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NEUROPSYCHOLOGICAL LANDMARKS IN MIDDLE CHILDHOOD

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Abstract. Middle childhood is characterized by important processes in child development and in establishing their sense of identity. The paper highlights the neuropsychological development of the five functional areas main functions, namely: attention and executive functions; language; sensor - motor functions; visual and spatial processing; memory and learning. Studies in these areas have shown that cognitive skills can follow different temporal paths of development and they can be affected differently. The lateralization of the two brain hemispheres, as well as the maturation of the corpus callosum continues to grow. However, the cognitive development allows children during this period to form self-concepts and understand the emotions of those around them and the child's behavior through which the emotional difficulties are translated into action is represented by aggression or hostility. At this age children continue to develop their language and the gross and refined motor skills. During this time children enter the age of reason, and the most noticeable progress is shown in the representation capacity.

Key words: *middle childhood, physical development, attention, executive functions, language, sensor - motor processing, visual and special processing, memory and learning.*

Introduction

It seems appropriate to begin this foray into the childhood stage with the question raised by Schaffer (2010: 20) in his Introduction to child psychology, namely: What is a child? The author answers this question with the description that the child is seen as a smaller version and a less strong adult - less dependent, with less knowledge, less competence, less socially adapted and less able to control himself emotionally. Schaffer highlights the weak point of this description is based on negative terms incompetences drawing attention to the child, without mentioning the vast potential for his future development [1].

According to Horghidan (1997) the period from 6 to 10 years old is the optimum time of educability - in which psychomotor skills can be maximum developed ("the period during which learning can be achieved with minimum effort and maximum efficiency"). At cognitive level, this stage is characterized by concrete operations stage, in which mental operations can be used such as reasoning in solving concrete problems (real). At this stage of concrete operations, children understand better than those in the preoperational stage the spatial concepts, causality, classification, inductive and deductive reasoning, conservation and the concept of number [2].

In terms of physical development at this stage growth slows down considerably, but the changes are not visible from day to day, they accumulate and give a surprising difference between 6 year old children and 11 year old ones, among which many of them begin to resemble adults [3]. Based on relevant studies and research in this field, the aim of this paper is to highlight the main aspects the neuropsychological developments occurring in middle childhood stage.

Middle Childhood

Studies in recent decades in the fields of cyber psychology and cognitive psychology, have founded a systemic and functional-dynamic conception of the psyche, which, together with the holistic 1 highlights new ways of seeing and understanding the mental activity and new ways of intervention. The human being can be seen as a cybernetic system, integrated within the physical, biological and socio-cultural macrosystems. Psyche as a cybernetic system approach draws attention to its energetic - informational nature and to the communication functions, command and control it performs [4]. Cosmovici (1996, as cited Mitrache and Bejan, 2010) believes that the systemic organization principle "requires us to remember the multiple dependency of any process on other subsystems and on the most comprehensive system - the individual, his ego." [4]

Middle childhood refers to the years between early childhood and adolescence; in other words, between approximately six and twelve years of age. It is a time of significant emotional, social, cognitive and physical development. In middle childhood, children strive to achieve competence, autonomy and to relate to others [5].

The period between 7- 11 years is defined as middle childhood. Some authorities divide the-middle childhood in early middle childhood (ages 7-9) and middle childhood (ages 10-11) periods. This period is characterized by important processes in child development and in establishing their sense of identity. During this stage of development children make the first steps towards maturing, becoming independent, self aware of the people around them. The physical, social and mental skills develop in a fast rhythm, the changes in the cognitive and biological processes have significant effects on the changes that occur in the body of children. At this stage of development children show greater independence from parents and family members begin to think about the future, begin to understand more about their place in the world to pay more attention to relationships and teamwork, and also to wish to be accepted by friends [6]. With the entry into school the social relations and roles are changing dramatically, children develop a sense of self esteem and individuation to their peers. It is time that we are in education itself, the focus is on training concepts.

Landmarks in the physical development

Physical development in middle childhood is characterized by considerable variations in growth patterns. These variations may be due to gender, ethnic origin, genetics, hormones, nutrition, environment, or disease. While children of this age group follow the same basic developmental patterns, they do not necessarily mature at the same rate. Most girls experience a preadolescent growth spurt around age 9 or 10, while most boys experience the same growth spurt around age 11 or 12 [7].

At the age of 6, physical development is a complex process. With the age of 6, the child grows by an average of 5-7 cm per year and nearly double their weight. Running, jumping over obstacles on the spot or begin to emerge and integrate easily with his usual movements.

The girls keep something more of the adipose tissue than boys, a feature that will persist until the age adult. At the age of 10 the child weighs about 5 pounds more than their peers; 40 years ago - nearly 30 kilograms in boys and 39 for girls [3]. After puberty, secondary sexual characteristics are outlined.

