ISSN 2602-0440, ISSN-L 2602-0440

INTUITIVE METHODS OF TEACHING MOBILITY ELEMENTS IN SKIING – SCHOOL SPORT CLUB

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Abstract

Background.. Ionescu, M (2000) classifies according to the requested analyzer and the static or dynamic character of the image the educational means as follows: visual technical means (epiprojector, epidiascope, back projector, etc.), audio technical means (radio, tape recorder, cassette player, player) for CDs, etc.), audio-visual technical means - which involves the use of a video camera, in connection with a TV monitor or video projector. Bocoş, M. (2010) calls them technical means of training.
Objectives. The use of modern intuitive methods can really contribute to the development of educational practice and to the solution of certain problems identified in the educational reality. By using modern intuitive methods of teaching acrobatic elements in gymnastics, included in the syllabus of the 7th grade, students achieve superior performances regarding the formation of specific skills and motor skills.
The research sample and stages, the methods. "Pavel Dan" Tritenii de Jos High School, Cluj County, rural environment; during the period: December 2018 - June 2019. The experimental sample: the 7th grade from with a staff of 21 students; control sample: 7th grade B with a staff of 20 students. The centralization of the notes in the tests of the experiment and of the averages calculated on each subject and on the samples, as well as their graphical representation, allow preliminary observations to be made, in support of the verification of the working hypothesis. In the case of the experimental group, all the students recorded an evolution of the performance, but much more significant, during the experiment. However, the same tendency of stagnation is observed in the last stage, with decreases in some subjects, as in the control group.
Results. "Independent Samples Test" presents the results of the t-test comparing the averages of the two samples. In the first part we read the results of the Levene test for checking the condition of variance equality (column "Levene's Test for Equality of Variances"), equality needed to validate the test t. The calculated value, F (37) = 0.172, at a safety threshold ("Sig.") P = 0.681 (higher than the admitted threshold p = 0.05), is insignificant, and the condition of variance homogeneity is fulfilled. Consequently, it can be stated, with a probability of 97.5% (1 - p = 1 - 0.025 = 0.975), that the difference between the sample meanings on the dependent variable (performance) is due to the influence of the dependent variable (using modern intuitive methods).
In addition to the statistical significance of the results of the t-test, materialized in the probability with which the research hypothesis is accepted, the effect size is of major importance. The calculation of this effect is performed using the indicator r, which, in the case of the t-test for independent samples and unequal groups, uses the formula: Value obtained (r = 0.32).
Conclusion. Following the application of the modern intuitive methods of teaching acrobatic gymnastics to the students of the 7th grade in the experimental group, they achieved a higher performance in the formation of specific motor skills, compared to those in the control group. 2. The constant use of modern intuitive methods has positively influenced the efficiency of the management of the didactic process. By using the audio-visual technical means, it can successfully replace the mediated or direct demonstration, and even have a better performance, in our case with 21.7%

Keywords: *intuitive methods, high school, acrobatic elements, education*

Introduction

Capitalizing on video technique in education, images and words, ideas and melodies harmoniously combine in a communication act in which the cognitive and affective channels are involved. Of the psycho-pedagogical valences of the video technique we mention the following aspects: it allows the current modification of the recordings by introducing new inserts or removing sequences; continue playback or pause, returns for

repeating sequences whenever needed; stores images and sounds for an indefinite period of time, M. Bocoș, M. Ionescu (2009).

Ionescu, M (2000) classifies the educational means according to the requested analyser and the static or dynamic character of the image, as follows: visual technical means (epiprojector, epidiascope, rear projector, etc.), audio technical means (radio, tape recorder, cassette player, player) for CDs, etc.), audio-visual technical means - "a special position is occupied by the video technique, which involves the use of a video tape recorder or a video camera, in connection with a TV monitor or video projector.

