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Contents

EDITORIAL

OSH IN FACULTIES OF PHYSICAL EDUCATION AND SPORT. NEW CHALLENGES

The globalizing tendency of contemporary society is obvious in all domains, and higher education is no exception. From our perspective, this tendency is defined by two apparently contradictory aspects: on the one hand, its world-wide character, which reflects the need for a unitary and proficient university training able to support the sustainable development of society, and on the other, the national/local "blueprint" (legislation, tradition, resources), which tends to particularize it, inducing moments of stagnation in the process. There is great and steady interest in creating a common space for higher education, materialized in the form of bodies/organizations/structures that develop strategies, standards, best practices, etc. and which work towards the integration of local "aspects" into a coherent, functional and efficient system.

In what concerns the field of physical activities (the term includes the all-encompassing preoccupations of faculties of physical education and sports), two reports of the *European Agency for Safety and Health at Work* (EU-OSHA), addressing education in the Europe, are worth the attention of specialists in the field: *Mainstreaming occupational safety and health into university* (2010); and *Occupational safety and health and education: a whole school approach* (2013). At the same time, due to its integrating character, the concept of "physical activity" will be approached here from an ergonomic perspective. To support our assertion, let us first define the term ergonomy. Ergonomy, or human factors, is the science that deals with the interaction of human factors, factors pertaining to the workplace, or environmental factors aimed at optimizing human performance. Traditionally, the object of ergonomy is the workplace, while sports and leisure activities are not ranged among a person's daily occupations. On the other hand, just like risks of injuries at the

workplace, the risk of accidents during physical activities is constant and extremely varied in cause; in both cases, it is the role of ergonomy to elaborate preventive strategies to eliminate such risks. Among other things, ergonomy focuses on factors such as: fatigue, stress, efficiency, comfort, performance, etc. A direct relationship was established between risk and safety, between human performance and the subject's health (B.J.Sharkey & S.E.Gaskill, 2006, *Fitness and health,* 6th ed., Champaign, IL): the higher the intensity of physical activity, the greater the benefits, but also the risk of accidents.

Domain experts need to consider specifically the direct relationship between benefits and risks inherent in the practice of physical activities: this relationship is even more obvious when sports performance is addressed as, in most cases, the athletes' maximal limits are targeted. But physical activity is also an intrinsic part of the daily life of today's individual, aimed at enhancing the quality of his life: health, performance, wellness, etc. In spite of man's changed attitude, statistics shows that half of annual illnesses and deaths can be attributed to the persons' way of life — which is quite alarming for specialists. As a result, "the advent of mass participation in sport, exercise, and recreational activities over recent decades necessitated a reappraisal of human factors in these areas" (Reilly, Thomas, 2009, *Ergonomics in Sport and Physical Activity,* Human Kinetics, Champaign, IL). The same author remarks the absence of sports ergonomy from the curricula of American universities; in most cases, ergonomic modules constitute an important component of academic programs only in safety engineering, occupational health and related areas.

A reading of a document elaborated by the Human Factors and Ergonomics Society, CA, Santa Monica (2000), entitled *Directory of Human Factors/Ergonomics Graduate Programs in the United States and Canada*, shows that all American and Canadian universities include ergonomics/human factors, but there is no program addressing sports ergonomy, i.e. a subject that views sports and leisure as pertaining to man's daily preoccupations. It is the time, as well as the duty, of researchers in the field of sports, to scien-

tifically fundament this new status of today's individual, that of occupational athlete. The person who practices sports and leisure will be considered and approached — just like any worker at his workplace — from the perspective of sports ergonomy, i.e. efficiency and human performance viewed in direct relationship with the safety and health of the workplace. In the European space there are already "coagulating factors" aimed at inducing all faculties of physical education and sports to embrace this new perspective; in this way, the unity and efficiency of European higher education can be accomplished (see http://osha.europa.eu /en/new_eustrategy).

The two reports mentioned above (EU-OSHA-2010 and EU-OSHA-2013), apart from numerous examples of good practice in the countries of the Union, define concrete modalities of implementing those strategies in European higher education. First of all, to integrate health and safety into education and training programmes at all levels and in all fields, including vocational and university education. To integrate safety and health in universities involves creating premises for improving the quality of life in sports and leisure for the occupational athlete. Occupational safety and health in education mean integrating one policy area (OSH) into another (Education). This means that different systems, with different institutions and different thinking, have to communicate with each other and to take joint action. The EU-OSHA-2010 report highlights the fact that most examples of good practice presented target independent courses and practical activities, instead of safety and health integrated as a "transversal" topic, i.e. throughout all the levels of education, and in different subjects. Thus, the outcomes for the students of the Faculty of Physical Education and Sports would be expressed in terms of attitudes and dispositions, of knowledge and understanding, of skills and competences regarding the occupational athlete's safety and health. The report also enumerates some difficulties involved in the process of integration of OSH into education, difficulties that faculties of physical education and sports must keep in mind: few universities offer examples of cross-border strate-

gies, most of them target a single university; university curricula provide independent courses, or courses that include OSH of various lengths (from 12 to 30 hours, plus practical activities; some such courses are complementary, others optional); a lack of training for teaching at university level, as well as insufficient OSH knowledge among academics whose specialty is not OSH; quite often, teachers/trainers have little OSH knowledge, they are not familiar with active teaching methods, and there are very few cases of higher education academics who have OSA teaching qualification.Integrating OSA in the faculties of physical education and sports represents a great challenge for specialists if the field; but at the same time, we should not ignore the changes in contemporary society, reflected in the European higher education environment. It is not enough to observe those changes; we must actively participate in the change.

Ioan GALEA,
Director of Research Center for physical activity

THE IMPORTANCE OF COMBINING MUSCULAR CONTRACTIONS DUTY FOR STRENGTH TRAINING, IN THE GAME OF TENNIS, FOR 11-12 YEAR-OLDS

Aurelia Cristina MACRI ,
The Faculty of Physical Education and Sports of Pitești

Abstracts:

The issue of optimizing the motor skills has always concerned experts in the sport training domain, mainly because it ensures the biological and functional under layer of the physical effort demanded by competition, Macri A.C., 2005, p.7.

The purpose of this research lies in the presentation and argumentation of the means orientated towards the tennis player's physical strength training in order to achieve an optimal capitalization of his/hers performance capacity reflected in obtaining greater results in competitions and tournaments.

In order to join the purpose and demands we submitted we will use the following research methods: the analysis and generalization of data in specialized literature; the pedagogical observation method; the inquiry method – through questioning; the measuring and motor testing method, the pedagogical experiment; the graphic and tabular method.

For elaborating the experimental programme, the main objective was represented by the choosing of the most efficient means belonging to the poly-metric contractions duty so as to optimize the strength.

We took into consideration particularities of age, sex, and the athlete's level of training, but also the type of strain and the game's particularities, and the physical effort's volume, intensity and complexity.

Key words: *optimization, plyometrics, programme.*

Introduction:

During the full cycle of the athletic life of a tennis player, the age of 11-12, preparation level — advanced, being the stage of the childhood's greatest performance, which follows the first organized training stage and prepares the consolidation and complete perfecting, where a high physical support is required.

The tennis player's training is scheduled in accordance with the competitional programme, which includes tournaments that are organized all year long, followed by 3-4 weeks when the training is continued. The physical preparation for the tennis player finds its place usually in the winter time, less in the competition period, and with lower balance all year long.

Metods:

In order to join the purpose and demands we submitted we will use the following research methods: the analysis and generalization of data in specialized literature; the pedagogical observation method; the inquiry method — through questioning; the measuring and motor testing method, the pedagogical experiment; the graphic and tabular method.

Results:

The question-based inquiry offered us large volume of information regarding the education/development manner of the motor force skills, at the age of 11-12, for advanced child tennis players, and also an opinion on the general working method with tennis players from this age range. The age of the inquired trainers (10 trainers) ranges from 24 to 56, having a length of service between 2 and 28 years.

Conclusions, at the age of 11-12, the weekly specific strength training is used — 70% of the trainers (7) we asked, and 30% work two trainings to develop strength in its diverse ways of manifestation.

All questioned trainers work once or twice per week speed-strength trainings, but not specifying how they work to educate the strength.

During the preparation period, 80% of the persons questioned work on developing strength in general, and 20% concentrate also on the build-up of muscular strength. When in pre-competitional and competitional period, in 90% of the cases the purpose is obtaining maximum strength and maintaining it by doing 2, 3 maximum, trainings per week, and 10% work with reduced loads in comparison to the preparing period and 2 trainings per week without naming the methodic orientation of the period.

The use of the method of combining the duties of muscular contractions is applied by 60% of the ones asked, used between volumes and low intensity, and 40% use it not so frequent or not at all.

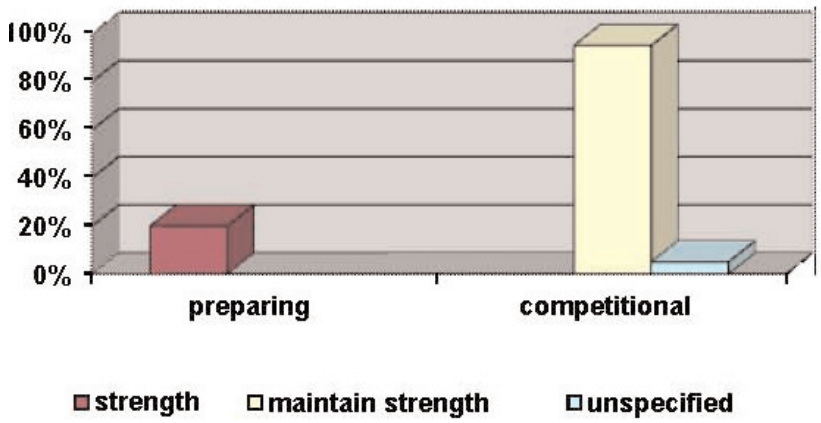

Figure 1

When considering the stability of the exercises for developing strength: the inquired trainers (100%) use calisthenics (jumping squat, different squats, steps, semi-squats, toe rising) for the speed-strength training, jumps and different combinations of those mentioned (with or without approach) 100% of those asked, 80% for exercises using the medicine ball, 15% for plyometric exercises, but with lowered intensities according to the age levels.

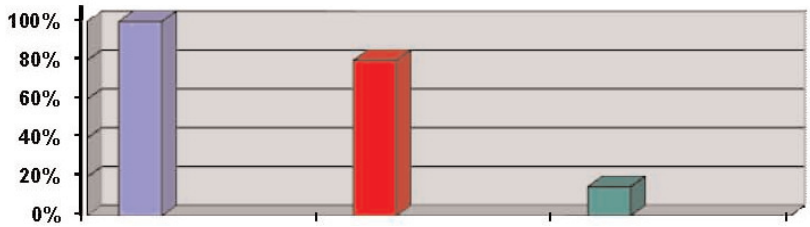

Figure 2
Means used in strength training

When answering questions regarding the utility of dynamic strength exercises — using ones body weight, we gathered the following data: ascend running (80%), multiple jumps (100%): long jumps without approach, triple jump, penta-jump, deca-jump, frog jumping, step jumps; bench exercises (95%).

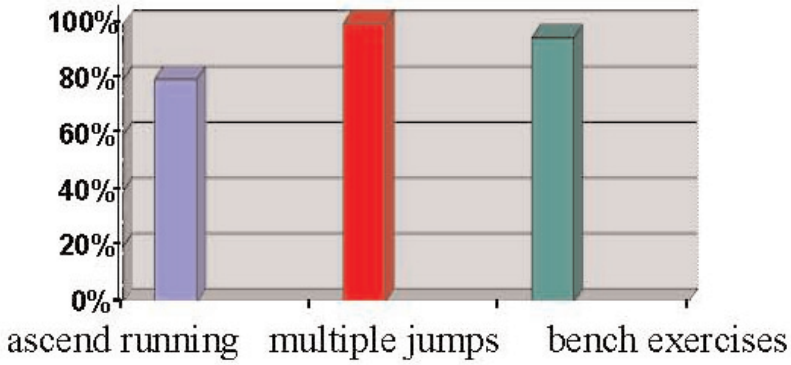

Figure 3
Dynamic strength means used by the questioned trainers

Plyometric exercises are used at about 15% in the strength training of skilled children tennis players.

Experimental programme proposal

The main objective is the choice of the most efficient means of plyometric contraction duty to optimize the strength.

We took into consideration particularities regarding age, sex, and the level of training each athlete had, but also the kind of load

and the game's characteristics, and also characteristics of volume, intensity and effort complexity.

The strength training programme

is based on the following arguments:

● The characteristic of the tennis game, considering that in this sport the effort is backed up by all muscular divisions that make effort combined and successive towards field movement and to perform technical procedures. The performances are explosives, in a coordination duty with a variable effect on duration and intensity.

● Age particularities, somatic development and psycho-motor of experimental subjects.

● The content of the tactical stages of the single game: the fix game stage and its component moments: service and return of service, the alternative game stage and its phases: ball's directions, the play-off and its components. Winning the net point and at the baseline, the passing game stage and its components: the offensive-defensive circuit.

● The game planning can differ from player to player, but in strong connection with every player's psycho-motor particularities and with his/hers techno-tactical knowledge. The modern game is offensive, in force, characterized by aggression, due to the fast surfaces. The strength training must answer to these demands. Strength exercises will be performed under a dynamic rhythm, at high range: weight loosing exercises (squats, running pushups with small weights: sand bags, vests — not heavier than 2.5 — 3 kg., ascend running, multiple jumps).

Table 1

The objectives of applying the optimizing manifestation forms of strength for

An optimization programme of the overall strength, especially in the upper body muscle divisions.

Verve factor	General character	The components of the tactical stages in tennis			
		The fix game stage and component moments: service and return	The alternative game stage and component moments: ball directions	The crucial game stage and component moments: winning the net point and the baseline	The passing game stage and component moments: the offensive-defensive circuit
Physical	The development of great body functions; Harmonious physical development. The development of basic motor aptitudes and general drive ability.	The development of muscles of the upper body	The strength optimization in the inferior limbs; The explosive strength optimization on resistance duty; The ball's hitting parameters optimization;	The strength optimization regarding skillfulness and speed for all limbs; The explosive strength optimization for the superior limbs;	The explosive strength optimization on resistance duty;

- Knee to chest jumps;
- Pushups:
- Torso lifts:
- Jumping squats:
- Torso extensions:
- Abdomen training;

Routine:

Work time: 3x30" with a 30 second break, break between series 3 minutes, active break, consisting of mobility exercises and active and passive stretching.

The progression element is represented by the gradual boost of the execution time by 5 seconds.