Neuropsychological landmarks

In this section of the paper we propose to highlight the neuropsychological development of the main functions of the five functional areas, namely: attention and executive functions; language; sensor-motor functions; visual and special processing; memory and learning. Studies in these areas of development have shown that cognitive skills can follow different paths of development in time and they can be affected by various [8].

Brain Development

As the previous research claims, changes in brain function support the structure and cognitive progress. The maturation and learning in middle childhood, and after this period, depend on the fine tuning of brain connections and the selecting the most effective brain areas suitable for certain tasks, together, they increase the speed and effectiveness of the brain and improve the ability to filter and eliminate irrelevant information [9]. The brain development during this period is characterized by an increase in the specific structures, especially the frontal lobes responders for planning, rationalization and ethical decision making. Lesions in this part of the brain result in uncontrolled emotional outbursts, inability of planning things and poor judgment in decision making. Lateralization of the two hemispheres of the brain, also continues during middle childhood, as does maturation of the corpus callosum (the bands of neural fibers connecting the two cerebral hemispheres), and other areas of the nervous system. Interestingly, children achieve concrete operations around age 7 when the brain and nervous systems have developed a certain amount of neural connections. When these neural connections have developed, a child's ability to perceive and think about the world advances from an egocentric, magical viewpoint to a more concrete and systematic way of thinking [7].

Attention / executive functions

Attention is defined as the position or orientation mechanism, focus and

consciousness fixation on an object, tasks, questions, problems, etc. This function is part of the energy supporting the work of psychic phenomena. As stated by Zlate (2006: 306), attention has undergone an extremely sinuous, evolution in the field of psychological research making the leap from considering it as a central mental faculty to ignoring it or even banish it from psychology [10]. Attention must not be understood as a static arrangement of the psycho-nervous energy, which is installed at a time and remains invariable. It involves dynamicity, unfolding in time, organizing and structuring of neurofunctional mechanisms. Between the ages of about 7 and 11, children are in the period of cognitive development that Jean Piaget referred to as the concrete operational stage. During this period of intellectual development, kids become increasingly skilled at understanding logical and concrete information. However, they still struggle to grasp hypothetical or abstract concepts. At this age, kids are able to focus on multiple aspects of a problem or situation and become less egocentric, meaning that they are able to think about and understand things from different viewpoints. However, they tend to be more focused on the "here and now" and less on the future consequences [11].

Regarding the term executive functions (EF), it was originally defined in the context of cognitive theory [8], which was developed by adding the concept of working memory. EF has long been considered to be a unitary, domain-general cognitive function with its subfunctions working together in a consistent fashion across different situations and content domains [12]. According to specialists in psychology, EF are necessary for the management of attention, emotions and behavior in order to accomplish our goals. These functions begin to develop in preschool and mature during adolescence [13]. In turn, the Moon et al., (2004, as cited in Papalia, Old and Feldman, 2010: 296), outstanding that as they progress through the school years, children make steady progress in terms of the ability to regulate attention and memory to retain information and to plan and supervise the behavior. All these developments contribute to the EF correlated, conscious control of thoughts, emotions and actions to achieve goals or solve problems. The gradual development of EF, from infancy into

adolescence accompanies brain development and especially the prefrontal cortex, the area that allows planning, judgment and decision making; as superfluous synapses are eliminated and the leading paths are fuelling, processing speed - usually measured by reaction time - improves dramatically, especially for girls; faster processing efficiently increase the amount of information that children can keep in working memory, allowing complex thinking and goal-oriented planning. School age thinking develops their planning skills taking decisions on their own daily activities [3].

Language

Language is defined as faculty capacity of expression and communication of ideas, feelings and desires, specific to people, by means of language [14]. This is a central field of neuropsychological assessment and has been studied extensively in children and adults. There are some additional considerations that underline that language is a human prerogative: Among the many interactive subcomponents that have been identified as crucial to the efficient processing of oral and written language are: phonological processing, appointment, receptive language comprehension, understanding of language structures and ease of reproduction syntactic language. From a development perspective, these subcomponents start developing in infancy and early childhood, but the quality continues to develop in childhood and adolescence through interaction with conceptual skills, education experience [8].

At school age children continue to improve language skills in several areas. Thus, the understanding of a sense continues throughout middle childhood. A first grader may know the meaning of 8,000 to 14,000 words, but a high-schooler knows 80,000 words [15]. These numbers are equivalent to the acquisition of 6,200 words per year between first grade and graduating from high school. The understanding that words have multiple meanings also increases. This more complex understanding of word use may be attributed, in part, to cognitive development [16]. As their vocabulary develops during school years, children use more precise verbs, comparisons metaphors, figures of speech style in which one word (or phrase) which means, usually, one thing is compared to another or applied to

another, are becoming more common; understanding the syntax rules becomes more complex with age. At age 8, most children can correctly interpret the first sentence, and at 9 years old practically everyone can. Sentence structure continues to become more elaborate. Older children use more secondary sentences; some structures, such as secondary clauses that begin with however although frequently they get to be used only in adolescence [15]. However, studies has demonstrated that learning a second-language can offer a number of cognitive advantages, including increased mental flexibility [11].