Bocoș, M. (2010) calls them *technical means of training*. This important category of media includes: the set of materials / media on which the information was stored - pick-up discs, tape recorders, audio cassettes, video tapes, disks, compact discs (CD-ROMs), DVDs, opto-magnetic discs; technical equipment - devices, apparatus, machines and installations; electronic equipment - cassettes, video cassettes, computers, multimedia projectors; all the pedagogical requirements for the efficient use of components 1-3 in the teaching-learning process. " M. Bocoș, M. Ionescu (2009). Theorists in the field of physical education and of the sport also speak about the use of iconographic materials as means used for the demonstration of the motor actions to be learned.

Șiclovan, I. (1979), speaking about the principle of intuition, recalls that the formation of movement skills cannot be broken by its sensory basis and has a special significance because children have a predilection for imitation, their thinking starts from concrete to abstract. Regarding the intuitive materials, he argues that their use "is especially necessary in cases of teaching new technical procedures or tactical actions but also in the stage of perfecting the movement skills [...]. In this sense it can be used to film the different executions of the athletes and then to watch the respective evolutions, as it contributes to the discovery of many details, which in the immediate action of the athletes cannot always be observed by the performer. Such intuitive materials help in the correct appreciation of the executions and in drawing some conclusions as objective, as stimulating for future activity. " Şicolvan, I. (1979).

Șiclovan, I (1979) recommended the presentation of films before the beginning of the lesson. Uțiu, I. (1993), describing the intuitive methods gives as a possible taxonomy of the demonstration: demonstration by teacher, coach, student or athlete; demonstration with the help of chinograms, planes or diagrams; demonstration with the help of films. He also states that watching the videos in slow motion is a modern form of physical education training, and that we can thus benefit as a model of the executions of the greatest sportsmen, to whom we can always refer.

Gh. Cârstea, Gh. (2000), makes a different classification; he divides the intuitive methods into the demonstration method (which in turn can be mediated or mediated) and the use of iconographic materials; observing the execution of other subjects. About the use of iconographic materials, he says that "it is generally recommended when the demonstration cannot be performed at the model level or it can be used as an additional way of strengthening the effects of the demonstration. It is realized, practically, by using the classic iconographic materials (plates, diagrams, graphs, etc.) or modern (slides, films, video tapes, etc.)" Cârstea, I. (2000)

Purpose of study

What do we do in the case when, for different reasons, the mentor of the instructional-educational process cannot execute the demonstration of an element in gymnastics, nor is there, among the students, someone experienced enough to perform the elements at a professional level? The answer, verified by the experiment of this present work, is that the demonstration through the use of audio-visual technical means, can successfully replace the mediated or direct demonstration, and even have a better performance, in our case with 21.7%. Thus, the use of modern intuitive methods can really contribute to the development of the educational practice and to the solution of certain problems identified in the educational reality. Turning from the stages of motor learning and from the definition of intuitive methods, we find as a common denominator the formation of a clear representation of the skill, or the formation of the mental image. This is achieved by demonstrations, mediated directly or through other intuitive methods and explanations. The clarity of the presentation of the skill that has to be learned gives this model a huge advantage.

ISSN 2602-0440, ISSN-L 2602-0440

Research period and the subjects

"Pavel Dan" High School Tritenii de Jos, Cluj County, rural environment; during the period of December 2018 - June 2019. The experimental sample: a number of 21 students from 7th grade; control sample: 7th grade B with a staff of 20 students.

Research Hypothesis

By using modern intuitive methods of teaching acrobatic elements in gymnastics, included in the 7th grade syllabus, students achieve superior performances regarding the formation of specific motor skills.

By confirming the hypothesis of our study we can argue that in most cases the quality of the demonstration of an acrobatic element, whether it is mediated or direct, is inferior to that which can be played by presenting a video clip, with a subject performing the motor action at the level of motor "mastery".

Data recording

The centralization of data obtained in the tests of the experiment, and of the averages calculated on each subject and on the samples, as well as their graphical representation, allow preliminary observations to be made, in support of the verification of the working hypothesis. The results of the last stage are almost entirely smaller compared to those of the post-experimental stage, the decrease, however, not being significant, see table 1.

