# OBSERVATIONAL STUDY REGARDING THE SPEED DEVELOPMENT LEVEL OF 12-13-YEAR-OLD MIRON COSTIN SUCEAVA SECONDARY SCHOOL STUDENTS <br> Petrariu Ileana ${ }^{1}$ <br> 1 "Miron Costin" Gymnasium School Suceava 

Keywords: development, speed, motricity, physical fitness, tests


#### Abstract

: Improving the instructive-educational process at the level of sixth grade students has been an important concern for a large number of authors [1]. The valorization of talents with special psycho-motor performances represents a complex process that imposes training solutions based on multiple information, experiments, researches and studies [3]. Therefore, the development of basic motor skills is a fundamental goal of physical education and sports [3].


Introduction. The purpose of the research is to evaluate the level of speed development of 12-13-year-old pupils from the Miron Costin Gymnasium School in Suceava. In this study, 160 students were tested, out of which 84 were girls. Speed evaluation consisted in applying the following tests: speeding $50 \mathrm{~m}, 5 \times 10 \mathrm{~m}$ cage, lateral speed test. These tests were aimed at determining the students speed development level. After applying the speed tests, the results were compared with the standard set in the national evaluation system for physical education discipline or the scoring scale of each test [5].

In order to achieve the proposed goal [4], the following objectives were formulated:

1. Studying the theoretical conceptions and the practical experience of the physical education and sports specialists who are active at the level of the secondary education, regarding the methodology for speed development.
2. Assess the level of speed development of secondary school pupils.
3. Interpreting the results by comparing them with the standard within the national evaluation system in the $\mathrm{VI}^{\text {th }}$ grade for the physical education discipline or the scoring scale of each test.

## Running the experiment

In this study, 76 boys and 84 girls ( 160 students) were tested. In the table no. 1 and 2 presents the results obtained for the motor testing of the 160 pupils.

| 12-13 years boys speed tests results |  |  |  |
| :---: | :---: | :---: | :---: |
| Statistical <br> indices | Speed <br> running <br> $\mathbf{5 0 m}(\mathbf{s e c})$ | $\mathbf{5 x 1 0 m}$ <br> test (sec) | Lateral <br> speed test <br> (sec) |
| Average | 8.40 | 20.12 | 21.04 |
| Standard <br> deviation | 0.50 | 0.86 | 0.91 |
| Variability <br> coefficient | 5.93 | 4.29 | 4.35 |

Table 1. Speed test results of 12-13 years old boys

| 12-13 years girls speed tests results |  |  |  |
| :---: | :---: | :---: | :---: |
| Statistical <br> indices | Speed <br> running 50m <br> (sec) | 5x10m <br> test (sec) | Lateral <br> speed test <br> (sec) |
| Average | 9.00 | 21.23 | 22.21 |
| Standard <br> deviation | 0.60 | 0.78 | 0.79 |
| Variability <br> coefficient | 6.68 | 3.65 | 3.55 |

Table 2. Speed test results of 12-13 years old girls


Chart no. 1. Representation of average values for Speed Running 50m
In chart no. 1 shows the average values for the " 50 m speed run" test. The girls obtained an average of 9.00 seconds, comparing the result obtained with the evaluation standard in the national system for the evaluation of the sample in the third grade, it can be said that the result falls to the level of 8 grade. For the same test, the boys had an average of 8.40 seconds, which puts them at the level of 7 grade.


Chart no. 2. Representation of average values for 5 x 10 m test

In chart no. 2 shows the average values for the " $5 \times 10 \mathrm{~m}$ test" sample. The girls obtained an average of 21.23 seconds, comparing the result obtained with the evaluation standard in the national system for the evaluation of the sample in the third grade, it can be said that the result falls to the level of 10 grade. For the same test, boys had an average of 20.12 seconds, which also places them at the level of 10 grade.


Chart no. 3. Representation of average values for Lateral Speed Test

In chart no. 3 shows the average values for the "lateral speed test". The girls obtained an average of 22.21 seconds, comparing the result obtained with the scoring scale of the test, it can be said that the result falls to the level "Sufficient". For the same test, the boys had an average of 21.04 seconds, which also places them at the "Sufficient" rating.

## Conclusion and recommendation

In terms of speed testing, at the "running speed 50 m " test, the girls achieved an average of 9.00 seconds, standing at the level of grade 8 , and the boys achieved an average of 8.40 seconds, which places them at the level of grade 7.

For the " 5 x 10 m test", the girls obtained an average of 21.23 seconds, comparing the result obtained with the evaluation standard in the national system for the evaluation of the test in the $\mathrm{VI}^{\mathrm{th}}$ grade, it can be said that the result falls to the level of grade 10, and for the same test, boys had an average of 20.12 seconds, which places them at the same grade, 10.

For the "lateral speed test" test, the girls achieved an average of 22.21 seconds, the result being within the" Sufficient" rating, and in the case of the 21.04 seconds average boys, it was at the same rating, "Sufficient".

From the results we can see that in most of the speed tests, the students achieved good results, ranking sufficient, well and very well.

It is advisable to adopt a healthy lifestyle and healthy diet for 12-13-year-old children, given that the specificity of age brings about changes in the growth and development of their body. We also recommend practicing regular physical exercise at both physical and leisure time and, last but not least, training and improving all basic motor skills, as well as application-utilitarian use of pupils during the education classes physical and sports activities.

## Bibliography:

[1] Antoniale L.S., Antoniale A., Teoria și metodica dezvoltării calităților motrice (partea I - generalităţi, viteza), Ed. Universitaria, Craiova, 2003
[2] Ardelean T., Particularitățile dezvoltării calităților motrice în atletism,
I.E.F.S., București, 1999
[3] Dragnea A., Bota A., Teoria activitaților motrice, Ed. Didactică și Pedagogică, R.A., București, 1999
[4] Popa, Gh., Metodologia cercetării ştiinţifice în domneniul Educaţiei Fizice şi Sportului, Editura Orizonturi Universitare, Timişoara, 1999
[5] Caiet de evaluare la educaţie fizică în conformitate cu "Sistemul Naţional Şcolar de Evaluare la disciplina Educaţie fizică şi Sport" Nr. 37 218/9.08.1999

# STUDIU CONSTATATIV PRIVIND DEZVOLTAREA VITEZEI A ELEVILOR DE 12-13 ANI DE LA SCOALA GIMNAZIALA MIRON COSTIN SUCEAVA 

Petrariu Ileana
Cuvinte cheie: dezvoltare, motricitate, viteza, condiţie fizică, probe de control

Rezumat: Perfecționarea procesului instructiv-educativ la nivelul copiilor a constituit o preocupare importantă pentru un număr mare de autori [1]. Valorificarea talentelor cu performanţe psihomotrice deosebite reprezintă un proces complex care impune soluţii de instruire bazate pe multiple informaţii, experimente, cercetări şi studii [3]. Astfel, dezvoltarea calităților motrice reprezintă un obiectiv fundamental al educației fizice și sportului [2].