The Sensor-Motor Functions

Senzor-motor skills were seen as indicators of normal development or atypical development and of brain damage or dysfunction. These skills have important functions of mediation and thus we refer to complex systems guided by the goals, through which are acquired knowledge, problem-solving and communication of intent or purpose [8].

Another aspect of sensory processing is discrimination the ability to distinguish sensory stimuli. This refers to the spatial and temporal characteristics of sensations - ie space timing. Sensory Discrimination grows with neurological maturation. As the child matures, it reacts less self-protective of each sensation and becomes more able to discern what is happening in his body and in the environment; he learns to use his senses to behave organized [17].

Visual And Spatial Processing

Visual and spatial processing skills relate to processing visual information, so as to allow movement in space, orientation properly, the accuracy of reaching objects, understanding visual patterns and the ability to shift gaze at various points in space.

Visual and spatial processing is complex and involves several subcomponents distinct, but are interrelated: the ability to synthesize elements in a whole way (view) and mentally represent objects; the ability to discriminate between objects, to assess the orientation of lines and angles, to distinguish between the left and right; the ability to cover a model or reproduce using cubes; the ability to adopt a variety of perspectives and mentally rotate objects; the ability to comprehend and interpret symbolic representations of the

external environment and the ability to solve nonverbal problems [8].

The child typically uses his visual information to guide his planned voluntary movements. With visual-motor skills synchronized, the child can effectively move the body to be able to get from point A to point B can look at a simple drawing or construction of cubes to copy, and can see and grasp an object. The child who has visual-motor skills with difficulty using his weak order to guide his movements. Dyspraxia can cause visual problems mental visualization, planning and execution of a sequence of complex movements such as rolling to bed to see the alarm clock. Defective eye-hand coordination means that hands and eyes do not work easily together, the child has problems when handling toys and school materials, when catching the ball, when he uses pencils or makes use of clothing accessories: buttons, hooks, zippers [17].

Memory and learning

Memory defines the temporal dimension of our psychic organization and its integration in the three segments of the temporal horizon - past, present, future. It has been studied extensively in children and it improves as the child develops the ability to conceptualize, to categorize and make associations. The encoding strategies are used more sophisticatedly the access to what has already been learned becomes automatic [8].

Memory strategies are the deliberate mental activities used to store and retain information. Working memory plays an important role in learning during middle childhood. General intelligence is highly correlated with working memory capacity. Memory capacity shows a steady developmental increase during middle childhood years as: capacity of short term memory improves significantly; increase in long term memory; meta-memory: understanding the processes underlying memory emerges and continues to improve during middle childhood development.

Remembering faces and names is a regular part of the daily experience of children. Face recognition or memory began in early childhood and continues in childhood and adolescence. With all these memory strategies, younger children use them differently to identify unfamiliar faces –their strategies are different from those of older children;

Children under 10 years, use details like obvious feature- hair style, glasses to identify unfamiliar faces; older children and adults adopt a holistic configurational strategy. [8].

Discussions

Passing through middle childhood children become part of school age and their education is a priority of modern society today. As we have seen, during middle childhood children continue to grow and mature in a fascinating way. Physical, social and mental skills develop rapidly during this period; it is a milestone in the development of children in all areas of life, such as relationships of friendship, school or practicing a sport.

During middle childhood physical development continues steadily, and the increased stature and weight may vary. For most of the children, height and weight begin to move at a much faster pace than in early childhood. The growth rate is influenced by genetic aspects and the interaction with the environment. As children progress from kindergarten to early adolescence, their fine and gross motor skills typically advance [18].

Based on the studies discussed, it appears that cognitive flexibility, goal setting and processing of information follows a critical period of development between 7 and 9 years old, and becomes relatively mature in 12 years. For most children the acquisition of cognitive skills, which occurs at the beginning of this period, allows communication of thoughts and feelings. In this respect, the most important role is played by school and the interaction with the social environment. In this respect, Neacșu (2010: 98) outstands the social interaction, built on school-family dyad, expressing a strong influence on the cognitive development of the child; by interaction with family members, but also with classmates, the child learns patterns of relationship, listening and social response, he learns roles, communication techniques, learns how to make decisions and form structures from notional and consistent networks of social and psycho - moral values[19].