Table 2

The optimization routine of the means of strength manifestations in tennis with the help of plyometric muscular contractions duty

WORKOUT OBJECTIVES			
Vertical jump optimization	Optimization of arms explosive strength	Optimizing the explosive strength on resistance duty	The optimization of strength on skillfulness and speed duty regarding upper and lower limbs
Continuous sported steps on the same foot, 4x20m;	4x10 vertical throws with the med ball (1-2 kg)	Long jumps without approach	Triple jump with and without approach 6x standing triple jumps, jumping over an obstacle 6x;
- Sported step takeoff and touching the suspended object, by running, 10 reps,	4x10 chest throws (2kg)	Standing long jumps, by sprint 4 jumps together with sprints on 10-15 m 6x;	Step jumps on two legs, step by step, or every other step 3x20 steps;
- Bench jumps on every foot, 3x10 reps	3x10 lateral throws	Sand shear jumps 3x20	Jumps on, over different height cubes 6x cubes
- Alternate feet jump 3x20	Back over head throw of the med ball 2kg, starting in a bent forward position, 10-20x	Fall-landing from a high area, followed by jumps over a fence of 50 cm high; 10-15 reps	Deep jumps over an obstacle 10-15 reps.
- Squatted support, advanced extension jump in the lumbar area;	Stepping wheel barrow with extended hands 3x10;	Long "frog" jumps 3x6;	
Squatted jump, high vertical jump		4x1 min diversified cord jumps	
- High jump squat 3x10.		6x6 hurdles (50 cm) on 2 feet	

Conclusions:

1. When considering the prospects of the physical training of tennis players we have to take into consideration the game's characteristic;
2. In order to maximize the athletes 'training, a thorough knowledge of the factors that make up professionals in tennis is required for the trainers.
3. For strength training there should be a balance between strength evolution and the techno-tactical training, but also with the other motor skills. The author recommendations refer to always work in parallel strength, speed resistance, grace and technique.
4. Workout routines regarding strength are established following the specialists' recommendations in tennis, and when followed, strength exercises will always be followed by others to develop grace and articular drive. Moreover, a second demand for efficiency in strength training, is to ensure a dynamic rhythm, with high range of the used routines.

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PLYOMETRICS AND THE EFFECT ON FOUR TYPICAL VERTICAL HEIGHT

Mateescu ADRIANA

University of Pitesti, Romania
Faculty of Physical Education and Sport, University of Pitesti, Romania

Abstract

The aim of this study-case was to determine the effects of plyometric training on height of rise, the (maximal) explosive force of legs, the power of the inferior train. The controlled trial that evaluated the effect of plyometric training on four typical vertical height, test were carried out: Counter Movement Jump - CMJ, Continuous Jump with Bent Legs Reference – CJbref, Continuous Jump with Straight Legs - hCJs, Continuous Jump with Bent Legs - CJb30 sec. Study-case was identified by computerised used Bosco Protocol applied Kistler force platform measurement 9290AD Quattro Jump.

The four tests that were performed using Kistler force platform to measure Quatro Jump Bosco Protocol Version 1.0.9.2, gave us the data about the height and jump power and capacity data on neuro-motor recruitment (fast fibers), voluntary effort, fatigue, muscle elasticity effect or stretching.

The pooled estimate of the effect of plyometric training o jump height was plyometric training provides a statistically significant and practically relevant improvement in jump height with the mean effect ranging from 3.8 (CJs) to 7.2 (CJb30s).

Words key: jump height, jump power, explosive strength, fast fibers, plyometrics**.**

Introduction

Plyometric training has been described as exercises or drills that combine speed and strength to produce an explosive movement and an increase in power (Chu, D., 1998).

Plyometrics have been promoted as being specific to almost every sport due to the combination of force and velocity development said Yessis M. in 1991.

Plyometrics are also categorized by their amazing ability to increase reactive strength and jumping skill and coordination.

Plyometrics improve reactive strength by utilizing the Strength-Shortening Cycle (SSC) in order to create maximal power output.

Plyometrics are based on the principle that the SSC can create much more power than a normal muscle contraction because the muscles are able to store the tension from the stretch for a short period of time - causing the muscle to react like a rubber band. The greatest force can be achieved when the stretch is performed as fast as possible.

The key concept to know is that a faster stretched muscle results in greater force development. Lundin, P., Berg, W. (1991, p.25) described the process of plyometrics as:

A muscle forcibly stretched before a contraction uses the stretch reflex to activate the muscle to shorten vigorously, and the elastic nature of the muscle fibers allows the muscle to store energy during negative work, that will be released during the shortening contraction.

It is essential to design training and conditioning programs to be as specific as possible to the actual performance and environment of the activity. Plyometric training is a novel form of conditioning and relates to the specificity principle.

Fox, E.L., Bowers, R.W., Foss, M.L, (1989, p.171) stated: Experience has taught successful coaches that in order to increase the performance of their athletes; a specific training program must be planned for each athlete. In other words, the training program must be relevant to the demands of the event for which the athlete is being trained.

After Radcliffe, J., Farentinos, R., (1985), an effective plyometric program achieves its outcome through the manipulation of four variables: volume, intensity, frequency, and recovery.

Volume relates to the total work performed for each session. Intensity refers to the difficulty and the number of exercises performed in each session. Frequency refers to the number of repetitions that an exercise is performed, and the number of times a session takes place per cycle (week). Recovery is the rest between each set and is a key component in plyometric training. (Robinson, L.E., 2002)

Explosive leg power constitutes a crucial component in numerous athletic events. Vertical jump height demonstrates a positive correlation with lower body power (Potteiger, J.A.,et all 1999). Jumping ability is critical in the execution of many athletic skills, such as high jumping, rebounding and blocking in basketball, and spiking in volleyball. The plyometric training protocol consisted of vertical jumps, bounds, and depth jumps.

Proposal of the study-case

The aim of this study-case was to determine the precise effect of an 8-week of plyometric training on height of rise, explosive force of the legs, power of the lower limb on a college —age male.

The muscular training tests applied: To evaluate data about the height and jump power and capacity data on neuro-motor recruitment (fast fibers), voluntary effort, fatigue, muscle elasticity effect or stretching of the subject studied, the testing method was used by *Bosco Protocol applied Kistler force platform measurement 9290AD Quattro Jump,* thus making use of 4 tests:

The Counter Movement Jump (CMJ) –the test presupposes doing a vertical jump identical to the Squat Jump, but by starting from a standing position. A vigorous flexion is executed, followed by the extension and vertical jump. The differences between the two tests represent the „elastic" aptitudes of the sportsmen. The CMJ performance describes the evaluation of the explosive (maximal) force FV of the legs, and the quality of reusing the muscular elasticity, the capacity of neuro- motric recruit, and the capacity of using the visco-elastic force from the muscular tissue.

The Continuous Jump with Bent legs reference (CJbref) – series of 5 — 7 jumps with bended knees at the contact phase used as reference for cu CJb 15 — 60 seconds. The CJb performance describes the mechanic power of the inferior train.

The Continuous jump with straight legs (CJs) (reactivity test) – series of 5 -10 jumps with stretched knees (short, elastic contact with the ground). The CJs performance describes the evaluation of the muscular elasticity of the legs extension muscles, the jumping technique and tolerance to stretched impact, the quantity of quick fiber.

Continuous with Bent Legs Jump (CJb 30s) - jumps with knees bent at 30 seconds contact phase. CJb describe performance: mechanical power on lower limb and measures alactacide anaerobic capacity.

Organizing and conducting research

The experiment took place at the Physical Education and Sport Faculty, Pites¸ti. Subject under research was a college —aged male. This study was conducted over 8 week and 10 indicators were tested: 3 anthropometric (height, leg length, weight — table 1), 3 physiology (Test Ruffier, standing and supine pulse- table 2) and 4 of movement (*Counter Movement Jump* - hCMJ, *Continuous Jump with Bent Legs Reference – hCJbref, Continuous Jump with Straight Legs - hCJs, Continuous Jump with Bent Legs (hCJb30 sec)* — table 3,4, for thelegs by through which we assess the progress in training and how different methods applied in the preparation.)

Results

Bosco Protocol can evaluate the components: tests explosivitate, plyometric expansion (CMJ) tests the power of the thigh (CJbref), (CJB) reactivity tests (CJs) and measurement alactacide anaerobic capacity (CJb 30s).

Table 1 shows physical characteristics, recorded by an initial and final testing of the student participating in our experiment.

Table 1: Anthropometric tests. ***Somatic growth dynamics of the development indicators initial – final testing***

Name: **M S**						
Age	**Weight (Kg)**		**Waist (cm)**		**Length of legs (cm)**	
	TI 01.04.2011	TF 01.06.2011	TI 01.04.2011	TF 01.06.2011	TI 01.04.2011	TF 01.06.2011
20 ani	77.37 kg	75.45 kg	182 cm	182 cm	100 cm	100 cm

Table 2: Physiological tests. . ***Dynamic evolution tests functional indicators initial – final testing***

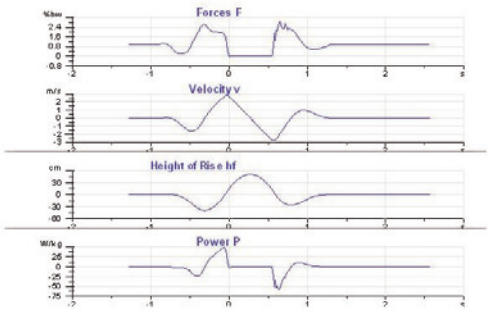
Nr.	NAME	Supine puls beats/minute		Standing puls beats/minute		Ruffier sample points	
		TI	TF	TI	TF	TI	TF
1.	S M	75	70	84	81	8.2	4.7
	df	5		3		3.5	

Table 3: Computer analysis of CMJ

COUNTER MOVEMENT JUMP (CMJ)

INITIAL TESTING

Legend	Leg	hf [cm]	hc [cm]	Pavg [W/kg]	Fi [BW]
3	Both	46.2	-39.7	28.7	1.62
Avg		**46.2**	**-39.7**	**28.7**	**1.62**



FINAL TESTING

Legend	Leg	hf [cm]	hc [cm]	Pavg [W/kg]	Fi [BW]
	Both	49.8	-45.1	28.1	1.63
1					
2	Both	51.7	-45.3	27.7	1.70
3	Both	49.7	-46.1	27.0	1.82
Avg.		**50.4**	**-45.5**	**27.6**	**1.72**
Stdev.		**1.1**	**0.6**	**0.5**	**0.10**

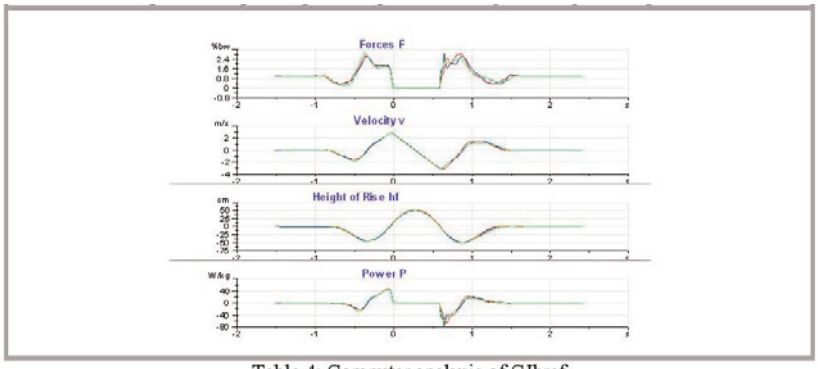
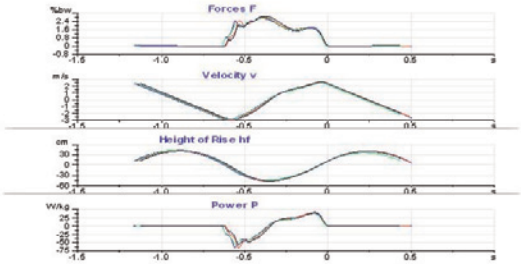


Table 4: Computer analysis of CJbref

CONTINOUS JUMP BENT LEG REFERENCE (CJbref)					
INITIAL TESTING					
Legend		hf	hc	Pavg	Fi
		[cm]	[cm]	[W/kg]	[BW]
1		40.2	-46.9	23.9	1.64
2		40.7	-47.4	24.4	1.72
		36.2	-44.9	22.7	1.68



FINAL TESTING					
Legend		hf	hc	Pavg	Fi
		[cm]	[cm]	[W/kg]	[BW]
1		42.0	-32.5	26.0	1.60
2		42.6	-42.2	26.4	1.79
3		46.7	-39.2	28.5	1.83
4		44.6	-39.4	27.2	1.82
5		44.3	-41.1	26.5	1.76
Avg		**44.0**	**-38.9**	**26.9**	**1.76**
Stdev.		**1.9**	**3.8**	**1.0**	**0.09**

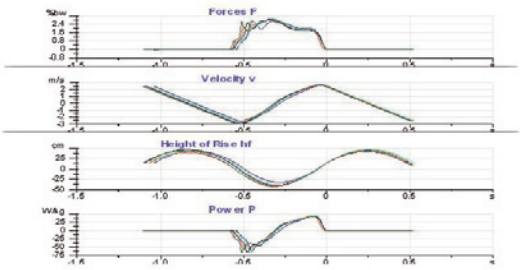
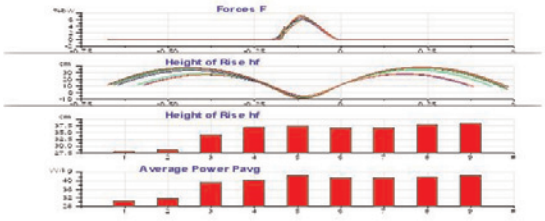


Table 5: Computer analysis of CJs

CONTINOUS JUMP STRAIGHT LEGS (CJs)

INITIAL TESTING

Legend		hf	Pavg	tcont.	k
		[cm]	[W/kg]	[s]	[kN/m]
1		27.9	30.4	0.206	31.50
2		28.6	31.6	0.196	35.21
3		34.2	39.0	0.204	30.03
4		37.0	40.3	0.208	27.96
5		37.4	42.7	0.188	37.49
6		36.6	41.5	0.184	39.85
7		36.8	41.6	0.192	35.19
8		37.8	42.0	0.200	32.51
Avg.		**35.0**	**39.1**	**0.197**	**33.51**
Stdev.		**4.0**	**4.7**	**0.008**	**3.75**



FINAL TESTING					
Legend		hf	Pavg	tcont.	k
		[cm]	[W/kg]	[s]	[kN/m]
1		39.1	39.6	0.228	23.79
2		40.4	43.0	0.218	25.52
3		40.3	43.0	0.214	26.55
4		40.0	43.1	0.214	26.75
5		41.4	43.9	0.216	25.60
6		39.2	43.1	0.212	26.67
7		45.0	44.0	0.260	17.30
8		39.8	43.3	0.190	37.38
Avg		**40.7**	**42.9**	**0.219**	**26.19**
Stdev.		**1.9**	**1.4**	**0.020**	**5.50**

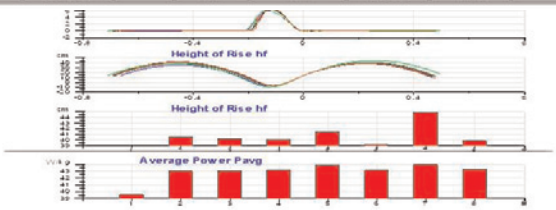
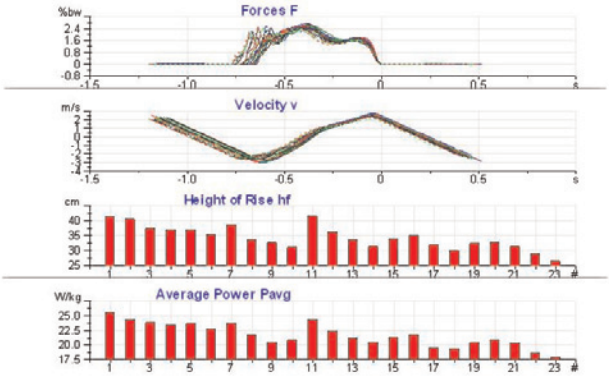