Table 1. *Results of the control group*

No.	Student initials	Grades/phases				
		Pre-test	***Test***	***Post-test***	***Retest***	***Average***
1.	B.A.C.	6,00	6,80	7,00	6,80	6,65
2.	B.L.C.	7,00	7,10	7,60	7,70	7,35
3.	B.A.G.	7,10	7,30	7,40	7,30	7,28
4.	B.D.	7,90	8,10	8,20	8,10	8,08
5.	B.R.	9,00	9,10	9,10	9,00	9,05
6.	B.D.	7,80	8,20	8,70	8,50	8,30
7.	C.S.C.	9,70	10	10	10	9,93
8.	D.L.Ş.	5,30	5,80	5,70	5,60	5,60
9.	F.A.	7,50	7,50	7,80	7,80	7,65
10.	G.M.	7,90	8,10	8,00	7,90	7,98
11.	L.N.	7,00	7,70	8,10	8,00	7,70
12.	M.R.R.	4,00	4,50	5,10	4,80	4,60
13.	P.R.D.	8,50	9,10	9,30	9,30	9,05
14.	S.D.	4,00	4,30	5,00	4,60	4,48
15.	S.A.R.	4,00	5,80	7,20	7,00	6,00
16.	S.D.C.	5,30	7,20	7,40	7,20	6,78
17.	S.D.	8,10	8,20	8,40	8,20	8,23
18.	T.A.	7,00	7,30	7,50	7,50	7,33
19.	G.E.	6,50	7,50	7,70	7,60	7,33

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No.	Student initials	Grades/phases				
		Pre-test	***Test***	***Post-test***	***Retest***	***Average***
Average		**6,82**	**7,35**	**7,64**	**7,52**	**7,33**

In the case of the experimental group, see table 2, all the students recorded an evolution of their performance, but much more significant, during the experiment. However, the same tendency of stagnation is observed in the last stage, with decreases in some subjects, as in the control group.

Table 2. *Results of the experiment group*

No.	Student initials	Grades/phases				***Average***
		Pre-test	***Test***	***Post-test***	***Retest***	
1.	B.M.G.	7,10	8,50	8,50	8,50	8,15
2.	B.D.	8,00	8,20	8,20	8,30	8,18
3.	B.M.	5,50	6,10	7,20	7,00	6,45
4.	C.S.	8,70	10	10	10	9,68
5.	C.A.L.	8,80	9,60	10	10	9,60
6.	F.L.	4,00	5,30	6,00	5,80	5,28
7.	I.C.	7,80	9,70	10	9,90	9,35
8.	M.I.G.	7,90	9,70	9,90	9,80	9,33
9.	M.M.I.	5,00	6,00	5,80	6,00	5,70
10.	N.P.	7,80	9,10	9,70	9,70	9,08
11.	R.S.	7,30	8,70	9,10	9,10	8,55
12.	R.A.P.	8,50	9,10	9,50	9,50	9,15
13.	S.D.	5,80	6,40	7,00	6,50	6,43
14.	T.R.	8,50	8,80	9,20	9,10	8,90
15.	T.D.D.	4,00	7,50	7,70	7,60	6,70
16.	U.A.	8,90	10,00	9,90	9,90	9,68
17.	U.D.	9,00	9,70	9,70	9,60	9,50
18.	V.D.O.	6,80	7,60	9,50	9,60	8,38
19.	V.M.C.	6,10	7,60	8,20	8,30	7,55
20.	Z.A.	8,50	9,70	10	9,90	9,53
Average		**7,20**	**8,37**	**8,76**	**8,71**	**8,26**

The distribution of the grades in the intervals 9-10, 8-9, 7-8, 6-7, 5-6 and below 5, highlighted in the graphical representations below, indicates a slight movement, from one stage to another, of the subjects.

Although both samples showed evolution of the results, the distribution of the mean intervals of the grades remains inhomogeneous, and the values for poor performance reaches 10%, in the case of the experimental group, and to 21% of the control group, see fig. 1 and fig. 2.