During this time children enter the *age of reason*, because they begin to show a more flexible thinking; develop self-awareness and also begin to identify and understand the feelings and emotions of those around them. Noticeable progress is observed in the *representative capacity*; at this stage of

development the neuropsychological symbols take on a more important role; at 11 years old, the child is able to extract the "principle" of an efficient cognitive model in action and to apply it in other situations.

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DEVELOPMENT THE MOTOR SKILLS THROUGH SPORTS DANCE

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Abstract. Sport Dance is a discipline that enjoys lately a great success. The aim of this study was to identify the role of dance sports and games specific means in the development of motor skills of children aged 6-9 years. Thus were comprised two groups (experimental and control subjects -14 subjects each). We test the initial and final level of motor skills development specific. The content of experimental program was developed taking into account the initial level of training of the subjects in the experimental group (being beginners) and the need to include in their training pathways for the development of motor skills that facilitate the acquisition of technical elements of dance sport. Efficiency experimental program developed and applied in the experimental group is clear from the results of t-test, and whose values for all samples were at $p < 0.05$ for the experimental group and $p > 0.05$ for the control group. Results signify that the difference between the means of two groups is statistically significant in favor of the experimental group.

Key words: *dance, games, motor skills, ability*

Introduction

Dancing is one of the first recreational activities undertaken by man as a means of expressing emotional and physical exhaustion, aiming to "cleanse" the psyche and spirit of problems or worries. It is important to note that dance, whether practiced as disorganized or sporting activity is one of the easiest and also important leisure activities, the most popular among young people (14-35 years depending on the class and social category).

Ballroom dancing, or dance sport, is an activity in which dance is combined with competitive sport and that allows participants to form social relationships and to improve their physical fitness and mental well-being.[1]

Skills are psychophysical operational systems that underpin successful completion of certain activities [2] In our case, skills such as coordination, strength and speed are essential in the practice of sports dance. Skills occur as a result of interaction between the hereditary provisions and the educational conditions of their formation and activity of the subject [3] They are "one size then differentiates individuals whose behavior is studied. Individual differences observable in a sample are generally attributed to the underlying characteristics that are not observed directly. The skills are a class of such characteristics. "[4].

Methods

Hypothesis

To what extent, playing a sport by children aged 7-9 years, helps develop their motor skills by means of specific sports dance and movement games.

Organizing and conducting research

For the pedagogical experiment, we chose a group of 28 children aged 6 to 9 years of age. Of these 14 subjects were children from the experimental group, members of the "Katamis" Dance Sport Club, prepared by certified instructor C.S., subjects that had not yet participated in official sports dance competitions, as they had started this sport for about 5-12 months. Being relatively new in this activity, our aim was their training in the discipline for a year and checking the level of their motor skills development. Their preparation process involved three training lessons per week, with a duration of approximately 80 minutes per lessons, in which, besides specific means and exercises specific to sports dance, we also developed movement games adapted for this sport discipline and age peculiarities of children.

Thus, the experiment was conducted during October 2013 - October 2014, and was the application developed experimental program.

We applied tests and control samples which evaluated the initial and final level of development of specific motor skills for the sports dance group subjects in the experiment. The content of the experimental program was developed taking into account the initial level of training of the subjects in the experimental group (the juniors) and the need to include in their training pathways for the development of motor skills that facilitate the acquisition of technical elements of dance sport.

The experimental program was developed with the means to acquire specific elements of dance sport as sport and dance teaching methodology for developing motor skills were taught and applied

elements of dance sport reached the stage of consolidation. They were included in competitions and sports games.

Lesson kept training structure with three parts:

I. Preparatory - input objectives for the gradual increase in effort by major body functions and analytical processing of body segments.

II. Fundamental - in this part we treated two themes: a theme in dance sport theory and a theme in developing motor skills by the same means as in dance sport either separately or included in motion games. If speed or skill was concerned (coordinative capacity), it was treated as a first issue, ahead of dance theory, and if strength was concerned, it was treated at the end of the fundamental part, after the dance sport theme.

III. Closing – it respected the aim of returning the values of heart rate and breathing, close to the specific basal level values for children.

We present some means of acquiring the experimental program developed for specific elements of dance sport which, in the consolidation stage, became the means to develop motor skills covered in the experiment:

1. Repeated application of a figure in Cha-cha-cha (ie "compact chassée"), which involves alternative flexion and extension of the lower limbs (knee shearing), with feet close together, in full contact with the floor, in "SSSQ" rhythm (3 slow shears to 2 quick shears). Normally, considering that the information was assimilated, the exercise was repeated on a musical rhythm of 24 bpm, which is a slower rhythm than the specific cha cha cha music speed (cha cha to - 30 bpm). Later, after several lessons, when supposedly strengthened, we applied the same exercise to develop the repetition speed of the subjects, using a brisk musical rhythm of 34 bpm, during four 90 seconds rounds (standard length of a dance).