Table 6: Computer analysis of CJb 30s

CONTINOUS JUMP BENT LEGS (CJb30s)

INITIAL TESTING					
Legend	hf	hc	Pavg	Fi	tcont.
	[cm]	[cm]	[W/kg]	[%BW]	[s]
1	41.4	-54.7	25.5	1.75	0.650
2	40.5	-51.5	24.3	1.60	0.670
3	37.5	-52.4	23.9	1.61	0.664
4	37.1	-49.6	23.5	1.55	0.666
5	37.1	-48.0	23.7	1.61	0.656
6	35.3	-46.2	22.7	1.63	0.644
7	38.7	-49.6	23.7	1.56	0.682
8	33.6	-49.8	21.8	1.57	0.674
9	32.7	-49.6	20.4	1.40	0.726
10	31.1	42.8	20.8	1.49	0.684

11	41.7	-52.3	24.3	1.48	0.760
12	36.4	-52.9	22.4	1.57	0.712
13	33.7	-48.7	21.2	1.41	0.700
14	31.4	-47.7	20.3	1.47	0.696
15	34.0	-49.0	21.3	1.50	0.716
16	35.1	-50.3	21.8	1.52	0.716
17	31.9	-51.7	19.5	1.38	0.754
18	30.0	-50.9	19.4	1.47	0.742
19	32.6	-52.3	20.4	1.42	0.776
20	32.8	-52.6	20.8	1.44	0.756
21	31.4	-52.7	20.3	1.51	0.756
22	29.0	-52.2	18.7	1.43	0.780
23	26.5	-45.9	17.9	1.42	0.786
Avg.	**34.4**	**-50.1**	**21.7**	**1.51**	**0.712**
Stdev.	**4.0**	**2.8**	**2.0**	**0.09**	**0.045**



FINAL TESTING

Legend	hf	hc	Pavg	Fi	tcont.
	[cm]	[cm]	[W/kg]	[%BW]	[s]
1	42.4	-37.5	26.1	1.72	0.554
2	38.4	-39.4	23.8	1.72	0.590
3	44.3	-40.6	26.4	1.77	0.596
4	44.2	-41.3	26.6	1.74	0.584

5	43.7	-39.5	26.4	1.73	0.568	
6	42.2	-39.1	26.1	1.78	0.566	
7	41.8	-38.8	25.3	1.63	0.598	
8	40.6	-38.0	24.8	1.66	0.590	
9	38.0	-34.9	23.8	1.52	0.580	
10	38.2	-37.4	24.0	1.69	0.592	
11	42.1	-35.6	25.8	1.64	0.576	
12	34.9	-33.3	23.1	1.71	0.570	
13	43.8	-41.3	26.1	1.70	0.650	
14	38.9	-39.3	23.6	1.63	0.620	
15	34.8	-37.2	22.2	1.63	0.596	
16	40.3	-44.8	24.4	1.75	0.658	
17	37.9	-40.1	23.6	1.66	0.612	
18	37.2	-42.4	22.5	1.56	0.660	
19	33.2	-38.8	21.5	1.66	0.634	
20	38.4	-47.8	22.8	1.71	0.698	
21	34.9	-46.2	21.5	1.63	0.670	
22	34.8	-43.2	21.8	1.64	0.650	
23	29.2	-45.6	19.1	1.62	0.692	
24	32.2	-40.6	20.6	1.65	0.670	
25	34.7	-44.6	20.8	1.47	0.722	
Avg	**38.4**	**-40.3**	**23.7**	**1.66**	**0.620**	
Stdev.	**4.1**	**3.6**	**2.1**	**0.07**	**0.047**	

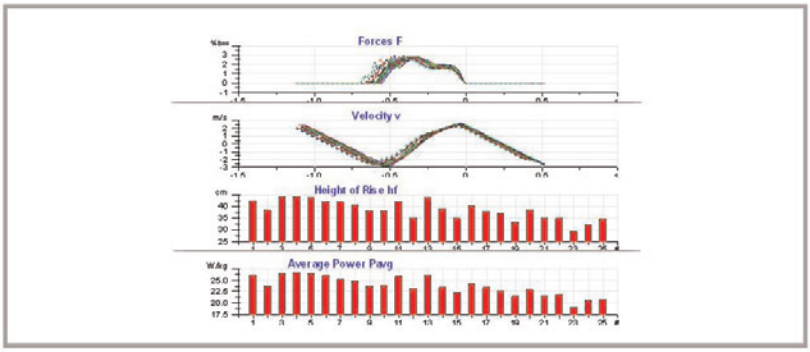


Figure below shows the best height of rise registered

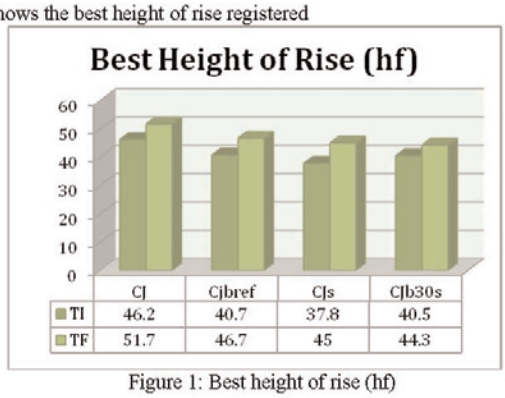


Figure 1: Best height of rise (hf)

Discussion

The height of the *Counter Movement Jump* (CMJ) (jump against movement) determines a significant change, with a difference of 5,5 (pre = 46,2, post = 51,7).

The height of the *Continuous Jump with Bent Legs Reference (CJbref*) (continuous jump with bent legs reference)- shows a significant difference of 6,0 (pre = 40,7, post = 46,7).

The height of the *Continuous Jump with Straight Legs (CJs)* **(**continuous jump with straight legs)- determines a significant change, with a difference of 7,2 (pre = 37,4, post = 45,0).

The height of the *Continuous Jump with Bent Legs (CJb30 sec)* (continuous jump with bent legs 30sec)- shows a significant difference of 3,8 (pre = 34,4, post = 38,4). Other data are presented in the tables above.

Conclusions

Maximum muscle strength under explosive momentum, benefits from a high capacity to reuse elastic energy of muscle, with a coordination component of the viscous-elastic movement.

The final testing we can speak of an improvement in all indicators covering both the height and power. Maximum explosive power indicator on an elk, has improved and we can say that the benefits from a high capacity to reuse elastic energy of muscle, with a coordination component of the viscous-elastic movement.

In conclusion, the present study demonstrates that plyometric training significantly improves height of rise, explosive force of the legs, and power of the lower limb in all four types of standard vertical jumps. The observed mean effect in jump height ranged between 3.8% and 7.2% and could also be considered as practically relevant.

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MOTRIC ROLE IN ADDRESSING THE EXERCISE OF A CATEGORY III OF GYMNASTICS

Dumitru VÎLCU
C.S.Ș Buzău

Abstract

This writing refers to the specific ways that the teacher of physical education uses during classes to physically prepare the students in the gymnasium cycle. Gymnastics is one of the most important branches of physical education. Having an extremely valuable content and a huge variety of methods, it accomplishes an essential role in harmonious physical development and specific motrical skills.

Keywords: driving skills, speed, strength, mobility.

Introduction

Gymnastics is one of the most important methods of physical education. Containing a very rich and a great variety of means, plays a critical role in harmonious physical development, in improving motor skills in basic motor skills training and specific.

Physical education is provided by the plan with two hours a week in each class. In addition to physical education lessons can organize sporting circles, with the school principal and specialized inspectorate opinion. A circle is formed by two hours sports weeklies groups of 18-22 students selected from different parallel classes or years of close study.

News issue

News of the problem is that there are many means of gymnastics and technicality requires highly trained psycho-motor. It can be argued that without exercises and gymnastic exercises available structures can not conceive a project teaching technology.

In the 10-12 minutes it takes the preparatory session, 70-80 % is gymnastics. If this part of the lesson is well structured, harmonized with elements of gymnastics and weight, the body will be

brought to optimum excitation, ready to tackle the fundamental part of the lesson.

Physical receiving a number of hours one third of the 1/3 total hours. The practical form of acrobatic gymnastics, rhythmic, artistic (jumps) and aerobics. With its great variety, gymnastics enables students to find ways of expression that bring them satisfaction. In general, at this age gymnastics "like" and enjoy great interest and wide popularity among students.

Acrobatic exercises include a diversity of movements that can be grouped in three main groups, representing itself means acrobatic gymnastics: l) individual acrobatic exercises, 2) acrobatic exercises in pairs and in groups (pyramid) 3) Special machines acrobatic exercises.

Reasons for choosing the topic

Continued modernization of physical education and sport in schools requires finding new methods, processes and means to act in practice and continuous improvement of existing ones, to the so-called classical, traditional, based on the new objectives that are in front of the object of study.

Consistent with this task of great importance to physical education and sport in school I developed this paper aimed at physical training in secondary schools by specific gymnastics. I chose this theme to show how effective are the means of gymnastics in the psycho - motor speed development, strength and mobility.

The aim

The purpose of this paper is to achieve a breakthrough level motor skills involved to show the efficiency of the means of gymnastics in physical education class.

Hypothesis

If physical education lessons in secondary schools using specific exercises and gymnastics means will get a better physical training, improving driving skills: speed, strength, mobility, skill, endurance.

The scientific substantiation of theoretical

The development of motor skills is an area that gives us ample opportunities and concrete objective assessment of the progress made by pupils, the quality of work done by students and teachers.

Objectification process of developing motor skills teacher claims:

- Know the preparedness of students from the study start;
- Establish evidence and rules specific driving skills and apply them regularly in student work;
- Develop the final model motor skills development exercises and structures used;
- Keep accurate records of all data and appropriate to use for critical thinking activity, retaining the necessary lessons.

Develop motor skills can be done in independent activity of students. Effectiveness of physical education lesson, it is the belief and habituation students to independent practice exercise, both during school and especially after graduation.

The main ways to drive the development of motor skills

From studying the experience of teachers in our country and other countries, we believe that the main ways in which action must be taken to develop motor skills in physical education activities and school sports are:

a) use of basic motor skills and technical procedures in the various branches of sport with their dominance modification, so the influence.

b) the use of methods, procedures and specific means of developing motor skills. This is the second and most effective way that can work for the development of motor skills in physical education activity schools.

Special morpho - functional and mental school children

Pubertal period is characterized by a sharp increase in both somatic and functional and psychological. From morphologically bone structure is similar to that of the adult.

One of the features is weight gain, especially in height due to lengthening limbs while thorax and basin lag behind.

It creates an asymmetric body, feet and hands long, short, flat trunk, large head, weak muscles, joint hyper - laxity.

Skeletal, although tends to solidification, in the danger deformation and especially spinal deformity as a result of some incorrect positions in the bank, at the table or because of a unilateral exercise.

Developing the muscles particularly the elongation of the fiber and not in thickness. As such, their strength is low. The girls adipose tissue deposition is observed especially around the hips. Muscle mass is small relative to body weight. At the age of 13-15 years employment growth is slower. From classes VI and VII can be introduced into physical education lessons, special exercises for developing strength.

Low muscle tone predisposes to spinal deformities, foot flat appearance or increased. From the functional point of view it appears that, although the mass and volume of the heart increases, the heart muscle does not develop at the same pace.

In the cerebral cortex few morphological changes occur. Cardiovascular development is ongoing, but slow, with some differences between girls and boys. Growth of blood vessels is lower than the heart, thereby increasing blood pressure, so the heart must make a greater effort. Respiratory hardly cope with the needs of the body.

Qualities automated driving skills are components of human motility, motor skills relate muscle activity and represents the properties of this activity. In the literature, these properties of human activity manifested by indices of strength, speed, strength, skill or mobility are called psycho — motor skills, meaning that there are some qualities of the human physique.

A) ***Speed***. Speed with its forms is present in most motor actions, contribution in achieving performance being determined in samples sprint athletics, swimming, skating, and not least in the gym.

Methods for the development speed is:

a) The method for developing the reaction rate: repeat method, fractional method (analytical approach and facilitated the repetition action driving conditions) sensory method;

b) The method of execution speed development: repeat method, fractional method, integral method, repeating the action integral concrete conditions of application;

c) The method for developing the repetition: the alternative method, method of repetition;

B) ***Fort Definitions***: - the neuro - muscular ability to defeat a resistance through movement on muscle contraction (A. Demeter) acquire muscle to develop tension under the action of external and internal stimuli, the body's ability to lift, to carry, to defeat, to pull some weights on re muscular contraction .

Factors that determine the value of forces: 1. Number of muscle fibers involved in contraction 2. Muscle thickness (cross - sectional area);

Manifestations of force: Force itself; Explosive Strength; Under the resilient force.

Exercises and methods for developing strength: a) competition exercises b) Special Exercises; c) exercise general workforce development: circuit training, power- training method, the method weightlifter and in some cases, especially in boys, isometric contraction.

C) ***Mobility.*** After Harre, mobility is "the human ability to perform movements with large amplitude by themselves or under the influence of external forces". After Dungaciu mobility is "man's ability to fully exploit the potential anatomic motion in a particular joint or joints throughout the body". Finally, mobility is the body's ability to perform high amplitude driving actions.

Factors that determines the amount of mobility: characteristics of joint, muscle elasticity, ambient temperature, age and sex, mental or physical fatigue, diurnal oscillations.

The expressions of mobility: general mobility - is manifested in

the main joints; particular mobility (specific) is manifest biological factors.

Methodological aspects for the development of mobility: mobility and development should be made harmonious labor so as to achieve the necessary amplitude of gymnastic elements, to ensure the needs of higher technical training.

Exercises to promote mobility must be carried out daily for 3 months, and maintain the at least 2-3 practicing training sessions a week in a series of 10 to 15 repetitions, with the amplitude increased.

The content and the experiment

Research methods used

Methods used: a) bibliographic study ; b) observation method; c) experimental method; d) investigation; e) test method; f) statistical and mathematical methods; g) the method of comparative analysis of the output of the subjects.

Place, time, subjects

The experiment was conducted at Primary School "Emil Palade" in Buzău, at an interval of seven months between October 2012 and April 2013. Working material consists of 48 students, grades A and C from the school will aforesaid, aged between 11 and 12 years.

Includes grade 23 students of which 13 girls and 10 boys and grade C comprises 25 students including 14 girls and 11 boys.

Both of these classes have been subjected to the same tests as in determining the grouping of starting at the beginning and at the end of the experiment.

The experiment consisted of applying a set of exercises in the experimental group, or fifth grade, different from that applied to the control group, grade C.

The material consists of a gym with a rich and varied range of sports equipment so, in the school yard is a basketball court, a volleyball court, and a handball, sand pit, trail running.

