

THE LEARNING UNITS EVALUATION FROM ACROBATIC GYMNASTICS OF SECONDARY SCHOOL STUDENTS

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Abstract. *This research aims to investigate the level of ownership of units of learning acrobatic gymnastics by students enrolled in the school gymnasium. The importance is all the more as the student is in a process of evolution, not only physically and mentally but also the formation of conscience on the development of his personality and character, with defining results in setting different types of values.*

Keywords: *school, physical education, acrobatic gymnastics, testing.*

Introduction

General education, in the full spectrum of its components, is the foundation of formation the human of European type, mentally, physically and intellectual, moral, aesthetic, technical and professional multilateral prepared being ready thus to capture high-efficiency demands of modern life both professionally and socially, as the sequences of personal life [8].

Through the process of physical education in the secondary level, generally is envisaged objectives that belong to this curricular area such as maintenance and development of optimal health, harmonious physical development of general and specific motor ability of different branches and sports events and education of positive moral-volitional traits. At the same time we can say that physical education (either as curricular field or activity extracurricular) must become the primary means of recovery in leisure time. The importance of employment concerns of specialists to our area [1, 2, 3, 4], which states that physical education, through its specific means, it is a way of improving the preteen, with important influences in terms of education, but being and the main means of developing physical condition so necessary at this age. It should not be mentally and physically missed either the highlighting of recreation and rehabilitation side by means of ex-

tracurricular activities of the type which is one of the forms of compensation and optimization of physical training of students. Physical education extrapolation of classroom to extracurricular activities with the involvement of a number of increased of students as is the permanent concern of school teachers, specialists and researchers in our field. Gymnastics in school we found it in all educational levels, having a very important role for the development of proper physical and harmonious growing organism, stimulating and improving all body functions, better health, providing basic physical support necessary to practice performance gymnastics and initiation in other sports [9, 10, 11, 12].

The aim of research

This research aims to determine the learning units of acrobatic gymnastics of secondary school students.

Objectives of research.

Theoretical and methodological issues concerning the optimization of physical education; assessing the somatic development, physical and technical preparation of students; development and implementation of elements of martial arts in Wushu extracurricular sports classes; theoretical and experimental argumentation verification of efficiency and the introduction of martial arts elements in the educational process.

Research methods

In the scientific approach that we have done in this paper we used several methods in order of knowing the current state of the proposed theme and highlighting the effects of a new methodological approach by introducing means of martial arts (Wushu) in the educational process during extracurricular sport activities [5, 6, 7].

1. Theoretical analysis and generalization of literature;
2. The study of working documentation (programs, documents of evidence);
3. The comparative method;
4. The method of survey (inquiry and interview);
5. The method of teaching observation;
6. The method of testing;
7. Pedagogical experiment;
8. The method of statistical and mathematical of data processing;

The organization and conducting the research:

The research was conducted within extracurricular sports hours in martial arts at School no. 194 in Bucharest and physical education classes in this school. The pedagogic experiment was conducted in two phases, the noted first preliminary, of factual data acquisition relating to the explored theme in a sample of 48 students – girls from the V and VIII classes from General school no. 194 in Bucharest ($n = 48$, of which: a = Class V-12 VI = 12 = 12 VII, VIII = 12); in the second stage - the formative experiment were included the same 48 students, the two control groups ($n = 24$, including V, VI = 12 Classes, but also VII, VIII = 12) and two experimental groups of girls martial sports arts hours, from General school no. 194 in Bucharest ($n = 24$, including V-12 VI = 12 = 12 VII, VIII = 12) Classes, groups, which was followed the applying of experimental program and methodical way of extracurricular activities. Control groups were made up of pupils from the same school, who practiced exercise in physical education lessons in the classroom. The activity was organized according to curriculum, including gymnastics topisc planned in November – December, respectively January to April, lessons conducted by teachers enrolled in those classes, aiming to achieve the objectives according to curriculum in the discipline of physical education. For the activity in the experimental groups were planned 64 hours (two hours per

week) for V-VIII classes on the basis of experimental programs and learning unity projection, carefully prepared, differentiated by classes and age groups under the leading of the researcher. The material base of school is good, proper in conducting the sports extracurricular activities (extra school program), which allowed us to conduct the research in optimal conditions.

In order to improve the content of extracurricular hours, to achieve optimally the objectives and requirements of this type of activity of all departments of learning and practicing martial arts, is required a careful consideration and analysis for the streamlining of training methodical way of discipline content, the technical elements and optimizing physical condition. For that purpose, we conducted an experiment based on organizing the lessons using an experimental curriculum.

To determine the level of motor and degree preparation for learning specific motor skills of martial arts by students in extracurricular groups from gymnasium we applied samples, to confirm the usefulness of the used program.

Tests for assessing the level of aerobic technical preparation:

Test 1 (T1) rolling forward and back in squat position and testing the capacity of coordinating the individual body.