2. Repeating a simple cha cha cha choreography (previously acquired) - a measure (4 beats - "QQSS") of "compact chassée" with "check" action (a forward motion, usually with left leg extended front weight on the whole sole right leg is bent, weight on the pillow, knees being close, weight on both feet, the second step of the movement involves the return to full weight on back foot in maximum knee extension) and a measure of "compact chassée" with "back basic" action (stepping back, usually with the right foot, and returning with the weight on left foot forward). The two actions of shifting body weight ("check" and "back basic"), alternated with the static action of the "compact chassée" aim to develop speed of repetition.

3. Repeated execution of the figure "hip twist chassée, forward and backward" - begins with a "check" action to be completed by the "hip twist" action, which involves stepping with the left foot, pad weight, crossing behind the right foot, and thus implying a strong rotation of the pelvis to the left and lifting it backward and of the left side; the second step involves a swinging movement forward and turning to the right of the pelvis, placing weight on the right foot, the entire sole, so that, later, the movement to end with a side step the left. The foot position is favorable for continuing with a "back basic", mentioned earlier. Rotations and strong oscillations of the pelvis, in sustained musical rhythm, causes contractions and extensions in the abdominal muscles and lower back, this exercise being aimed at developing muscle strength in the back and abdomen, which are crucial motor abilities for dancers.

4. Confidence game" - The 14 subjects were divided into 7 pairs spread out through the dance studio, every couple standing face to face and in contact with the hands (left-right, right-left), with the elbows at pelvis level, forearms locked forward so that the contact is fixed. At the beep, one subject in each pair had to close his eyes, following that other component to guide the space using only voltage the positive or negative contact between the two hands. After 3 minutes of work, the roles were reversed in pairs, will take place again exercise for other partners.

The exercise aimed to develop coordinative capacity (skills) as orientation in time and space subjects. Moreover, we targeted "leading" impulses received from the partner with specific motion indications (displacement, rotation, etc.)

5. "Musical Statues" - Subjects were instructed to move freely on a randomly selected song, so that, at each stop of the song, they suddenly stop in the position they were in. When the music restarted, subjects continued movement immediately as follows:

- After 3 minutes of applying the exercise, subjects were dancing their own cha cha cha choreographies on a specific song, and at each pause in the music, they stopped suddenly in the position they were in; when the music restarted, subjects continued movement, but in the correct "timing" of the cha cha steps and figures

After another 3 minutes from the application of the exercise, subjects, with each restart of the music, resumed dancing on a specific beat in the music (1, 2,3 or 4) correlated with the steps in their choreographies.



The game aims to develop coordinative capacity (orientation in time and space) and music

coordination, particularly important in dance sport.

In order to estimate the influence of sports dance on the development of motor skills in children (7-

Table no.1. – Describing the control tests

9 years), they were subjected to tests, the initial (October 2013) and final (October 2014). Tests and control samples were applied as follows:

Nr.	CONTROL TEST	MOTOR QUALITY CONCERNED (manifestation)	DOSAGE	PRESENTATION
1	"Tapping" test for leg development	Testing is done by drawing two circles on the ground, with a radius of 15 centimeters, 20 centimeters distance between the circumferences of the two circles. Subjects will be placed with their feet in the two circles, registering the number of beats of each foot inside each circle (separately record the number of repetitions for each foot).	Repetition speed 30"/ 2x Only the highest number of repetitions was noted	
2	"Shuttle" test (4x7,5 m)	It implies running a total distance of 30 meters - on a linear path of 7.5 meters, subjects will cover the distance in sprint from the start line to the end, twice without interruption, with changing direction by placing the foot on the skilfulside onto the starting line or fininsh line.	Travel speed 1x	
3	Sit-ups (ab crunches)	Testing involves placing subjects in dorsal recumbent position, with knees bent, feet on the ground, supported with the help of appointed volunteers, hands behind the head and trunk lift seated at an angle of 90 ° from the ground – the number of repetitions was recorded in an interval 30 seconds	Abdominal strength 1x	
4	Extensions of the trunk from frontal recumbent position	From a frontal recumbent position, legs supported by appointed volunteers, hands behind the head and lifting the torso off the ground - the number of repetitions was recorded in an interval 30 seconds	Lower back strength 1x	
5	Test for assessing sensorimotor coordination in appreciating distance	Testing involves traveling a distance of 7 meters without visual control, registering the accuracy of assessment of the segment covered by measuring the deviation in centimeters on a line passing through the point of destination, parallel to the line that is the starting point.	Skill – ballance 2x	

Results

To determine the effectiveness of the experimental program applied to render the results of applying said control tests and trials (Table. 2).

Arithmetic average values from initial testing to final testing indicates an increase in all control samples, as shown in chart. 1.