Samples used in the experiment

Tests for efficiency gymnastic exercises to develop motor skills were as follows: 1. Telecommute (harvesting potatoes); 2. Lumbar mobility; 3. Bridge; 4. Antero-posterior string; 5. Long jump on place; 6. Lifting of lying dorsal trunk in sitting and return.

Gymnastics specific means used during the experiment

Means gymnastics in physical education at their place in the history of free exercise form, with objects, with partner, and the equipment, relay and games, and in the fundamental and applied as passes, acrobatic exercises, exercises for the development of certain motor skills. Combining exercise also contributes to the development of quality.

Daddy driving speed, explosive power, agility, stamina, mobility. We used the experimental class passes compound exercises as applied.

Games used during the experiment: Fighting Cocks, Wheelbarrow, Rabbits, Flight bank.

Exercise Class V ground for the floor

Initial position: Stand. Raising the arms above added step forward lowering arms, pirouette, passage squat, rolling forward in squat, back with surround 180°, roll forward from far distant, string before passing hind leg before, lying dorsal bridge down, return to lying dorsal, standing on the shoulder blades, crossing the watershed on one knee, jump and squat lifting support stand with body wave before.

Results and their interpretation

The tables present results represent the experimental class and the class witnessed the initial testing that we made on 1 October 2012 and the final testing that we made on 17 April 2013.

Comparison of results

	Testare	Naveta	Mobilitate L	Podul	Sfoara	Săritură L	Abdomene
Clasa E	Ti	11,96	49,30	46	17,6	163	21
	Tf	11,69	55,43	43	14,8	169	22
	Ti # Tf	0,27	6,13	3	2,8	6	1
Clasa C	Ti	13,03	53,28	50,8	23,6	158	23
	T f	12,88	54,32	50,1	23	159	23
	Ti # Tf	0,15	1,04	0,7	0,6	1	0

LEGEND

Class E - Class experiment Class C - Class Why Control, Mobility L - Mobility lumbar Ti - initial testing, T f - final test, Ti # T f - the difference between initial and final testing.

By comparing the average initial testing with the final experimental classes and witnesses, it appears that both of them improve their final test results, however, the experimental class better values?. The first test performed commute, which I tested performers velocity was obtained in the experimental class, an average of 11.96 seconds and 11.69 seconds from initial testing to the final progress being 0.27 seconds. The witness we obtained an average grade of 13.03 seconds at the initial testing and the final 12.88 seconds, the progress being 0.15 seconds, 0.12 seconds faster than the experimental class. In the second test we checked that level lumbar mobility, we obtained the experimental class, averaging 49.30 and 55.43 inches from initial testing to final, so an improvement of 6.13 inches. Instead, the class witnessed progress was only 1.04 inches by 5.09 inches shorter than the experimental class. So exercises in gym have a particularly important influence on the development of mobility. The third test in which we measured the mobility of the scapula - humeral level, the experimental class we obtained an average of 46 inches at the initial test and the final 43 inches. Progress is 3 inches. In class we got 50.8 inches witnessed the initial test and 50.1 at final progress being 0.7 inches by 2.3 inches shorter than the experimental class. The fourth sample consisted of string performance antero-posterior which we measured coxo-femoral mobility. Progress in the experimental class is 2.8 inches and 0.6 inches witness class, 2.2 inches lower. In the long jump seat , which was the fifth sample applied in the experiment, we obtained the experimental class, 163 centimeters and 169 centimeters initial testing to final, so progress 6 inches. In class we witnessed the initial testing achieved 158 centimeters and 159 centimeters at the end, progress is accomplished by an inch. The last test consisted of lying dorsal trunk lifts in seated against the clock. We obtained the experimental class, an average of 21 lifts and 22 initial testing to the final progress as a lift.

Instead, the class witnessed the number of lifts was 23 both initial testing and at the end, so it has remained constant. Therefore, although the witness class and best results were obtained from the initial tests, there has been no progress. Experimental class, being ill-equipped in terms of abdominal strength, yet achieved a breakthrough because gymnastics means that we used during the experiment. By comparing results from the two classes we observe an improvement of motor skills in the experimental class.

Conclusions and proposals

Type of lesson in gymnastics using specific means, in this case the experimental class in the elementary school "Emil Palade" in Buzău, confirmed the hypothesis, making a development of motor skills, physical training much better than the class witness.

Means gymnastics intensively used in physical education classes alongside traditional means, increase the frequency of students in class, increase the attractiveness of their motivational framework creates a conducive conscious and active participation of students contributing to the increased efficiency lessons.

The entire work program watched gymnastics using specific means putting emphasis on the development of motor skills. The statistical indicators obtained, especially arithmetic indicates an upward trend confirming the initial hypothesis, the experiment we observed in the experimental class that physical education classes have become more attractive, exciting and enjoyable for students.

Given the results, I recommend physical education teachers in primary and secondary schools to introduce their lessons as many specific exercises and games gymnastics so harmonious physical development of pupils and to maintain their mental health and relaxation they need during school. In this way physical education classes appear to be boring, they are pleasant, attractive.

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MODELING TRAINING TECHNICAL HIGH PERFORMANCE MALE GYMNASTICS

Constanța PĂTRUȚ,
CSȘ Buzău

Abstract

The modeling represents a way through the thinking is led to finding the truth, which is a process helped by other samples, due to analogical reasoning. The model is a material and theoretical system, which develops to another scale, a structure – elements and their relation – of another system that we are trying to understand. The original one, as an object, phenomenon or a real process is developed by the help of the model. This way, the reality's knowledge is indirectly through the same model. The process of constructing model is called modeling. This process has as a target the initialize in analogical reasoning's employment, the finding of objects' and phenomenon's new properties, through these models' studying.

Keywords*: physical training, technical training, model, modeling.*

Introduction

Current artistic gymnastics is characterized by a great dynamism, amplitude and execution risk, requiring a higher level of precision and expressiveness in terms of execution of technical elements.

In sports training and skill improvement accumulated numerous theoretical and practical knowledge. Now solve the contradiction between the huge amount of knowledge gained and opportunities limited and relatively constant accumulation, sending large amount of knowledge in an increasingly shorter turns out to be the main task in the preparation.

Change continues to special requirements contained in the code of points and permanently change the value of the various elements leads to the requirement of permanent adaptation of the training process, especially in the high performance gym, where these adaptations need to be very quick to optimal results in competitions.

Obtaining and maintaining the world ranking performance is the fundamental objective of this process of preparation solving tasks formulated the concern of both the specialists and the gymnasts at this level.

We conducted this study based on the following assumptions:

1. my direct and active involvement in the preparation of high performance artistic gymnastics;

2. top performance artistic gymnastics world by men in our country;

3. trends of global artistic gymnastics, which may result in the following aspects: maximum safety performance, technical perfection and aesthetic; eliminate monotony, unilateralism executions default the spectacular increase their permanently change the competitive system in strict relation to the need to "show" - the direct involvement of the media and advertising.

Theoretical issues of

About model and modeling

Modeling is a way of thinking is the thing that led to the discovery of truth by means of models, thanks to analogical reasoning.

The model is a theoretical material or reproduce, in another scale, structure - elements and relations between them - another system that we intend to meet him. The original object, phenomenon or real process is reproduced with the model.

Reality knowledge is done as indirectly through the model. Building models is called modeling. To model started using analogical reasoning, the discovery of new properties of objects and phenomena by studying their patterns.

The model should be efficient, simple as the original, relevant and representative. The model reflects objective reality, but only summary. He does not exhaust the original, is more homogeneous and more abstract than this.

The original is an open system, and the model is a closed system. The model must be accurately quantified to have quantitative and qualitative parameters.

Qualities required driving performance gymnastics

Gymnastics is a sport branch that require upper limits of the body, the level of development achieved to date may recommend classification of sports gymnastics in "extreme sports" and this required a continuous and systematic work, perseverance, aiming to develop motor skills, training and learning a bulky luggage, varied and difficult mental exercises and education qualities.

This raises the need of knowing the level of expression of motor skills that underlie learning and execution of any exercise, the knowledge necessary motor skills, but in a complex form since the movements are executed with a certain combination of strength and speed, with a certain amount of the different angles of action of muscle chains and levers bone in the body, knowing that the center of gravity of the gymnast must climb to 250-260 cm, there are phases of flight with multiple rotations and where the carrying devices, they land often about the second floor.

The technical content of the exercises on machines

Floor exercises predominant manner consists of acrobatic jumps , combined with other elements such as parts Gimn force mobility movements, stands hands and dance combinations, constituting a harmonious whole and upbeat, with a maximum duration of 70 seconds, which is conducted over the whole surface of the ground (12 m x 12 m).

Pommel horse. Pommel horse exercise is characterized by execution in support and all parts of the horse swinging pendulum and the various forms of circular swings with your feet together or apart. It can run via standing swinging hands with or without rotation. When this device is not permitted parts of force, all items are made ??of balance without any interruption.

Rings. Year rings are characterized by elements of elk, force and maintenance, distributed in roughly equal numbers.

Jumping. Jump is made of a moose and fight with both feet on the trampoline and short support arms on horseback. Jump can contain one or more rotations of the body.

Parallel Bars. Parallel exercises include moose and flight ele-

ments with different transitions between hanging and support.

Horizontal bar. Exercise the fixed bar is characterized by a dynamic presentation containing elements elk, turns and lift off without stopping near and far made ??bar and various outlets of the hands .

Evaluation

Assessment in sport is a complex didactic nature that is measured and assessed predispositions acquired vocational and performance capacity of athletes in the process of training and competition.

The research hypothesis

Based on the assumptions set out above and from bibliographic study conducted consider technical knowledge of gym high profile performance at the current model enables the anticipated performance of the gymnasts who will compete in the next Olympic cycle.

Organizing and conducting research

Direct contact with the best gymnasts in the world today (both in our country and abroad), and study their exercise videos led to the preparation of this study. The exercises analyzed in terms of the technical elements recovered in FIG code of points are presented in major competitions: JO, CM, CE and stages of the World Cup in the range of 2008 to the present, a period that covers the current Code of Points .

From the study of the technical content of the material contained in the code of FIG score it is noted that certain groups of elements provides a limited range from the point of view of the great difficulty because of this international regulations provide opportunities for combinations of elements less difficult, but their connecting leads directly to the increase in the amount thereof.

This kind of difficulty I will mention under the name of "combinations" and specifying which group elements belong. The study was structured on all 6 machines and watched the contest submission frequency of various technical elements of great difficulty.

Gymnastics exercises were studied following countries, considered by experts to be the most representative: Romania (8) Russia (8) Belarus (5) Ukraine (6) China (6), Japan (6), the United Emirates (6) Germany (5), France (4), Italy (4), Greece (3) Bulgaria (3), Spain (3) , in that order , totaling a number of 67 gymnasts.

In terms of physical preparation we used the rules and control samples used gymnastics Olympic team of our country, including:

• Tractor hanging on horizontal bar - maximum number of repetitions against time 20 sec. = Minimum 18 correct executions.

• Pushups in parallel support arms to further load of 5 kg (with sandbags attached to the ankles) - maximum number of repetitions against time 20 sec. = Minimum 30 correct repetitions.

• Simultaneous lifting the torso and legs lying - maximum number of repetitions against time 20 sec. = Minimum 25 correct repetitions.

• Jumping up - down on both feet simultaneously on the box cover of the gym (h = 40 cm) against time 20 sec. = Minimum 21 correct repetitions.

• Support continued square least 10 seconds.

• Raising the trunk of the facial bed box gym, feet fastened outside surface core support - maximum number of repetitions against time 20 sec. = Minimum 30 correct repetitions.

Data analysis and interpretation

Floor

1. Group 1 elements (parts of balance, strength, mobility): most gymnasts appeal to value elements C, less B, although none of these elements (B or C) without difficulty bonus. The highest frequency - 31 cases - have = lifting force remained standing on hands 2 seconds. the square remained high 2 sec. -24 Cases = lifting force on hands sitting side support (inverted cross) maintained 2 sec.

2. Group 2 elements (jumps, tours and circles): most gymnasts perform D - value elements, but there are elements of great difficulty - 12E. The highest frequency - 61 cases = combinations pivot circles with both feet together and apart .

3. Group 3 elements (parts acrobatic earlier) : all gymnasts running value elements D. frequency largest - 67 cases = return jumps forward longitudinal axis.

4. Group 4 elements (parts acrobatic back) is observed equilibrium value of the items D and E. The highest frequency - 18 cases = double Tsukahara with 1/1 or more return (D) = -11 cases double jump spread (D) = double jump -15 cases grouped with 2/1 turn (E) -13 cases = double jump down with 1/1 turn (E).

5. Group 5 elements (parts acrobatic jumping sideways and back with Iturn): most gymnasts appeal to elements of value D. The highest frequency - 31 cases = bounce back with Iturn and double jump forward group.

Pommel horse

1. Group 1 elements (swinging one foot) items in this category are limited, the difficulty of code points, most gymnasts perform a valuable asset B. The highest frequency - 39 cases = double scissor backward or forward with Iturn before and Iturn back.

2. Group 2 elements (circles and circles on with or without pivot and stands on hands): in this case the distribution is greater difficulty elements, predominantly, though elements of value C. The highest frequency - 26 cases = 1/1 the pivotal support side of the two circles © -11 case = 1/1 or 3/2 the pivotal support side of one circle on (S) -3 case = 1/1 and 3/2 on the pivotal side of a support single circle (E).

3. Group 3 elements (public transport and lateral support transverse support) elements predominate value D. The highest frequency - 58 cases = transport Magyar (3/3)

4. Group 4 elements (passes dorsal and facial) feature prominently D. The highest frequency value - 39 cases = facial Russian with 3/1 turn or more.

5. Group 5 elements (downhill) prominently feature value D. The highest frequency - 55 cases = descent passing through the hands and sitting on 1/1 turn in circles and circles on.

Rings

1. Group 1 elements (deadlifts and moose items) prevails valuable items B and C. The highest frequency - 38 cases = Li Ning (B) = -17 cases stretched Honma.

2. Group 2 elements (swinging stand hands): C prevails valuable items.

The highest frequency - 67 cases = forward or backward giant hands remained standing 2sec.

3. Group 3 items (swings in maintaining the force element) elements predominate value D. The highest frequency - 29 cases = upside down cross

4. Group 4 elements (elements of power and maintenance) D value elements predominate , but there are elements of E. The highest frequency value - 24 cases = Hirondelle (support arms along the body) remained 2sec. (D) - 10 cases = the force for lifting Hirondelle tilted laterally maintained 2sec. (E).

5. Group 5 elements (downhill) prevails valuable items C and D. The highest frequency - 34 cases = double jump back down - 19 cases = double jump back grouped with 2/1 turn.

Jumping

When jumping , the analysis we made a note on the frequency of departure (the amount of code to jump points). The gymnasts have turned to jump - start most often in notes 9,80 and 9,60. As a structure prevailed in spindle turns jumping longitudinal and stretched body, except for the cross shaft return.

Parallel Bars

1. Group 1 elements (balance the two support bars) predominate valuable items C and D. The highest frequency - 21 cases = Diamidov - 17 cases = from sitting on an arm support Heally in (D).