ISSN 2602-0440, ISSN-L 2602-0440

Fig. 1 The values of the means of the control group

Fig. 2 The values of the means of the experimental group

Processing, analyzing and the interpretation of the statistical data

Collected and systematized as a result of the experiment, allow us, by reference to the working hypothesis, to outline two main directions of the conclusions:

1. Following the application of the modern intuitive methods of teaching acrobatic gymnastics to the students of the 7th grade in the experimental group, they obtained higher performance in acquiring specific motor skills, compared to those in the control group. This is largely due to the quality of the teaching model, but it should be specified that the use of modern audio-visual technical means allowed the students of the experimental group, to observe the videos in *slow motion*, allowing students to see all the details of the execution of the acrobatic element, and thus form a clear image of the skill and what needs to be learned. At the direct execution of certain acrobatic elements it is quite difficult to give students the explanation at the same time, but the use of audio-video technical means allows this, and even more, it allows the easy replay of the motor action, being this makes possible to focus attention on different aspects (movement of the arms, movement of the legs, position of the segments at certain times, etc.).

Another advantage the experimental group had over the control group was the use of audio-visual technical means for correcting errors by recording and analyzing their own executions. Specifically, when necessary, we filmed the execution of the of movements of students that made mistakes in their performance, and we replayed this on video projection, so the subjects became much more aware of their own mistakes, they were able to understand them better than explaining with words.

We consider that an extension of the didactic research would be useful, not only for the use of the modern intuitive methods in acquiring the skills in acrobatic jumps in apparatus, but also in learning specific skills of other sports disciplines such as those specific to athletics or sports games, provided that the activity takes place in the gym. The data obtained as a result of the statistical observation process during the four stages of the experiment allow a characterization of the evolution of the studied groups and the organization of the information, in order to verify the research hypothesis. The main activity of the systematization is the presentation of the data in the form of statistical series (tables).

The systematization of the results (mainly of the means) obtained by the subjects in the verification tests related to the four stages of the experiment is performed in the structure of the following table (table 3):

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Table 3. *Systematic statistical data for hypothesis verification*

No.	Student initials	Independent variable - *Context*	Dependent variable - *Performance*
1.	B.A.C.	Intuitive classical methods	6,65
2.	B.L.C.	Intuitive classical methods	7,35
3.	B.A.G.	Intuitive classical methods	7,28
4.	B.D.	Intuitive classical methods	8,08
5.	B.R.	Intuitive classical methods	9,05
6.	B.D.	Intuitive classical methods	8,30
7.	C.S.C.	Intuitive classical methods	9,93
8.	D.L.Ş.	Intuitive classical methods	5,60
9.	F.A.	Intuitive classical methods	7,65
10.	G.M.	Intuitive classical methods	7,98
11.	L.N.	Intuitive classical methods	7,70
12.	M.R.R.	Intuitive classical methods	4,60
13.	P.R.D.	Intuitive classical methods	9,05
14.	S.D.	Intuitive classical methods	4,48
15.	S.A.R.	Intuitive classical methods	6,00
16.	S.D.C.	Intuitive classical methods	6,78
17.	S.D.	Intuitive classical methods	8,23
18.	T.A.	Intuitive classical methods	7,33
19.	G.E.	Intuitive classical methods	7,33
20.	B.M.G.	Intuitive classical methods	8,15
21.	B.D.	Intuitive classical methods	8,18
22.	B.M.	Intuitive classical methods	6,45
23.	C.S.	Intuitive classical methods	9,68
24.	C.A.L.	Intuitive classical methods	9,60
25.	F.L.	Intuitive classical methods	5,28
26.	I.C.	Intuitive classical methods	9,35
27.	M.I.G.	Intuitive classical methods	9,33
28.	M.M.I.	Intuitive classical methods	5,70
29.	N.P.	Intuitive classical methods	9,08
30.	R.S.	Intuitive classical methods	8,55
31.	R.A.P.	Intuitive classical methods	9,15
32.	S.D.	Intuitive classical methods	6,43
33.	T.R.	Intuitive classical methods	8,90
34.	T.D.D.	Intuitive classical methods	6,70
35.	U.A.	Intuitive classical methods	9,68
36.	U.D.	Intuitive classical methods	9,50
37.	V.D.O.	Intuitive classical methods	8,38
38.	V.M.C.	Intuitive classical methods	7,55
39.	Z.A.	Intuitive classical methods	9,53