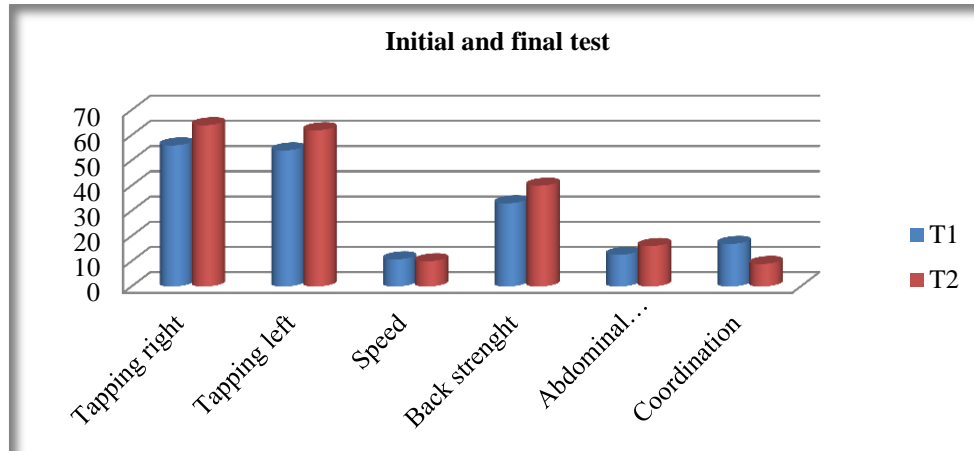


Chart no.1 Values of T1 and T2 evaluation

Table no.2. The static indicators calculated at initial and final testing, for all control tests

CONTROL TEST STATIC INDICATORS		Experimental group		
		T.I	T.F	
„Tapping” test for the legs	\bar{x}	R foot	56,25	64,08
		L foot	54,25	62,66
	Cv	R foot	11,62	9,27
		L foot	13,5	9,8
	D ₂₁	R foot	7,83	
		L foot	6,41	
	D ₂₁ %	R foot	14,27%	
		L foot	11,62 %	
Shuttle (4x7,5 m)	\bar{x}	R foot	p<0.05	
		L foot	p<0.05	
		10,78	10,01	
	Cv	7,88	7,34	
	D ₂₁	0,77		
	D ₂₁ %	7,06 %		
Sit-ups	\bar{x}	12,58	16,08	
	Cv	21,01	17,27	
	D ₂₁	3,5		
	D ₂₁ %	28,85 %		
	p<0.05			
Torso extensions	\bar{x}	33,17	39,75	
	Cv	11,19	9,23	
	D ₂₁	6,58		
	D ₂₁ %	20,39 %		
	p<0.05			
Sensorimotor coordination in	\bar{x}	16,92	8,96	
	Cv	10,37	8,41	

appreciating distance	D ₂₁	7,96
	D ₂₁ %	46,27%
p<0,05		

Discussions

To interpret the results we calculated the following statistic indicators: arithmetic average (X), variation coefficient (CV), difference (D21) and progress (D21%) between the two tests (initial and final), the experimental group for all control samples applied (Table 2). Speed (Tapping) recorded at an average of 56.25 initial testing rep., With values between 48 and 63 rep. Standard deviation is small, the arithmetic average is representative of the sample ($S = 6.5383$). The coefficient of variation, by value ($Var = 11.62\%$) indicates a low degree of scattering of the results from the average, thus indicating a certain homogeneity of the subjects tested. The final testing, this parameter recorded an average of 64.08 rep., Values ranging between 55 and 73 rep. Standard deviation is small, the arithmetic average is representative of the sample ($S = 5.946$). The coefficient of variation, by value ($Var = 9.278\%$) indicates a small scattering of results from the average, so a greater homogeneity of the subjects tested, which demonstrates that the means applied on our subjects improved the speed, with an average progress of 14.27%.

Speed (Tapping) recorded an average of 54.25 initial testing rep., With values between 47 and 67 rep. Standard deviation is small, the arithmetic average is representative of the sample ($S = 6.2249$). The coefficient of variation, by value ($Var = 11.066\%$) indicates a low degree of scattering of the results from the average, indicating homogeneity of the tested subjects. For the final testing, this parameter record an average of 62.66 rep., Values ranging between 56 and 72 rep. Standard deviation is small, the arithmetic average is representative of the sample ($S = 6.095$). The coefficient of variation, by value ($Var = 9.7263\%$) indicate a small scattering of results from the average, so a greater homogeneity of the subjects tested, which demonstrates that the means applied to the subjects improved the speed, with and average progress of 11.62%.