2. Group 2 elements (swinging his arms) prevails valuable items C and D. The highest frequency - 31 cases = leap forward in the support arms (C) - 28 cases = Tippelt

3. Group 3 elements (impetus hung on 2 bars) predominate valuable items C and D. The highest frequency - 33 cases = giant back with Iὸr 1/2 turn in standing on hands. 16 cases = giant back with 1/1 turn in standing on hands.

4. Group 4 elements (power and maintenance, working on a side bar swinging leg) C prevails valuable items. highest frequency - 39 cases = referral to support standing square and lifting hands in force.

5. Group 5 elements (downhill) elements predominate value D. The highest frequency - 44 cases = double jump back to square.

Horizontal bar

1. Group 1 elements (swinging extensive hung with or without return) value B elements predominate, but there are also elements C, D and E. The highest frequency even - 39 cases = gigantic forward with ˝ or 3/2 return (B) = -27 cases gigantic back to 1/ 1 or 3/2 back in the socket cubital.

2. Group 2 elements (separation): in this case the elements encounter a wide variety of more than C and D, and E and SE. The highest frequency - 33 cases = cases = Tkatchev © Tkatchev stretched -18 (D) -14 = Kovacs stretched or square cases (E) -2 cases = Kovacs stretched with 1/1 turn (SE).

3. Group 3 elements (near the front) is the balanced type in terms of the distribution of the elements difficult. The highest frequency - 17 cases = Endo (B) = -16 cases Endo ˝ return the square standing on hands - Endo in 12 cases = square with 1/1 or 3/2 sitting back in your hands (D) - 17 cases = Endo in the square with 1/1 or 3/2 home in hands sitting on cubital outlet (E).

4. Group 4 elements (plugs cubital and hung dorsal and dorsal position elements) elements predominate C. The highest frequency value - 38 cases = giant Russian ©

5. Group 5 elements (downhill) prevails valuable items D and E. The highest frequency - 32 cases = double jump back down to 1/1 turn (D). -22 cases = double jump back down to 2/1 return (E).

Combinations. All gymnasts, invariably turn to combinations of simpler elements, which direct binding gives grant a higher level of difficulty, although the current trend is of superior individual elements of great difficulty. These combinations are possible especially on the ground in front detachment fixed bindings, especially the pommel horse.

Conclusions and proposals

1. Precise systematization of the entire technical content of

gymnastics led to orientation training, especially at the basic level required, given that there were many world top gymnasts who did not have difficulty elements of certain groups of elements;

2. In terms of technical performance gymnasts of the future Olympic cycle, Baggage must master a large element of difficulty in all groups of elements;

3. Even if necessary (through better use of the difficulty in scoring code) execution singular elements of great difficulty, combinations of simple elements will not be neglected as a return on their perspective, especially due to their extremely spectacular;

4. Gymnasts who reach this level, you must have a very solid core motor skills, physical training requirements are minimal Olympic;

5. Ground training will be extended to return the elements transverse axis, predominantly those currently returning longitudinal axis;

6. Horse training should be modeled on any special requirements or constituting this new device, currently a global model;

7. Technical training rings are mostly conditioned motor support of gymnastics most difficult elements present no technical problems;

8. Jumping gymnasts will need to acquire both structures need to return the longitudinal axis and the transverse axis;

9. The difficulty of parallel elements can be acquired only after execution of technical accuracy, both swings in support, and those hung as;

10. The horizontal bar performer requires a model of the future technical baggage greater accuracy of detachment, separation combinations are essential to this unit.

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LEARNING ISSUES JUMP SITTING BY THE HANDS SALT 1″ GYMNASTS OF AGES 10 TO 11 YEARS

Constantin GABRIELA,
CSȘ Buzău

Abstract

Artistic gymnastics, an old discipline, has recently developed, especially nowadays. Its evolution in the last four years was rapid, being characterized by a refined technique, which implies virtuosity and by very risky elements. Among other sports, gymnastics has a very well defined status, even it is in a continuous process of renewal and modernization. It can be seen in daily practice, in different ways, depending on teachers and gymnasts.

Keywords: hands standing leap forward, artistic gymnastics, exercise, effort.

Introduction

Learning at a young age as difficulty jumping high jumps heavy learning is a prerequisite to higher categories. Gymnastics with a considerable age developed especially nowadays in a spectacular way.

Its evolution over the last four years has been very rapid, characterized by a refined technique involving ties virtuosity and high-risk items. The constellation sports, gymnastics is a discipline with a well defined status and subject to a continuous process of renewal and modernization.

In daily practice, this is noted in the various forms bearing the imprint of both teachers and the gym. We are witnessing the creation of a theory and the development of a technique to ensure the prerequisites for a more efficient work with a strong scientifically well founded.

The importance and topicality

Thus it comes to achieving high performance sport in value very early age, achieving economies both material and spiritual

energy. Only the correct orientation in the educational process of children and youth can yield valuable results worldwide.

The accuracy, technical accuracy, high-risk elements were executed amplitude of performances true gymnastics competitions.

Acquiring such valuable and spectacular executions, execution acquisition technique for achieving high performance are subject to systematic training, continuous and well organized during 10-11 years. Preparing gymnasts is done in a pedagogical process that uses specialized forms of activity and ways custom known sports training.

International competitions in gymnastics performances are scenes which have exceeded the limits of experts regarding human limitations. The performance improvements are due to continue the training process, the result of the scientific.

Purpose and objective

We believe that by streamlining the corresponding algorithms and efficient methods will succeed as technical element "Jump by standing on hands 1˝ leap forward" to be accessible to children aged 10-11 years old.

The research objective is to choose the most efficient movements in short, well defined. Purpose of this paper is to contribute to good results in competitions involving gymnasts, as well as selecting the group of children and youth.

Reasons for choosing the topic and literature coverage

We chose this study because as we executed gymnast jumping in different competitions, believing that art can bring details of execution and delivery methods. An important issue was the development of methodical learning sequence whose yield to give the desired result.

There are works in the literature referring to elements acrobatic leap forward leap forward with double rotation. Gymnastics is characterized by a rich arsenal of moves specific competition all samples having widespread in the country and in the international arena. She is constantly subjected to a process of renewal and

modernization, which manifests itself in many different forms, which bears the imprint of personality coaches and gymnasts alike.

Currently artistic gymnastics has developed much on the continued growth of the difficulty and complexity of movements and compositions, reaching unexpected heights with a high degree of difficulty, being executed by a growing number of athletes.

Ultimately, differentiating values ??will be carried out by a technical ideal of elegance and special attire running. The literature is quite poor in terms of method, effective business models to acquire the vault.

The purpose of the work and my motivation is to contribute to improving my methodology this vault to find the most effective exercises to facilitate learning at this age

The scientific research

The anatomical and physiological and psychological age 10-11 years

In the process of training the child as a "miniature adult" (Piaget, Claparede) should be treated differently. The coach must know every stage of growth and development of the child, age peculiarities specific rules.

While increasing the expression of quantitative phenomena related to the size of body size, development of specific processes is qualitative, which marks the achievement of higher levels of functionality. It should be mentioned that between chronological and biological age discrepancies.

Optimization of the children and youth sports training requires knowledge of the peculiarities of their growth at different stages. In what follows, I will refer to the essential characteristics before puberty growth phase. At this stage, growth is generally uniform, as manifested by lengthening legs .

Musculoskeletal system. Bones are more elastic beams strengthening functional systems, which determines their tendency toward deformation tensile, pressure, twist. At 6 is 21,7% by weight of the muscles of the body.

The children of pubertal age, muscle fibers are relatively longer than in adults, and the portions are shorter tendon. Favors low muscle tone making larger movements in the joints, but more difficult to achieve fine movements, differential accuracy.

The cardio-vascular. The heart reacts, but the effort uneconomic; coronary perfusion is rich. Resting heart rate of 100/min is on average 6 years, 7 years, 80/minut 90/minut to 12.

Chest development is behind that of the limbs. Underdeveloped respiratory muscles can not provide the size of the volume of the thorax in the effort, the amplitude of respiratory movements are relatively small in this case. The level of psycho-physical development at this age stage allows the formation of new motor skills, improve coordination, skill, flexibility and mobility, providing a fundamental luggage specific techniques.

Middle school age that coincides with puberty in girls is between 11 to 14 years. This period marking the entry into office of estrogen endocrine glands, the environmental and hereditary factors influence puberty when installing so that individualization of puberty and chronological age of the biological differentiation are major elements in the scientific investigation of this stage of development body.

During this period, along with sexuality, there are a number of relatively sudden events for children, an increase in waist up to 10 inches per year and an increase of the weight up to 9.5 kg. With increasing infant characters that can cause mental instability. Bones grow more in length. In this stage, intense calcification and strengthen intimate functional structure, making them more resistant to mechanical factors detrimental to their previous elasticity.

The cardio-vascular develops slowly. Heart rate recorded at the beginning of 90-100 beats per minute and decreases at the end of puberty by 82-88 beats per minute. So cardiovascular system have difficulty adapting to intense efforts.

Joints are weak and ligaments do not provide sufficiently tensile strength and twist. Muscles develop more in length than the thickness, so that their surface is small section physiological and,

therefore, their strength is low. Strength and stamina are reduced but the reaction speed and repetition are very good.

The nervous system is growing rapidly maturing ending motor cortical area analyzer. The analysis and synthesis bark thrive, increasing the external inhibition. Consequently, the speed increase skills training and conditioned reflexes are formed off slower. As the approach of puberty is an improvement of coordination and better use of the second signaling system linked to it "sports equivalent" central nervous system already operated separately in children have focused primarily on building up skills and techniques varied driving and driving on broadening the range of possibilities and diverse techniques as well as broadening the range of opportunities for children and driving his motor repertoire.

Respiratory develops intense pubertal stage. Net improves respiratory function. Respiratory balance the body and other analyzers reach comparable adult development.

Consequences for training.

The child shows a great audacity, consciously accept risks, so it can achieve very significant technical accumulations will favorably influence its evolution sports. At this age it creates nervous and locomotor substrate necessary learning motor skills. Not recommended maximum efforts with major musculoskeletal strains.

In training you can use a large number of exercises in a different and varied nature of neuromuscular effort. They contribute to the development of dynamic stereotypes and improving the functional capacity of the body. Thorough knowledge of morphofunctional features of each child with psychic work is the only way that avoids the two most common mistakes in sport: overloading the body by exaggerating and excess caution because of that preparation is maintained at a lower level opportunities child.

Considerations jumping machine

Jumps are a basic means of gym workouts, with an important contribution to multilateral physical development. They have a positive influence on the whole body and muscle developing osteoligamentar device, increasing circulation and respiration.

Using jump training lessons in various forms are a good opportunity for development and education qualities psycho-motor (strength, stamina, skill, flash, courage, determination, self-confidence).

The jumps were a large number applicability gym. Jump by standing on hands 1˝ leap forward part of the third group and is mandatory for athletes to Category III (Junior III) Level 4.

Aspects of motor learning

The influence of early environment in sport

In very young children, peer role is crucial in order to establish their relationship to sports activity.

Parents, coach, and team leaders are the ones who determine their feelings for sports and the benefits that they can get away during life.

Often, however, parents themselves who aspire to the good of their children, however, do not behave as they should when it comes to their sports life.

They involve too much in training, resulting claim as a reward for their dedication, often occurring as next coach would do some fans overdo expect extraordinary performance from their children or do not believe in the discipline they practice and tell them this.

Technical description of the movement

Following the established phases of jumping - Greek, beating on the trampoline, I fly, beating hands - Flight II has different characteristics have to jump through hands standing by introducing a leap forward in the transition phase by standing on hands.

Salt 1 ˝ Jumping before the question decrease rotational speed and maintain contact with the ground in a favorable position at an angle of 120° -130°.

Opening the appropriate time is when the body has conducted 480° - 490° of rotation of 540°. Opening will be done by stopping the rotation of the torso and legs so that the extent of contact with the ground to make the center of gravity behind the contact points.

Organizing and conducting research

Research methods used in developing the work

Study bibliography. We've come a rich literature material to allow me a deeper approach to the theme.

Observation method. Direct observation allowed me the registration of general and specific dynamics and complexity. It was held on the basis of a theme and using measuring instruments designed to objectify the results collected.

Place and duration of research

The research was conducted in the gymnasium of CSS Buzău in the period 1 May 2012 - May 2013.

Stages of research and results

The first phase took place from May to April 2012 and aimed to end the acquisition and consolidation of jumping through hands sitting at the table salt 1 ″ gymnastics, jump presented in 2013 at the National Individual Competition - June.

The second phase took place in May - now 2013. This time I followed the consolidation and improvement of sitting on your hands jump by 1″ grouped leap forward for the upcoming Junior Championships in November 2013.

CONCLUSIONS AND RECOMMENDATIONS

From the research I've done it, we have outlined the following conclusions:

1. Based on the purpose of the work, we think we have failed to act with the most effective exercises to quickly acquire jump.

2. Organizing and conducting research confirms the work.

3. To learn proper jumping technique to remove the fear and risk of accidents is important to use helpful devices (foam pit, chest gymnastics, trampoline spring).

4. Lessons will make training guidance and coordination capacity to acquire driving rapid movement technique.

5. To learn jumping by sitting on your hands and jump forward 1″ grouped athlete must master very well jump by sitting on your hands and jump grouped before.

6. From the study it appears homogeneous group, which

allowed us to use the same algorithms in training, creating a school child jumping a group performance of the Club CSS Buzău.

7. In the literature studied jump is less addressed in relation to simple jumping.

8. Methods and algorithmic learning gave very good results were verified in competitions.

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QUALITATIVE DEVELOPMENT DRIVING LESSON IN PHYSICAL EDUCATION AND SPORT USING STATE BASKETBALL

Lucian POPA[1] , Akos MEȘTER[2]
"Aurel Vlaicu" University of Arad[1,2]

Abstract

Based on the extent of got it today grassroots sport and sport performance both internationally and nationally well as one of the disciplines that deal with children initiating an industry practice sports are physical education curriculum. Physical education lesson should be the basis of mass sport performance.

Keywords: physical education, motor skills, basketball, physical training.

Introduction

Basketball is one of the most popular team sports in the world and is characterized by finesse, precision and technical and tactical exercises imagination through waist high and special physical qualities of athletes, all sports involved in a fight claiming team spirit and of sacrifice, intelligence and nervous strength.

Points are scored by throwing the ball (*aiming*) through the basket from above, the team that accumulates more points at the end of the game wins.

The ball can be made to advance the field by dribbling or by passing it to other teammates. Physical acts unsportsmanlike (*foul*) are penalized and there are restrictions on how it is used (*violations*).

Over time, the basketball have developed techniques common sight, poultry and dribbling, as well as the positioning of the players, and offensive and defensive structures.

Usually the most senior players will take center or one of two forward positions, while smaller sized players or those who have speed and the best handling abilities of the ball , will occupy the position of guard.

While competitive basketball is like some rules, numerous variations of basketball have developed for casual games. In some countries, basketball is a popular sport with many spectators.

We believe that the use in physical education classes and sports of basketball means they will lead to a higher morphological development, motor skills development index parameters and to raise skills training organization and independent practice of the game of basketball.