The comparison of the average performance (V.D.) of the two groups, as an expression of the average of the results obtained by subjects in the modern-classical contexts (V.I.), represents the first step in the procedure

ISSN 2602-0440, ISSN-L 2602-0440

of verifying the working hypothesis. The general and significant systematization from the point of view of the evolution of the dependent variable during the experiment is highlighted by the following graph, fig. 3:

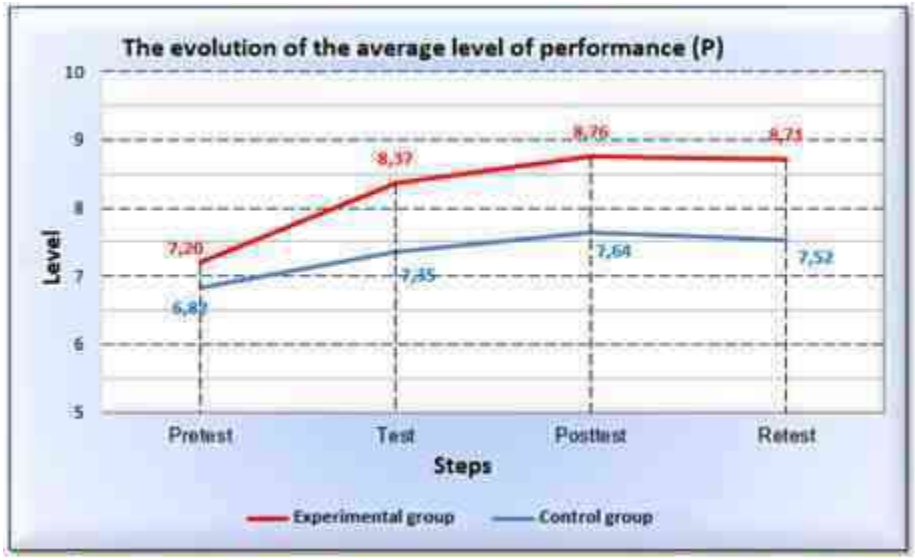

Fig. 3 Graph of the evolution of the average level of performance

The graph shows a significant increase, of 21.7%, of the average performance of the experimental group, during the intervention (applying modern intuitive methods), compared to the 12% increase of the control group, which carried out its didactic activity under ordinary conditions, with classic intuitive methods.

Also, the graph confirms the difference between the levels of the dependent variable, recorded by the two groups in the Post-test stage and in the Retest stage, this being meant to further confirm the research hypothesis, should it be verified.

The procedure for verifying the research hypothesis must demonstrate that the superior value of the performance of the experimental group, as compared to that of the control group, is due to the intuitive methods used and not happened by accident. Statistical data regarding the variation of the dependent variable were calculated (V.D.), the performance systematized and subjected to the automatic processing procedure using the SPSS statistical analysis computer application. As previously determined, the t test will be used for two independent samples to verify the hypothesis. By the t test, the null hypothesis is provisionally admitted, it is assumed that the difference between the two means of the samples is due to chance and that there are no real differences between the samples.

The first table generated by the computer application is "Group Statistics", which presents for each of the two samples, associated with the independent variable (classical and modern methods), the number of subjects (column "N"), the average (column "Mean"), standard deviation (deviation) column ("Std. Deviation" column) and standard error of the mean ("Std. Error Mean" column). It is observed that the average of the experimental sample is higher than the control sample (8.2585 > 7.3353), table 4.