For strength (abdominal strength), we recorded at an average of 12.58 initial testing rep., With values between 9:18 rep. Standard deviation is small, the arithmetic average is representative of the sample ($S = 2.644$). The coefficient of variation, by value ($Var = 21.01\%$) indicates a

high degree of scatter of results from the average so low homogeneity test subjects. At the final testing, this parameter recorded an average of 16.08 rep., The values hovering between 12 and 21 rep. Standard deviation is small, the arithmetic average is representative of the sample ($S = 2.778$). The coefficient of variation, by value ($Var = 17.27524\%$) indicates a low degree of scattering of the results from the average, so a greater homogeneity of the subjects tested, which demonstrates improvement due to the means applied on the abdominal strength of the subjects, having an average progress of 28.85%.

For strength (lower back strength) we recorded an average of 33.17 initial testing rep., With values between 26 and 38 rep. Standard deviation is small, the arithmetic average is representative of the sample ($S = 3.713$). The coefficient of variation, by value ($Var = 11.195\%$) indicates a low degree of scattering of the resultst from the average, so a certain homogeneity of the subjects tested. The final testing, this parameter recorded an average of 39.75 rep., Values ranging between 37 and 45 rep. Standard deviation is small, the arithmetic average is representative of the sample ($S = 3.671$). The coefficient of variation, by value ($Var = 9.235\%$) indicate a small scattering of results from the average, so a greater homogeneity of the subjects tested, which demonstrates that the means applied improved the lower back strength of the subjects, with a 20.39% average progress.

Overall coordination (sensorimotor) recorded at the initial testing an average deviation of 16.92 cm, with values between 28 and 8 cm. Standard deviation is small, the arithmetic average is representative of the sample ($S = 6.828$). Variation coefficient, by its value ($Var = 40.365\%$) indicates a high degree of scattering of the results from the average so low homogeneity test subjects.

The final testing, this parameter recorded an average of 8.96 cm, values ranging between 13.5 and 3 cm. Standard deviation is small, the average is representative of the sample ($S = 3.44$). The coefficient of variation, by its value ($Var = 38.408\%$) indicates a lower degree of scattering of results from the average, so a greater homogeneity of the subjects tested, which demonstrates that the means applied improved the overall coordination

of the subjects, with an average 46.27% improvement

Conclusions

The efficiency of the experimental program developed and its application in the experimental group can be clearly observed from the results of t-test, whose values for all samples were at $p < 0.05$ for the experimental group. The results signify that the difference between the two areas is statistically significant. After applying technical elements of dance sport that reached the stage of consolidation, for specific skill development, we can say that this method has contributed to the development of our research subjects qualities. The specific content of sports dance ensemble involves muscular activity with various artistic movements of the dancers, developing movement skills without this constituting the actual priority of training, but being a subordinate to the learning objective of elements and technical procedures, including the development of psychomotor

behavior. The three movement qualities tested on our subjects (speed, strength, coordination) showed positive development due to the applied means and procedures.

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IMPROVING THE ABDOMINAL MASS OF THE STUDENTS THROUGH BODY BUILDING

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Abstract. In this research, were introduced in physical education lessons, specific means of bodybuilding as a form of maintenance and selective influence of the musculoskeletal system but also as an effective body reshaping, physical development of young people being a major and actual issue. Thus, for 6 months, 22 subjects (aged $19 \pm 1,5$ years) participated in fitness and bodybuilding lessons 2 times a week, each session lasting 60 minutes. The programs were individualized according to the weight of the need and previous motor experience every subject, pursuing two main objectives according to constitutional type i.e. decrease of fat and / or muscle tissue mass growth. Subjects were tested initially and finally through InBody230 device, aiming to abdominal obesity, abdominal perimeter and abdominal strength. At the end of the research, followed abdominal parameters, showed significant improvements compared to the beginning of the experiment.

Key words: *body-building, abdominal mass, students*

Introduction

Bodybuilding specific exercises have in their structure a wide range of basic or isolation movements, performed in a repetitive system.

On the backdrop of cultural and social developments, sports are today concerns not only for athletes. Mentalities sport or sportsmanship as motivation extends in many spheres of life, affecting all ages and walks of life. [1]

"Physical activity can be considered as a basic element of a healthy lifestyle and a condition of everyday life. Health formula consists of mandatory daily physical activity by age, sex and type of activity". [2] "Placing the movement, the human activity in an educational context, is founded argumentative close ties they develop, along with those of major biological functions, mental processes and especially to those cognitive". [3]

Analyzing the effects of exercise on the body of students, Tremblay and Chiasson [3] states that they are much higher on adiposity of those who practice fitness, than they are perceived generally by professionals and health agencies.