Necessary materials: a gymnastics mattress (judo) with a length of 2 m. The latitude of 1m.

Instructions for individual:

- Will sit on the edge of the mattress in “sit-up position”;
- Carries out rolling forward, catching calves with palms (under the knee) and turning back in the initial position;
- After turning back, is carried out back rolling, reaching again in its original position (sit-up);
- The test ends when the individual reaches the straight position.

The examiner is in the right side of the mattress and follows the development of the individual.

The result:

- Are awarded points from 10 to 1 depending on the level of execution of the individual;
- Is followed to maintain equilibrium during the execution of both rollings;
- Back has to be curved;
- The chin pulled in chest;
- The grouping to be sufficient;
- To not extend vertically the feet while performing rollings;
- If the individual needs help during the execution, he will be penalized with 3 points.

Test 2 (T2) Lateral (wheel) is an acrobatic element, testing the ability of the individual and the skill components such as coordination, equilibrium or spatial orientation.

Necessary materials: gymnastics or judo mat (2mx1m).

Instructions for the individual:

- He stands at the edge of the mattress ready to execute acrobatic element;
- The examiner stands on the right side of the mattress, watching the exercise execution by the individual.

The result: are awarded points from 10 to 1, aiming the:

- The execution of lunge;
- Laying the hands on the mat one after another;
- Throwing the feet over the head;
- The degree of stretching the segments during throwing;
- Whether the examiner comes with “help” minus 3 points.

Test 3 (T3) Lateral and forward cord, measures mobility factor at the level of coxofemoral joint and of flexibility lower limbs.

Necessary materials: a gymnastics or judo mattress (2mx1m).

indication for individual:

- He stands in the center of the mattress;
- Gradually depart the feet until is reached the maximum opening;
- The individual can use the support of-

palms.

Result: it is seeking the remaining distance from the ground to the pelvis in cm., giving points as follows:

- between 15-20 cm. – 9 points;
- 20-25 cm. – 8 points;
- 25-30 cm. – 7 points;
- 30-35 cm. – 6 points;
- 35-40 cm. – 5 points;
- over 45 cm, no points are giving and the test is considered lost;
- Is granted a bonus of 1 point for maintaining the legs stretched and straight back in final position.

Test 4 (T4) gymnastics backbend is an element which measures mobility factor in the spine muscle flexibility as well as strength in the upper limbs.

As a necessary material for carrying out this sample is required gym or judo mat (2mx1m).

Indications for individual:

- The individual stands on the mattress lying on dorsal with hands along the body;
- To the examiner signal the individual puts the palms on the mat, opposed (back of the hands on the mat and fingers backwards) next to ears and flexing the knees, keeping feet on the ground;
- Pushing in arms and legs, arching and raising the basin.

Notes to examiner:

- This ones its in the right side of the mattress watching the sample.

The result: it is observed the level of stretching upper and lower limbs and spine arching, are given points from 10-1 and a bonus of 1 point bonus for individuals that carry out the element by standing position.

Table 1 are presented the results of evaluations of acrobatic gymnastics learning fields of female students in middle school included in the experiment of the two researched age groups.

Forward-back rolling in squat to squat position (notes)

The results of averages in forward and back

rolling sample from squat to squat position, presents an average of 6,17 points in V, VI classes and 7,04 points in VII, VIII classes (Figure 1).

achieved results shows an average of 6.91 points in the V-VI cl. and 7,04. points in the VII-VIII classes (Figure 2).

Lateral (wheel), notes. Analysis of the

Table 1. Evolution of averages of acrobatic technical training parameters obtained in the ascertaining experiment

Nr. of crt.	The sample name	I Group (n=24)	II Group (n=24)
		X \pm m	X \pm m
1	Forward-back rolling in squat position (notes)	6,38 \pm 0,13	7,42 \pm 0,10
2	Lateral (wheel) (notes)	6,17 \pm 0,18	7,04 \pm 0,13
3	Cord (notes)	Forward on the right	6,91 \pm 0,10
		Forward on the left	6,83 \pm 0,12
		Lateral	6,42 \pm 0,12
4	Backbeding (notes)	6,46 \pm 0,12	6,79 \pm 0,10

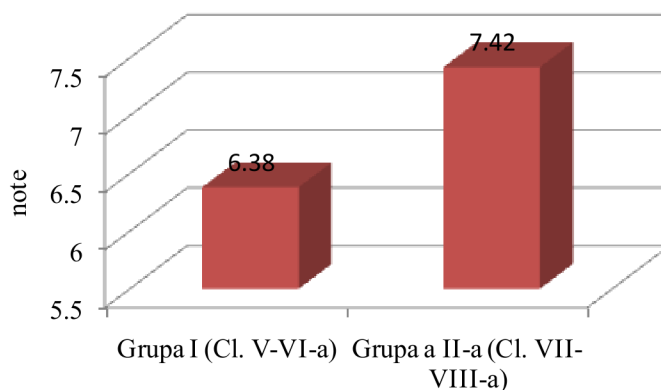


Fig. 1. The chart of average the evolution by age groups in sample forward and back rolling in the squat to squat of school girls from secondary education