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Table 4. *„Statistics Group"*

Group Statistics

	Metode	N	Mean	Std. Deviation	Std. Error Mean
Performanta	Moderne	20	8,2585	1,41978	,31747
	Clasice	19	7,3353	1,42899	,32783

The second table, "Independent Samples Test", presents the results of the t-test for comparing the averages of the two samples. In the first part we read the results of the Levene test for verifying the condition of variance equality (the column "Levene's Test for Equality of Variances"), equality needed to validate the t test.

The calculated value, F (37) = 0.172, at a safety threshold ("Sig.") P = 0.681 (higher than the allowed threshold p = 0.05), is insignificant, and the condition of variance homogeneity is met. The number 37 in the column "df" represents the degrees of freedom, variable noted with n, and is calculated according to the formula:

n = N1 + N2 - 2, where N1 and N2 are the number of subjects in the two samples, see Table 5.

Table 5. *„Independent Samples Test"*

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Performanta	Equal variances assumed	,172	,681	2,023	37	,050	,92324	,45629	-,00129	1,84775
	Equal variances not assumed			2,023	36,871	,050	,92324	,45636	-,00154	1,84802

Assuming the homogeneity of variances, the results of the first t test, "Equal variances assumed", will be used in the table. The calculated value of t (37) = 2.023, at a significance threshold [column "Sig. (2-tailed) "] p = 0.05 (equal to the 0.05 threshold proposed in the hypothesis), indicates that there are significant differences between the means, the subjects of the experimental sample registering a higher level of performance in comparison with those in the control group. The calculation formula of t is represented by the report:

$$t = \frac{\left|\overline{m_1} - \overline{m_2}\right|}{\sqrt{\sigma^2\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}} \quad (1)$$

Where: m1 and m2 are the mean of the groups, and σ2 - the variance of the collectivity (of the assembled groups), calculated as follows:

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$$\overline{\sigma^2} = \frac{\sum\left(x-\overline{m_1}\right)^2 + \sum\left(x-\overline{m_2}\right)^2}{N_1+N_2-2} \quad (2)$$

Where x takes the values of the subjects' individual environments.

Once the value of t = 2.023 is calculated, it is determined the probability that the differences between the averages are due only to the random factors, respectively the probability of verifying the null hypothesis. For this the Student table is used (table t), see table 6.

Table 6. *Student table (extract)*

v	0.10	0.05	0.025	0.01	0.005	0.001
1.	3.078	6.314	12.706	31.821	63.657	318.313
2.	1.886	2.920	4.303	6.965	9.925	22.327
3.	1.638	2.353	3.182	4.541	5.841	10.215
4.	1.533	2.132	2.776	3.747	4.604	7.173
5.	1.476	2.015	2.571	3.365	4.032	5.893
6.	1.440	1.943	2.447	3.143	3.707	5.208
7.	1.415	1.895	2.365	2.998	3.499	4.782
8.	1.397	1.860	2.306	2.896	3.355	4.499
9.	1.383	1.833	2.262	2.821	3.250	4.296
10.	1.372	1.812	2.228	2.764	3.169	4.143
11.	1.363	1.796	2.201	2.718	3.106	4.024
12.	1.356	1.782	2.179	2.681	3.055	3.929
13.	1.350	1.771	2.160	2.650	3.012	3.852
14.	1.345	1.761	2.145	2.624	2.977	3.787
15.	1.341	1.753	2.131	2.602	2.947	3.733
16.	1.337	1.746	2.120	2.583	2.921	3.686
17.	1.333	1.740	2.110	2.567	2.898	3.646
18.	1.330	1.734	2.101	2.552	2.878	3.610
19.	1.328	1.729	2.093	2.539	2.861	3.579
20.	1.325	1.725	2.086	2.528	2.845	3.552
21.	1.323	1.721	2.080	2.518	2.831	3.527
22.	1.321	1.717	2.074	2.508	2.819	3.505
23.	1.319	1.714	2.069	2.500	2.807	3.485
24.	1.318	1.711	2.064	2.492	2.797	3.467
25.	1.316	1.708	2.060	2.485	2.787	3.450
26.	1.315	1.706	2.056	2.479	2.779	3.435
27.	1.314	1.703	2.052	2.473	2.771	3.421
28.	1.313	1.701	2.048	2.467	2.763	3.408
29.	1.311	1.699	2.045	2.462	2.756	3.396
30.	1.310	1.697	2.042	2.457	2.750	3.385
31.	1.309	1.696	2.040	2.453	2.744	3.375
32.	1.309	1.694	2.037	2.449	2.738	3.365
33.	1.308	1.692	2.035	2.445	2.733	3.356
34.	1.307	1.691	2.032	2.441	2.728	3.348
35.	1.306	1.690	2.030	2.438	2.724	3.340
36.	1.306	1.688	2.028	2.434	2.719	3.333
37.	1.305	1.687	2.026	2.431	2.715	3.326
38.	1.304	1.686	2.024	2.429	2.712	3.319
39.	1.304	1.685	2.023	2.426	2.708	3.313
40.	1.303	1.684	2.021	2.423	2.704	3.307
41.	1.303	1.683	2.020	2.421	2.701	3.301
42.	1.302	1.682	2.018	2.418	2.698	3.296
43.	1.302	1.681	2.017	2.416	2.695	3.291
44.	1.301	1.680	2.015	2.414	2.692	3.286
45.	1.301	1.679	2.014	2.412	2.690	3.281

