used adequate means to teach athletic exercise, the value of the indices increases, both in terms of physical development and technical training;
3. By using correctly designed algorithms, adapted to the level of preparation of students, it is ensured the rapid achievement of the proposed objectives.

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