Methods used

A. Bibliographical study;

B. Method of observation;

C. Method of registration;

D. Questionnaire;

E. formative psycho-pedagogic experiment as the main research method;

F. statistical and mathematical methods;

G. Method tests.

A. Bibliographical study is an indispensable method in research, especially in a time of information explosion manifests itself strongly, which causes perishable information in all fields. Therefore before starting the actual research is needed documentation to-date information on the topic covered, also documenting ongoing, systematic and appropriate is a binding act.

B. Observation is one of the oldest methods of research which uses the self-contained (individual) or anticipatory phase of an experiment or observation method in experiment between the experimental and tracking is intentional and systematic accurate recording the different manifestations studied as the current situational context. In the subjective observation as a method to track the behavior and attitude of staff towards physical education class in general and to the game of basketball in particular. In a more restricted process of observation considered tracking students with skills and more developed motor skills tending to practice basketball performance.

C. Method of recording and implementing tables evolution in

matches we used to obtain objective indicators on the effectiveness of the means used to verify that the instructional model training parameters. In this case we used recordings made ??by me in matches held at Arad, and if backed away matches we used sheets of arbitration.

D. The questionnaire is programmed sequence, logical and psychological utterances (interrogative and / or enumeration) that the interdependence between them form a single whole, and by giving operators the investigation, or by a self or subject group of subjects, determined by their verbal behavior to be recorded in writing, tape or telematics support.

E. fundamental research experiment that our method has enabled verification of training means that we have included in preparedness plans.

F. Following implementing tables results and measurements we obtained several lines of data that we have processed and interpreted according to the methodology of scientific research.

Thus, in assessing the results and as comparison we used the weighted average (Mc or X), and we chose to assess the homogeneity of the amplitude (A or W), amplitude is a parameter category dispersion factor is calculated as follows:

W = Xmax - Xmin,

- Where Xmax and Xmin are the highest, respectively lowest in the data string, this parameter giving us information about the homogeneity of the results obtained from subjects.

G. Tests - in the evaluation and testing of the classroom in order to establish the general physical training and special training were used:

General Physical Preparedness

"Standard test fitness"

- Speed running 5o m;
- Long jump on the spot;
- Running resistance 600 m;
- Throwing the rounders;
- Maintained hung with arms bent at fixed bar;

- Shuttle;
- Lift the trunk of the dorsal recumbent position;
- Coxofemoral mobility in the previous plan.

Special physical training

Samples and control rules of basketball specific training:

- Running speed with changing direction and swivel;
- DX vertical;
- Shooting 4,5 m.

Results

The experiment was conducted during the 2012-2013 school year, semester I and II from October of 2012 to end in May of 2013, National College "Moise Nicoară" for grades VII A and VII to B.

National College "Moise Nicoară" has following equipment:

- Room, size 22/12m with two panels;
- 2 golf school stadium, regular;
- Athletics track 50m with 3 lanes running;
- Running track length of 224 m;
- Sand pit for jumping;
- Regular balls;
- Traction bar.

Training team of students was held in physical education classes and sports mostly basketball themes, two hours a week with 50 minutes. We used a large number of regular basketball (10-15 balls).

All these conditions allowed, especially during favorable time, when he worked on the sport , to carry out a large number of repetitions.

Experimental Class VII A was composed of 34 students, 18 boys and 16 grade girls counting and control class seventh B composed of 32 students 17 boys and 15 girls.

Initial testing was done in the period 1 to 12 September 2012, for general physical training samples contained in "Standard Fitness":

Speed running 5o meters, Long jump on the spot, Running resistance 600 m, Throwing the rounders, Maintained hung from

his arms folded flat bar, shuttle, raising the trunk of the dorsal recumbent position, Mobility coxofemural previous plan.

Final testing was conducted from May 10 to 15, 2013.

Initial testing on samples of special physical training took place October 25 to 30, 2012 , namely: Running speed with changing direction and swivel; Detention vertically, 4,5 m Shooting. Final testing was done 18-28 May 2013.

The study aims to demonstrate to what extent the practice in physical education classes and sports of basketball skills contribute to the development of basic and specific motor skills.

From studying the results obtained at the initial and final tests in general training test samples and test specific basketball game and applying three representative indicators resulting statistical and mathematical analysis of the developments of the two working groups (experimental group and control group - boys and girls) during the school year 2012-2013. Such indices were calculated following statistical mathematics:

M = arithmetic mean;

A. S = standard deviation;

C. V = coefficient of variation.

B. Specific tests for basketball

1.) DX vertical

In this sample "DX vertical" although left close results, as

DX vertical - The experimental group

Nr. crt.	Indicators	Girls		Boys		Obs.
		Ti	Tf	Ti	Tf	
1	M	25,2	34,3	26,4	32,4	
2	A. S.	± 6,7	± 6,9	± 7,7	± 10,6	
3	C. V.	26,28 %	22,24 %	26,33 %	30,48 %,	

DX vertical – *The control group*

Nr. crt.	Indicators	Girls		Boys		Obs.
		Ti	Tf	Ti	Tf	
1	M	24,1	30,2	25,8	31,4	
2	A. S.	± 6,8	± 6,7	± 7,8	± 9,8	
3	C. V.	26,34 %	22,12 %	26,26 %	31,89 %,	

expected in the end group of girls progressing much better than the group of boys, especially since the long jump test situation

was totally opposite. Both groups presented high values ??of standard deviation.

2.) The sample specific speed

The results obtained for the "specific speed" are also those

Nr. crt.	Indicators	Girls		Boys		Obs.
		Ti	Tf	Ti	Tf	
1	M	32,4	29,3	31,1	26,8	
2	A. S.	± 1,7	± 1,9	± 1,3	± 1,6	
3	C. V.	6,18 %	8,24 %	5,33 %	6,48 %,	

Sample specific speed – The control group

Nr. crt.	Indicators	Girls		Boys		Obs.
		Ti	Tf	Ti	Tf	
1	M	33,4	30,2	32,2	29,4	
2	A. S.	± 1,8	± 1,7	± 1,8	± 1,8	
3	C. V.	6,34 %	7,12 %	6,26 %	6,89 %,	

obtained for the "shuttle" because of similarities in terms of changes in running direction and the results are better in the group of boys (both the experimental and the control), which during the year school also achieved greater progress. The results show a small standard deviation of the results of the group.

3.) Shooting

According to the table above, the results of both groups to test

Shooting – The experimental group

Nr. crt.	Indicators	Girls		Boys		Obs.
		Ti	Tf	Ti	Tf	
1	M	1,54	3,16	2,16	2,76	
2	A. S.	± 0,7	± 1,5	± 1,3	± 1,5	
3	C. V.	46,18 %	43,24 %	45,33 %	42,48 %,	

Shooting – The control group

Nr. crt.	Indicators	Girls		Boys		Obs.
		Ti	Tf	Ti	Tf	
1	M	1,45	2,13	2,21	2,34	
2	A. S.	± 1,2	± 1,4	± 1,4	± 1,5	
3	C. V.	46,34 %	47,12 %	46,26 %	45,89 %,	

"shooting" initially indicates higher values ??for boys, but the final results show better progress than girls group as a result of

attention and a higher power of concentration of the test static moments over boys. The results obtained for "shooting", the large standard deviation in both groups at both girls and boys.

Discussions

To verify the hypothesis stated at the beginning of the paper, we proposed making a pedagogical experiment that has the following stages of development;

● Documentation, through study of the literature, the issues required for programming, planning and design of the physical education lesson with themes mainly from basketball to optimize, streamline training activity;

● Planning model composition and evaluation activity in physical education class and sports mostly basketball themes, adapted to the concrete conditions of middle-school and school materials;

● Setting objectives and main means used in physical education class and sports mostly basketball themes;

● Establish control samples, measurement, quantification and comparison of the results in order objectification activity, driving quality parameters proposed to be pursued;

● Registration verification results and general and specific control samples basketball game;

● Interpretation of data collected from the results and draw conclusions based on them and formulate proposals to optimize the activity in physical education class and sports mostly basketball topics.

Conclusions

According to the study conducted and the conduct of business during the school year 2012-2013 in physical education classes and sports National College "Moise Nicoară" for grades VII mentioned in the work of tabulation and calculations some conclusions can be drawn:

Doing a study on the progress of the classroom VII A test of the evidence "Standard Fitness Test" and specific evidence it

appears that basketball game basketball taught in physical education classes in seventh grade its make a substantial contribution to the development of motor skills and physical education objectives;

According to the tables in the sub-chapter "Appendix" find a good development in many cases very good but basic motor skills and specific skills as well as driving, making the first steps towards initiating students into the world of basketball performance;

By using the means of the game of basketball and the game was done by practicing a good morpho-functional development, especially the growth in height of the subjects. So we can say that the role of media in basketball and the game of basketball as a means of physical education and sports students to develop motor skills has been achieved;

All tests have been conducted and evidence , normally a significant increase from one test to another , due to the work done in this regard, during the school year, from this perspective and within our pedagogical experiment, the hypothesis of the paper is confirmed, is optimizing the planning documents, both in form and in content, physical education classes and sports-themed basketball contributes significantly to improving motor skills, specific skills of the game of basketball as well as increased frequency of students' education classes sports;

Design work, and the entire contents of the training, selection and dosing means used have proven efficacy, the results obtained;

Developments are not spectacular, but support the idea that by exercises and organized, progress can be made on line general and specific motor skills and play basketball line;

Our proposal is to proceed directly to basketball practice in physical education lessons in secondary school classes, promote it in schools is less known and practiced, organizing as many school competitions to boost the competitiveness of the children, creating minimum requirements for practicing the game in all schools with secondary classes;

This paper sought to develop a model of work training in phys-

ical education lesson themed basketball, to schedule and to order and quantify the main means and physical structures-technical-tactical, the subject of the experiment led to positive results;

A number of pupils participating in the study have formed the habit of solo play basketball during recess and free time, and a number of two boys and three girls were advised by Mr. M.C., professor of physical education and sport to is part of the School Sports Club Arad for practicing basketball performance.

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REASONING THE NEED FOR SPORTS PROMOTION AND GUIDANCE IN FIELD EVENTS

Corina DULCEANU
„Aurel Vlaicu" University of Arad

Abstract

One of the most important preoccupation of the contemporary sport is the process of identification of most talented sportmen, who need to get involved in a training program.

The purpose of the present research is that of perfecting the present selection system, firstly in field events and supplementing it with sport events, psycho motive tests and coordinative abilities, all in the same time with the promotion of some actions of sportive orientation for athletics in schools.

Key words: mediating, athletics, performance

Introduction

Throughout my work of documentation on the phenomenon of mediating athletics, I found that, unfortunately, national action to promote sports are almost nonexistent. Media action in this direction is extremely low, with no promotion campains, specialized TV programs that athletics in general and among children in particular, to be brought to public attention. Print media in Romania is deficient in articles on the subject of athletics, even if the results of its great values ??are made public. Media coverage of the competitional athletics, reduced to nonexistent in the major media outlets (TV, radio and the press) are a major cause for the lack of interest shown by the public towards this branch of sport.

The absence of events to mark the importance and attractiveness of athletics, as well as the few activities to promote the county commissions of athletics, made us to deepen further more the need for this sports branch to be known among the school population.

Through its specificity, field events involve nothing spectacular or attractive, as do other sports, such as football (which lately

has become a true financial industry), or tennis, a discipline that requires the sacrifice of those who practice it, sacrifices that their parents are willing to assume just because it is "fashionable". A significant amount of work and dedication that the athletics practice require children, leads to a reduced presence in the specialized fields.

Methods. Analysis

To substantiate the need for action to promote athletics in the school system we made an analysis and compilation of clubs and sports organizations in five counties (Arad, Timis, Caras-Severin, Hunedoara and Cluj) which give children the opportunity to practice performance athletics.

Following the analysis conducted on the data made ??available by the FRA concerning specialized units (sports clubs, sports program high schools, etc.) in the surveyed counties where children could practice performance athletics, it appears that there are opportunities to practice this sports discipline, as illustrated in the diagram below, which, however, are not valued to a significant extent. Sports clubs and sports program high schools, whose athletes are listed in the children national championships, indoors and outdoors, are highlighted by red marking. (according to FRA)

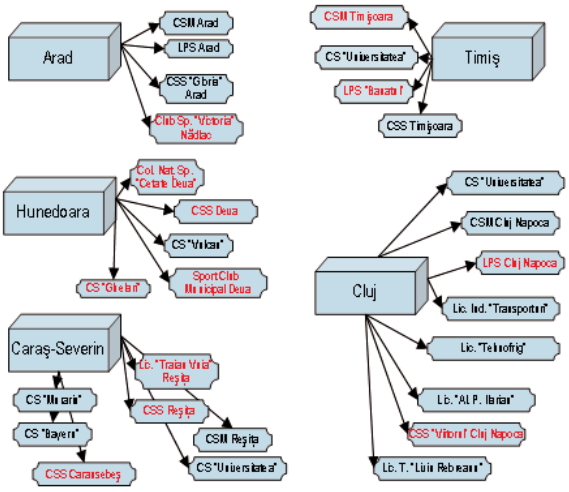

Fig 1. Specialized units network of the surveyed counties

Parallel to this analysis, we carried out the quantification number of the participants in these clubs at Children's National Championships (summer and winter national championships) in the period 2008-2010, based on the data provided by the Romanian Athletics Federation.

Results

The analysis of the results of the children's national championships between 2008-2010, published by the FRA, reveals that although the number of participants has grown nationally, as evidenced in chart. 1, in the counties included in our research, the participation rate is extremely low, ranging between 0.1% and 2.9% in 2009 and 0.1% and 1.3% in 2010.

Table no. 1. The number of participants in the National Championships mentioned by RAF, legitimate in specialized units in the surveyed counties

Region	Organization	2008	2009	2010
AR	Club Sp. "Victoria" Nădlac	-	3	4
TM	CSM Timişoara	2	1	-
	LPS "Banatul"	2	1	-
HD	Col. Naţ. Sp. "Cetate Deva"	-	19	7
	CSS Deva	-	2	18
	Sport Club Municipal Deva	-	2	-
	CS "Ghelari"	6	2	2
CS	Lic. "Traian Vuia" Reşiţa	8	2	12
	CSS Reşiţa	-	1	-
	CSS Caransebeş	-	17	8
CJ	LPS Cluj Napoca	15	24	30
	CSS "Viitorul" Cluj Napoca	-	4	27

I believe this is due to poor promotion of the benefits of this sport, both at school level and in sports clubs.