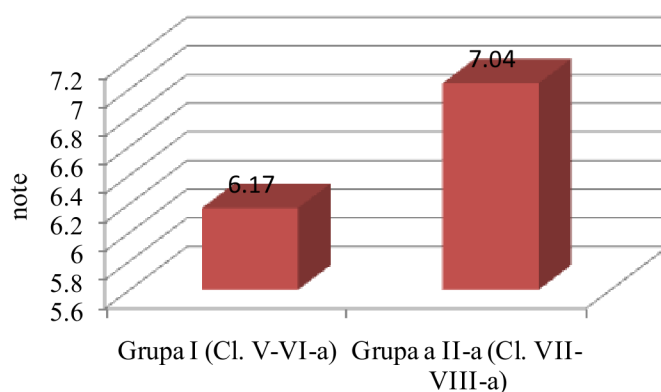


Fig. 2. The chart average of evolution by age groups in the sample lateral (wheel) of female students in secondary education

Cord (notes)

The data registration in mobility static acrobatic sample at the level of coxofemoral joint, forward cord on the right leg, presenting an average of 6,91 points in the group I (V-VI cl.) and 7,46 points in the group II (VII-VIII cl.); in the sample forward cord on the left leg the average has a value of 6,83 points in the group I and 7,29 points in the group II and in lateral cord sample average

value is 6,71 points in the Group I and 6,71 in the group II (Figure 3).

Low backbend (notes)

The average results registered in mobility static acrobatic sample in the spine and scapul-humerale, has an average of 4,46 points in the I group (V-VI cl.) and 6,79 points in the II group (VII-VIII cl.) (Figure 4).

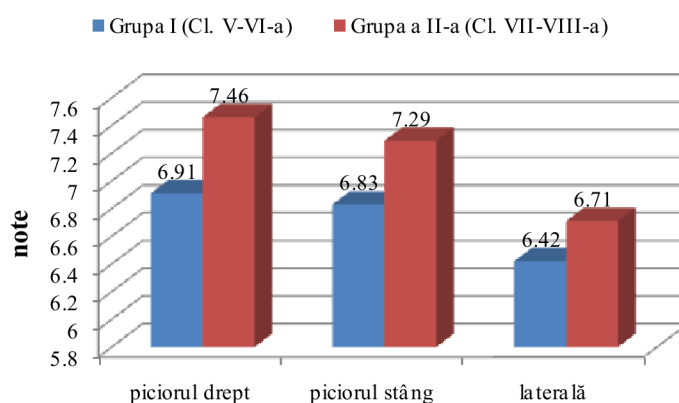


Fig. 3. The chart of average evolution by age groups in cord sample of female students from secondary education

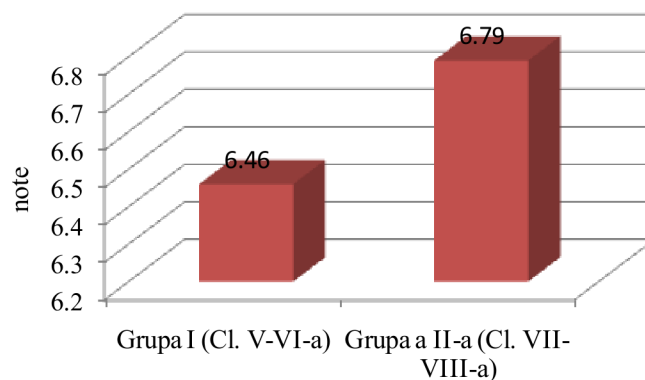


Fig. 4. The chart of average evolution by age groups in low backbend of female students sample secondary education

It is important to note that students enrolled in secondary school, show good availability regarding the appropriation of techniques specific to sport branches, in this way initiation and learning specific technical bases of different sports, is the main task of school physical education. Hence

girls can easily tackle artistic exercise, such as the gymnastics exercises [4, 5].

In conclusion, it appears that the assessment of units of learning acrobatic gymnastics of female students in secondary education, in dynamic of evolution between age groups in back and for-

ward rolling in the squat to squatting position of 1,04 points, in lateral (wheel) differences of 0,87 points, in the forward cord of mobility sample on the right foot are observed differences of 0,55 points, in forward cord on left leg differences of 0,46 points and lateral cord – differences of 0,25, and in low backbend are highlighted differences between groups of 0,33 points.

These insignificant differences between the researched age groups namely in the secondary level, once again it indicates that the prac-

tice of physical education and sport in the curriculum area with up to 2 hours per week is not enough for harmonious, development of students body, which is required the supplement with up to 2 extracurricular sports hours, in our case the introduction of elements of Wushu martial arts. The necessity to introduce 2 hours per week is due to the novelty of discipline content to ensure the continuity of its effectiveness and preparation.

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