On the line corresponding to the degree of freedom df = 37, the value of t corresponding to the significance threshold p = 0.05 is identified, for which the null hypothesis is rejected and the working hypothesis is accepted. If the calculated value, 2.023, is greater than the one in the table, 1.687, the research hypothesis is verified and accepted. Moreover, the above table shows that the exact probability (if we can say so) for the calculated level of t is 0.025.

Consequently, we can state with a probability of 97.5% (1 - p = 1 - 0.025 = 0.975), that the difference between the sample meanings on the dependent variable (performance) is due to the influence of the dependent variable (using modern intuitive methods).

ISSN 2602-0440, ISSN-L 2602-0440

In addition to the statistical significance of the results of the t test, shown in the probability with which the research hypothesis is accepted, the determination of the effect size V.I. is of major importance on V.D. The calculation of this effect is performed using the indicator r, which, in the case of the t test for independent samples and unequal groups, with the following formula: The obtained value (r = 0,32) refers to certain reference values, established by the statistician Jacob Cohen in 1988, quoted by Antonesei, L. (2009).

Following this report, it can be stated that applying modern intuitive teaching methods to the experimental sample has a medium effect on increasing the level of motor skills specific to acrobatic gymnastics.

$$r = \frac{t(N_1 + N_2)}{\sqrt{t^2(N_1 + N_2)^2 + 4t(N_1 N_2)}}$$

Values of *r* :	**Effect category:**
0.10	- weak
0.30	- medium
0.50	- strong
≥0.70	- very strong

Conclusions and proposals

The analysis of the results of the experiment led to the verification of the research hypothesis, showing that through the proper use -in the hours of physical education and sports in the 7th grade-, of the modern intuitive methods of teaching acrobatic gymnastics, the students registered an increase with 21.7% of the level of specific motor skills, the application of these methods having an average influence on the obtained performance. Going back from the stages of motor learning and from the definition of intuitive methods, we find as a common denominator: *forming a clear representation on learning*, or *forming the mental image*, Cârstea Gh. (2000).

This is formed by demonstrations, mediated or directly, or through other intuitive methods and explanations. The clarity of the representation on the skills to be learned gives a great advantage this model. If we look at it from this perspective, it is of course understood, but also demonstrated by confirming the hypothesis of this study, that in most cases the quality of the demonstration, whether it is mediated or direct, is inferior to that which can be played by presenting a video clip with a subject performing the action at the level of motor "mastery".

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