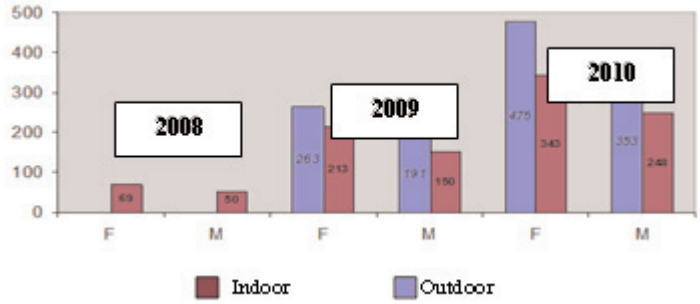

Figure no. 2. The total number of participants in children's national championships

Participants to children's national championships

Table no. 2. The share of participations to the National Championships of children who legitimate in specialized units in the counties surveyed, participants mentioned the RAF

Region	Organization	2008	2009	2010
AR	Club Sp. "Victoria" Nădlac	-	0.4%	0.3%
TM	CSM Timişoara	1,7%	0.1%	-
	LPS "Banatul"	1,7%	0.1%	-
HD	Col. Naţ. Sp. "Cetate Deva"	-	2.3%	0.5%
	CSS Deva	-	0.2%	1.3%
	Sport Club Municipal Deva	-	0.2%	-
	CS "Ghelari"	5,0%	0.2%	0.1%
CS	Lic. "Traian Vuia" Reşiţa	6,7%	0.2%	0.8%
	CSS Reşiţa	-	0.1%	-
	CSS Caransebeş	-	2.1%	0.6%
CJ	LPS Cluj Napoca	12,6%	2.9%	2.1%
	CSS "Viitorul" Cluj Napoca	-	0.5%	1.9%

Conclusions

In the Romanian school system, promotion and popularization of athletic discipline is insufficient, if not nonexistent; sports oriented actions are needed to improve the basis for selection as well as getting children to practice this sport. Documentation in this area reveals a lack of concern from relevant institutions in this direction, county associations or sports clubs with athletics profile.

Given the qualitative and quantitative arguments (concrete facts and figures) above mentioned, we believe that through sustained action to promote athletics in schools, combined with sportive orientation for this subject, premises for increasing the number of children who practice athletics performance, can be created.

It is necessary to undertake activities to promote athletics having both a cognitive general purpose - knowing the athletics as a sport, as well as a specific goal — to capture students' interest in the target group to willingly participate in testing activities, providing a real basis, extended by selection.

Promotional activity must be considered as a preliminary stage action, prior to testing and selection of children; it is ment to capture their interest and should have as their primary objective the identification of potential students and their orientation by practicing various athletic events, later reflected in the enrollment of athletics clubs .

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PSYCHOLOGICAL ISSUES IN SWIMMER PERFORMANCE TRAINING

Phd **Vasile Liviu ANDREI,**
"Aurel Vlaicu" University of Arad, Faculty of Physical Education and Sports

Motto: "*The winners in life think constantly in terms of I can, I will, and I am. " (Denis Waitley, writer, motivational speaker)*

Abstract

In the XXI century, professional sports has become a social, psychological, educational and cultural issue that concerns both society and the individual. It concerns society in the sense that its going forward and progress of mankind depends on understanding how international social relations are regarded, on which sport really focuses; the individual as the child's physical, mental, emotional and moral development is influenced by the time spent for building his own self . Currently, performance sport turns into a measure of social wealth and represents an effective means for the harmonious development of personality. Since the second half of last century, the sport has seen strong growth in terms of performance, sports centres, equipment, apparatus, facilities, structural organization, competition, management and research.

Keywords: mental preparing, water, victory,

Introduction

According to "The Oxford Dictionary of Sports Science & Medicine" performance, M. Kent, The Oxford Dictionary of Sports Science & Medicine, Oxford University Press, 2006, covers both the process and the outcome of an action. Often, the requirements imposed and reached by a person are called "performance". If, in a general sense,it is the result of actions, outputs and processes, from a normative point of view it is perfection mastery or performance of a task as well as possible. The meaning of the term in the social sciences emphasizes, above all, addiction of result to the ability of existing skills and all the previous processes of learning and maturation.

Applied sport psychology focuses on identifying and understanding the psychological theories and techniques that can be applied in sports to improve performance and capacity cultivation of those involved in the physical activity. The purpose of psychological training is learning how to create a consistent mental tension conducive ideal to boost those physical qualities that allow all athletes to give their best in competition.

As Mahonay says, sport psychology conceptual roots grow deeper in ancient times: in the early Greece and Asian cultures interdependence between mind and body was not only recognized but also highlighted as being of central importance for achieving performance and personality development.

Coleman Griffith is the American psychologist who initiated the modern application of psychology in sport (University of Illinois, 1925). After 1970, the sport psychology began to flourish in North America and be accepted more as a separate discipline within the sport sciences. Since the 1990s, research in sport psychology and applying knowledge in preparation for training and competition have increased. In Romania, the representative figure in terms of theoretical concerns and constant concern for the development of sport psychology at university level science is the teacher M.Epuran.

Methods and techniques of instruction in swimming

Aspects of technical training in accordance with psychological preparation. Psychological characteristics of swimming Epuran, M.; I. Holdevici; F.Tonița: Performance Sport Psychology: Theory and Practice. Fest Publishing House, Bucharest derive primarily from the fact that the work is water, the medium opposing a specific resistance of the body which is at the same time in a less normal position. The main request is addressed to feelings of balance and body orientation under water immersion. In the activity of learning how to swim there are involved some difficulties of accomodating to the water, specific breathing skills, coordination of arms movement with those of legs and breathing; it is known that water immersion adversely

affects kinesthetic sense and balance, and so, driving representations. A particular aspect is jumping from the tower or the trampoline where, as in gymnastics,it is appreciated the athlete's skill in leading the body to complicated and difficult exercises in terms of coordination.

Specific swimming styles in competitions are the classic ones, also practised as recreational sports: breaststroke, crawl, back and butterfly. These, however, involve the formation of complex motor skills. Motor skills involve internal processes that occur in the central nervous system of the athlete, Fitts and Posner studied through monitoring performance athletes. They described three phases of driving skills training: cognitive, associative and automated. Cognitive stage is characterized by a verbal transposition activity of execution. This process is characterized by conscious focus of attention on the details of their movements and at the same time, other aspects of external circumstances (e.g. the position of opponents in competition). The dominant sensory system, in cognitive stage, is the vision that allows control of the limbs learning the new skill. Cognitive phase is complete when the athletes can perform the technical element as it has been shown. The instructions in advanced phase of learning serve to support athletes to maintain their own level and to motivate them to cultivate their desire to improve performance.

Aspects of physical training in swimming. The design, programming and planning effort in the preparation phase is necessary to take into account the minimum effort that involves the disappearance of futile effort, economy of means, time and energy in the process of training. The law of minimum effort states that the logic of quantity is in relation to that of quality; not every training entails the athlete's development, only the one that, through training, is conceived and designed to be carried as an integral process in action imposed by competition.

Psychological substantiation of physical training, S.J. Bull, (2011), Sport Psychology - Guide to performance optimization, Three Publishing House, Bucharest of swimmers considers the

relationship between genetic skills background and practice, motor skills, interests development, overall coordination, kinesthesia, and segmental and overall coordination. Physical training is related to a psychomotor skills complex represented by speed, strength, skill, and the representation of the body scheme, sense of rhythm, space orientation, kinesthesia, balance, general coordination and segmentation. Each training factor has its importance in achieving sports performance and is therefore essential that they do not have gaps in their achievement.

Psychological aspects of swimmers preparing. Mental limits Niculescu, M.: Sport Psychology (collection of lessons), Ex Ponto Publishing House, Constance of human possibilities under maximum request are presented as system boundaries, each component of the mental states being in relation of dependence to the others and all together constitute the characteristic syndrome of overworked psyche. It is known that solving new and challenging situations depends on the activation mechanisms of thought, its creativity, intelligence level of the athlete. In special situations of sports emulation, these mechanisms suffer from blockages, crediting the solving of acute problems to insufficient efficient and adapted stereotypes. Intellectual barriers come from establishing concepts, beliefs at a certain level of possible performance. Another aspect is creativity in solving situations. Currently there is talk of tactical intention of assessing situations and ability to adapt to them. In these situations there are identifiable barriers consisting of stereotypes of perception, anticipation and resolution of refusing new enhanced mechanisms.

Emotions and motivation represent some of the most characteristic aspects of limit situations. Fear that a sportsman lives is of different origin, as the danger is physical, organic or moral. With heavy use of the body, fatigue or physical exhaustion allows disinhibition of brakes, the athlete's feelings taking strong aggressive forms, uncontrolled, reducing thinking and decision capacity. Voluntary control of behavior, as a constituent of athlete psyche, has its oscillatory or contradictory moments, being depend-

ent largely on the factors mentioned above and at the same time, on the degree of self-education and exercise capacity. Capacity of voluntary effort can be greatly enhanced in training, leading to performance.

Performance capacity, Ibid 2, is set at a certain level above which there are subjective difficulties, judgment, confidence and conviction. Often the subjective barrier is unconscious, representing time, either adding repeated failures or from the acceptance of disincentive ideas. In sports, the barriers can be designed as:

- Limits of a performance level still unreached;
- Limits of the performance established of a particular sportman that can not overcome himself, it's about fixing the level of aspiration, even unconsciously.

Mental barriers, Ibid 4, are double conditioned: socially and individually. From the social point of view, they are determined by the influence of group awareness and individually, barriers consist of many limiting factors that lead to the formation of subjective attitudes of distrust, fear. Mental barriers of limit states are not only affective-emotional or driving, but intellectual. Lack of imagination and creativity acts as a barrier that an athlete exceeds it very hard, through the means of an incentive: encouraging suggestion, motivation, cognitive restructuring, affectivity level adjustments, restructuring in technique and tactics. Reached a certain level of performance, the difference is very small between training levels achieved by these athletes and the most important factor that decides the winner is the ability of each to face psychological pressure, capacity consisting of multiple components: motivation, effort, concentration, confidence, and especially the ability to withstand the stress of competition, in the words of the famous American economist George P. Schultz, Cited Zbenghe, T. : Kinesiology - Movement Science, Medical Publishing House, Bucharest, "from the moment you talk about what you will do if you lose,you lose."

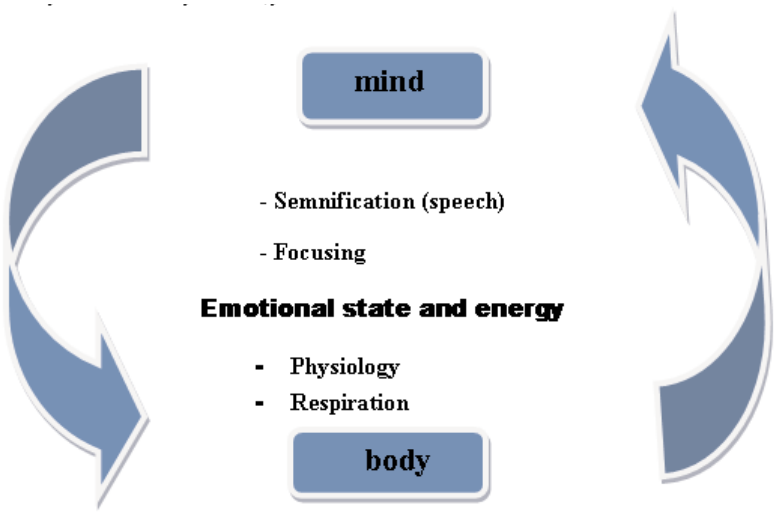

Fig. 1. Mind - body relationship and psychological effects on the athlete.

Instead of conclusions

As part of the total training, mental training of the swimmer is particularly important in the formation and education of the spirit of the performance. According to some authors, the origins of mental training is in antiquity, being mentioned by Platon. In the last two to three decades, the mental component is used in most sports, the Special Forces training, and various fields in the form of coaching or mentoring.

Mental training, Grosu, E., F. : Mental training techniques, edition 2, vol.III, from the "Motor action and mental action" GMI Publishing House, Cluj-Napoca is a very important and complementary means of technical and tactical training of athletes, supporting or even replacing practical training when it is interrupted for various reasons: accidents, long trips, etc.. Concentration, confidence, control and commitment are considered to be the main qualities of the swimmer's performance. Mental training Epuran99 Epuran, M. : Traction and psyche in bodily activities. FEST Publishing House, Bucharest defines as "the process of

maintaining and strengthening the representation of movements and actions resulting in formations neuromuscular activation, and therefore practical work efficiency."

Michael Fred Phelps is more than a confirmation of the above notions. American swimmer, he is a multiple world champion and Olympic to different swimming samples, it is 14 times gold medalist to Summer Olympics (the greatest number of medals won by any other sportman) and is the holder of seven world records. In the spring of 2001, Phelps broke the world record in 200 meter butterfly (his first world record), becoming the youngest swimmer in history - 15 years and 9 months! And this is happening considering that, in childhood, had been diagnosed as suffering from ADHD - attention deficit hyperactivity!

Legend of the Olympics, Phelps wrote the book No Limits, where he talks about himself, about how he trained, physically and mentally in order to perform impressively, imposing new standards for success. His book is an inspiration and motivation to millions of athletes in the world and is also a guide "step by step" on the path to success. One of his favorite mottos is " performance can become reality "and is typical of the attitude he adopted in the struggle for breaking world records and winning gold medals.

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TENDENCIES IN PHYSICAL ACTIVITY IN THE EUROPEAN UNION, STUDY CASE - EUROPEAN CAMPAIGN "MOVE WEEK" IN ARAD - ROMANIA

ARDELEAN Viorel Petru
"Aurel Vlaicu" University of Arad — Research Center for physical activity

Abstract

Scientific evidence shows that physical inactivity is a leading risk factor for ill health, going well beyond issues related to weight control and influencing both physical and mental well-being. Over the past few years, the promotion of physical activity has increasingly been recognized in Europe as a priority for public health, and many countries have responded through the development of policies and interventions. With almost one million deaths per year attributable to physical inactivity, this has become the fourth leading risk factor for global mortality in high-income countries and a major public health issue (WHO). In this paper we want to present an example of best practice in the field of physical activities to the broad masses of the population. These activities were conducted in the month of October 2013 throughout the European Union. Our case study approach the events organized Aurel Vlaicu University of Arad during this campaign. With over 300 attendees at the event and the first edition, we consider it a successful campaign.

Keywords: *movement, health, plaing, students*

Introduction

Nowadays it is being discussed more and more problems physical activities performed by the population, namely mass sport. Are presented TV spots, press articles, radio or television programs dedicated to this topic and other ways to approach the subject ... but concrete action happens quite few and rare.

A recent study published by the "Adevarul" newspaper and

conducted "Student Sports" Association among students in Romania, highlights some negative aspects of mentality and the way young people relate to physical education classes:

● Nearly 75% of students were not at any hour sports university in this academic year, citing "lack of information";

● Over 70% of Romanian students who participated in the online poll, said they participate in sports activities at least 2-3 times per month, but outside the university;

● Among those who went to such courses, over 56% have attended a maximum of 5 hours of training and 20% maximum of 3 lessons;

We belive if young people, who have hours of sport in school schedules, are such figures, in other categories of the population may be more worrying situation. Romania suffers from this point of view and the causes are multiple. Data taken from Eurobarometer are conclusive:

● 29 % Romanians say they play sport with regularly or with some regularity. 71 % never play sport or do so less than once a month;

● 57 % Romanians say that lack of time prevent them from practicing sport regularly;

● Only 11 % of respondents in Romania say they exercise for fun. In Sweden, 53% of respondents say they exercise for fun; this is followed by Denmark (46%), Germany (46%) and Lithuania (46%);

● Romanians don't use sports clubs or sport centres. Only 3 % percent attend a sports club or a centre. In the Netherlands 25 % use a sports club and in Germany the number is 19 %. The main factors determining the usage of such facilities are presumably quite simple: their availability (most likely to the urban population) and the disposable income of citizens in the different Member States;

● 15 % of the Romanians exercise in order to improve physical appearance. Only 7 % of respondents in the Netherlands are motivated by this, while Bulgaria (17%), Poland (17%) and Portugal (17%) also are well below the average.

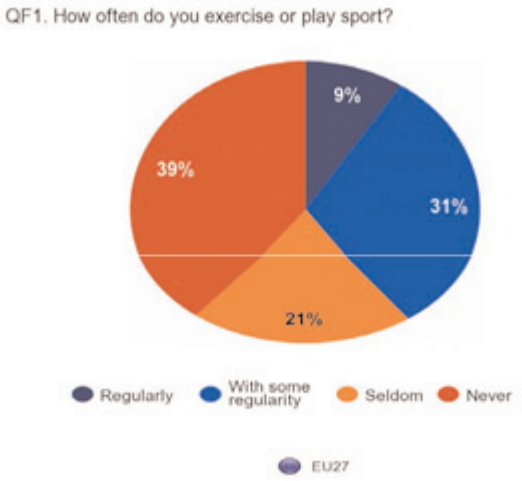

Fig. 1. Poll in the E.U. on the frequency of practicing sports or other physical activities by citizens (according to the Eurobarometer).

World Health Organization (WHO) listed in a report several key factors on physical activity, which should be taken into account:

● Physical inactivity is one of the leading risk factors for health and is estimated to attribute to one million deaths (about 10 % of the total), per year in the WHO European Region.

● Physical inactivity accounts for 8.3 million disability-adjusted life-years (DALYs - about 5% of the total) in the Region.

● In particular, two thirds of the adult population (people aged over 15 years) in the European Union do not reach recommended levels of activity (30 minutes/day on most week days). On average, only 31% of respondents in a European survey reported sufficient physical activity.

● 40% of EU citizens say that they play sport at least once a week

● Only 34% of European young people aged 11, 13 and 15 years reported enough physical activity to meet current guidelines. In most countries boys were more active than girls and activity declined with age in both sexes.

● Proportions of active young people vary widely between countries, ranging from 11% of girls and 25% of boys in France to 51% of girls and 61% of boys in Ireland among 11-year-olds. Similar variations existed among the other groups; for example the proportion of active 15-year-old boys was 49% in the Czech Republic and 25% in Portugal.

● Inequalities between countries are rising, with those in the eastern part of the Region bearing the heaviest burden. The citizens of the Nordic countries and the Netherlands, generally speaking, are the most physically active in the EU. Meanwhile, the citizens of Mediterranean countries and the 12 new Member States tend to exercise less than average.

● Emerging estimates of the direct (health care) and indirect costs of physical inactivity (loss of economic output due to illness, disease-related work disabilities or premature death) are alarming. On the basis of two studies, in Switzerland and the United Kingdom, physical inactivity can be estimated to cost each of the Region's countries about 150-300 per citizen per year.

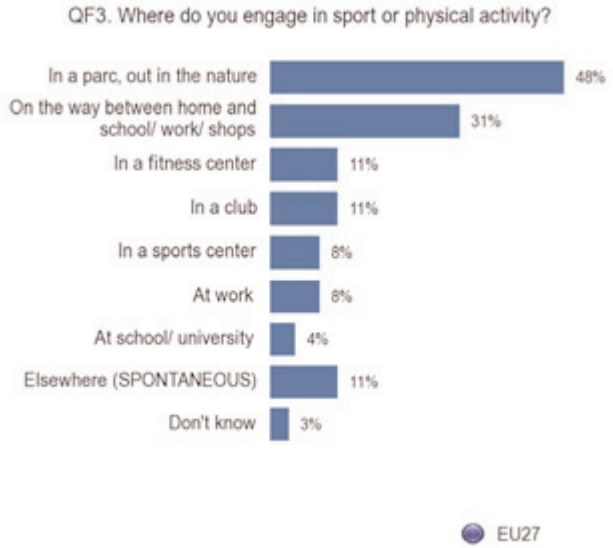

Fig. 2. Poll in the E.U. on the place of practicing sports or other physical activities by citizens (according to the Eurobarometer).

Also an article recently published in the U.S. says that exercise does not have only limited effects on somatic development side, but they extend also in the effective plan to theoretical classes. asserts that "children who are more active show greater attention, have faster cognitive processing speed, and perform better on standardized academic tests than children who are less active." ()

Methodology and content of the study case

To conduct this work we used the following research methods: - the study of archived recordings, - interviews, - documentation, - direct observation - participatory observation.

Through this project we want to address in particular to the young population (pupils, students), because in this time they form their habits of life. It is important that these habits include the pleasure of doing physical activities or sports (any form of practice), or recreational sports character. Referring to recreational sport, Professor Gagea Adrian said: "Packaging the recreational sport is individual health interest to rebalance and restore the physical and mental state to control and eventually remove individuals from wasting or using flawed free time etc. "(Gagea A., 2008).

MOVE Week is an annual European campaign promoting the benefits of being active and participating regularly in sport and physical activity. Organisers are : ISCA (International Sport and Culture Asociation), ECF (European Ciclism Federation) cu sprijinul Comisiei Europene si avand partener media postul TV Eurosport.

In 2012 the first ever MOVE Week engaged individuals, organizations and cities from across Europe in a large-scale celebration of sport and physical activity, by promoting a myriad of successful sport and physical activity initiatives across Europe. This test run of the MOVE Week was held from the 1st to the 7th of October 2012, where more than 100 events were held in 23 countries with approximately 140,000 participants.

Vision: "100 million more Europeans active in sport and physical activity by 2020"

ISCA seeks strategic partners to fulfil this vision. The overall

objective of NowWeMove is to facilitate cross-sector collaboration for promotion of participation in sport and physical activity.

Objectives of the campaign:

a) Raise awareness about the benefits of sport and physical activity among European citizens;

b) Increase accessible opportunities to be active in sport and physical activity by developing new and up-scaling existing initiatives;

c) Enable sustainable and innovative capacity building for MOVE Agents through open-source solutions and advocacy.

Fig. 3. Some pictures which have been used to promote activities inside the Move Week

Results

Throughout the week, 550 MOVE Agents ensured that 1,257 MOVE Week events in 510 European cities across 33 counties bought fun and physical activity opportunities to their communities. The success of these events bought an estimated 250,000 people to join in their local MOVE Week activities. The events were lit up in orange by 300,000 bracelets, 250,000 stickers, 5,000 MOVE Week t-shirts and 3,500 banners.

Fig. 4. Map of Europe with cities that have conducted activities in the Move Week.

During the Move Week campaign 2013, in Romania was held about 30 events and the University "Aurel Vlaicu" of Arad were organized two events: > one in wich the Faculty of Physical Education and Sport has proposed to students but also pupils who began school, to participate in an organized manner in a series of sports competitions, held in sports hall of the university, by which they can enter in a pleasant atmosphere into theoretical seminars and courses; > the second event was the "Aurel Vlaicu" University by the Faculty of Physical Education and Sports as a partner in a national competition of orientation.

We believe that the mission of a sports faculty is not only that of transmit knowledge and to train specialists in the field, but also a faculty must develop practical activities (competitions, demonstrations, games and other activities, with practical character) for both, its students and for community it is part. We had into account for choosing the sports of these actions, the survey conducted by the association Studentsport among the students from Romania, so that three disciplines of the students appreciated were found also in the the actions of the Week Move from UAV Arad.

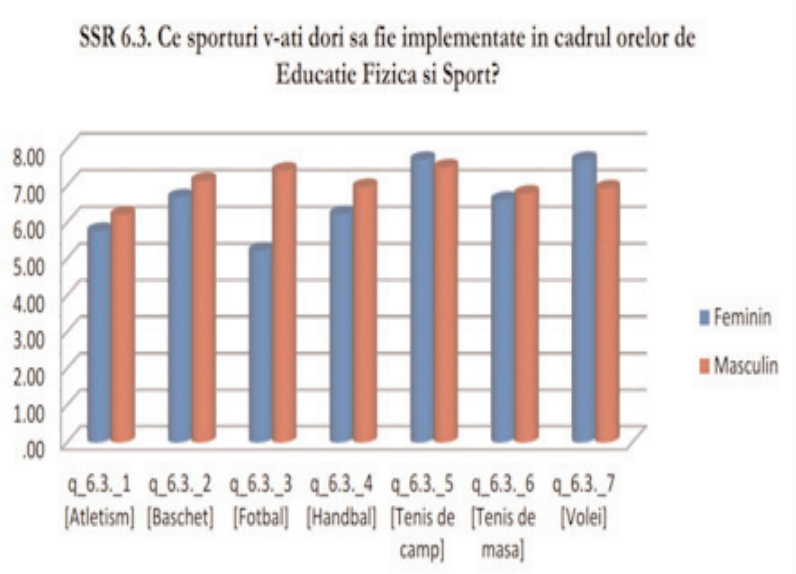

Fig. 5. Graphic regarding options for practicing sports by Romanian students in universities (according to Studentsport survey).

For this event were made ??a series of posters (with Now We Move logo) who divided in the schools, have been exhibited on the notice boards of the University and in various public spaces in the city. Also were launched invitations to sports teachers from high schools.

Also in this sense, to inform the school population were sent press releases (to the newspapers or on-line) have been posted ads on facebook, on the University website, on the websites www.orienteering.ro, www.condorclub.ro, and on the forum of Arad School Inspectorate. To the events, held at the sports hall of the UAV, participated and realize an interview, regional television "West Regional TV". The press has received a series of informative materials about the campaign.

Table no. 1. Summary of activities conducted at UAV Arad during the Move week campaign.

No.	Competition	Place / date / hour	Competitors (sex & categ.)	Volunteers involved
	Event I : "Move your body and ... back to school"			
1	Table Tennis Tournament	CSM AR, 08.10.2013; 10,00	15 students (m+f)	3 pers.
2	Volleyball Championship	Sports hall UAV, 09.10.2013; 09,00	4 team x10pers = 40 (stud., m+f)	7 pers.
3	Martial arts Demonstrations (karate, kyokushin, ju jitsu)	Sports hall UAV, 09.10.2013; 12,30	10 students (m+f)	3 pers.
4	Football Championship	Sports hall UAV, 09.10.2013; 13,00	4 team x10pers = 40 (stud., m)	7 pers.
5	Dance Demonstration (salsa, bachata, cha-cha and ballroom dance)	Sala spect. Camin stud., 09.10.2013; 18,30	10 pairs x2pers = 20 (m+f)	4 pers.
	Event II: " Zarandului Cup 67, „Dávidházy Kálmán" Memorial and „Aurel Vlaicu" University Trophy			
1	Long distance orientation stage	"Neptun" swimming pools, 12.10.2013, 12,00	~ 50 pers., (m+f)	5 pers.
2	Night orientation stage	M.Eminescu park, 12.10.2013; 07,00	~ 30 pers., (m+f)	5 pers.
3	Medium distance orientation stage	A.V. University, 13.10.2013; 10,00	~ 60 pers., (m+f)	5 pers.
4	Short distance orientation stage	"Neptun" swimming pools, 13.10.2013; 15,00	~ 40 pers., (m+f)	5 pers.

Before each competition organized, at the opening ceremony, were presented to the participants: - vision and purpose pursued by organizing these events; - the initiators and supporters of the project; - data about importance of physical activity for good health (all data taken from the detailed statement of information for Romania).

Promotional materials provided by European organizers of the campaign (presentation banners, t-shirts worn by volunteers, bracelets, Stickers and diplomas received by participants in events) had the role to arouse curiosity and give the posibility to some questions like: what? who? for what purpose? is performed such events. Volunteers were instructed to provide the necessary answers.

Fig. 6. A few pictures within the activities performed at UAV Arad during the Move week.

Conclusions

We appreciate that this campaign organized at European level was a success, which can be verified by the multitude of actions that were performed in the 33 countries included in the campaign and over 1250 eventsby which were involved in physical activities approximately 250,000 persons.

Also consider as events organized by UAV Arad in the campaign was a success, as the first edition. The strengths of this campaign in Arad were: - enabling students to start school in an pleasantly way, with a series of sports competitions; - informing them about the importance it has physical exercise in any form; - involvement of some students, like volunteers, in organizational activities of these events were beneficial for him.

Like measures what can be taken to improve the following participation in this campaign: - a better communication with schools in order to involve more numerous school population - the opportunity to give more importance of the event involving some authorities, institutions or local companies.

Next we want to present appreciation of ISCA president (the main organizer of this campaign):

"We know the challenge. We know that multi-sector approach and commitments are needed to create motivation for change and impact. We have to act upon this challenge and knowledge! Governments, corporate sector and civil society need to align around ambitious visions for increased physical activity.

The challenge of inactive lifestyle is far too big for one single sector. However, if the major stakeholders from the various sectors align, collaborate on the innovation of solutions and contribute to the implementation from our respective positions, we have a chance to succeed in reversing global inactivity trends.

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"AUREL VLAICU" UNIVERSITY OF ARAD
FACULTY OF PHYSICAL EDUCATION AND SPORT
PHYSICAL ACTIVITIES RESEARCH CENTER

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Manuscripts submitted for publication should be clearly identidied as **Original articles**:

aricles reporting the previously unpublished results of completed scientific experiments conducted by the authors, confirming or refuting a clearly defined research hypothesis.

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Style. The manuscripts should be written in first person using the active voice.

Formats of numbers and all other style matters should follow the **AMA Manual of Style (10th edition).**

Manuscripts must be submitted electronically, on line, or via email to: or to the contact persons .

Contain:

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Abstract: must be limited to 250 words and accurately reflect the content of the manuscript. Include the following headings: Purpose, Methods, Results and Conclusions. A list of 3-5 key words, not repeating wording used in the title, should follow the abstract.

Introduction: should give the scientific rationale for researching the given topic, the primary issues and controversies, the aim of the study. Only pertinent references should be cited.

Methods: The Methods section should be limited to material available at the time of the study design and should contain essential information regarding how the experiment or research was conducted. The protocol of data acquisition, procedures, investigated parameters, methods of measurements and apparatus should described in sufficient detail to allow other scientists to reproduce

the results. The study subjects/participants should be described in terms of number, age and sex. All investigations with human subjects should conform to the Code of Ethics of the World Medical Association (Declaration of Helsinki)

The statistical methods should be described in detail to enable verification of the reported results.

Results: The results should be presented in a logical sequence, given the most important findings first and addressing the stated objectives. The number of tables and figures should be limited to those absolutely needed to confirm or refute the thesis.

Discussion: The authors should deal only with new or important aspects of the results obtained. Material from the Results section should not be repeated, nor new material introduced. The relevance of the findings in the context of existing literature or contemporary practice should be addressed.

Conclusions: Only conclusions supported by the study findings should be included.

Acknowledgments: list all those who have contributed to the research; financial and other material support should be disclosed and acknowledged.

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Figures and tables: Each figure and table should have a caption that is self-explanatory and defines all abbreviations. They should not be in color. Photographic images can be submitted if they are saved in JPEG format at a resolution of 300 dpi.

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