Tucker (1990) shows that a good physical condition can significantly reduce the risk of mental disorder in adults of both sexes. Exercise regularly practiced can stimulate emotional functioning, so that stress factors are more easily tolerated. As a consequence, social contacts are positively influenced. [4] Therefore, exercise influences both the physical and mental and social condition. For students, this can be successfully achieved through physical education lesson. As an undisputed necessity follows that the system is operating disciplines with the age at which the

processes of growth and development are still present, including in higher education in the early years of deadlock, both the formation and training of the younger generations cannot be conceived without physical education. [5]

Physical education and sport is a pedagogical act approach concerning all human ages, in response to a double necessity: a social and an individual one, namely: the health of human body, its normal development and the extension of human life. [6] Also, harmonization of educational offer physical education time students with options regarding the branches favorite sport is one of the steps to promote movement among young people.

Methods

For 6 months, 22 subjects (aged $19 \pm 1,5$ years) participated in fitness and bodybuilding lessons 2 times a week, each session lasting 60 minutes. . The programs were individualized according to the weight of the need and previous motor experience every subject, pursuing two main objectives according to constitutional type ie decrease of fat and / or muscle tissue mass growth. The exercises were generally loaded (with many repetitions), aiming muscular hypertrophy, the workload is high. Each subject was given at each meeting a worksheet in weight and dosage exercises differ, depending on the objective (to increase muscle mass and / or lowering body fat). Research subjects were tested before implementation of work programs and the end of the experiment, aiming to progress.

After testing the device Inbody 230, each subject was drafted an evaluation report according to which were developed training programs, this report indicating the need for each topic

decreasing fat mass and increase muscle mass depending on which recommended cardio exercises and weight training at the start (*Running or walking on treadmill, Stationary bicycle use, Running or jumping*).

For research subjects were used basic exercises aimed at those movements made in several joints, where in addition to the main muscle group to whom the exercise and other muscle groups involved helping the movement's performance.

For example, squat with the bar behind your head, the quadriceps muscle is the main group, but the hamstrings muscles, gastrocnemius muscles, butt, abs and back muscles are also involved.

Basic exercises are the foundation upon which then builds the training program, for students is the basis for the development of physical fitness, exercise is recommended particularly at the beginners.

Initial testing the degree of abdominal obesity and abdominal obesity rate target

Indicators	Degree of abdominal obesity	The target degree of abdominal obesity
Media	0.87	0.84
Standard deviation	0.05	0.02
Minimum value	0.78	0.81
Maximum value	0.96	0.88
Amplitude	0.18	0.07
Cv	5.95	2.14

It is known that one type of abdominal obesity is expressed by determining the deposit of abdominal fat.

The initial testing of the degree of abdominal obesity, there is an overflow of Niche calculated by the device Inbody 0.02, the average value of this parameter is 0.87 (± 0.05), Niche calculated as 0.85. The staff is very homogeneous, with a coefficient of variation of 5.95%. This index depends on the anthropometrics parameters - height, weight, and the slight increase observed in the studied subjects is related to the increase in the percentage of body fat by 0.5%.

The final testing of the degree of abdominal obesity, there is an average of 0.84 (± 0.02) the target calculated as 0.85. The staff is very homogeneous, with a coefficient of variation of 2.14%.

The decrease in the level of expressed abdominal obesity is reduced, but is below the target the set of software processing.

This decrease, although minimum, is explained by a process of reconfiguration metabolic determined by the type of training specific muscle, which caused energy consumption based on the use of body fat.

Its abdominal decrease, proves consumer orientation to abdominal adipose tissue reserve and tissue protection at segmental level.

Initial and final test abdominal perimeter

Indicators	Abdominal perimeter T1	Abdominal perimeter T2
Media	81.41	78.41
Standard deviation	8.73	7.54
Minimum value	68	68
Maximum value	102	98
Amplitude	34	30
CV	10.72	9.62

In initial testing, abdominal area has a mean of 81.41 (± 8.73 cm) registered values ranging between 68-102 cm. The group is not homogeneous in this test. The final testing, abdominal area has a mean of 78.41 (± 7.54 cm) registered values ranging between 68-98 cm. The group is homogeneous in this test.

Indicators	Abdomen T1	Abdomen T2
Media	21.44	27.70
Standard deviation	8.07	5.48

Minimum value	15	22
Maximum value	36	38
Amplitude	26	16
CV	37.65	19,69

The final testing, abdominal force recorded an average of 27.70 (± 5.48 repetări) being comprised between 22 and 38 repetitions.

Conclusions

Specifics bodybuilding is that through a system of exercises performed with different coarseness (dumbbells, barbells) and using special devices to develop a healthy body, strong, powerful, beautiful, with a harmonious and proportionate muscles visibly shaped and well illustrated.[7]

This has been highlighted by our research, the targeted segment of abdominal muscles. Bodybuilding can be categorized as mass sports can be practiced at any age, regardless of gender, previous driving experience.

Physical appearance was improved by the positive development of the perimeter registered, we observed an abdominal muscle definition.

On abdominal level were significant improvements to the final testing period comparing to start period of the experiment to all test parameters (abdominal obesity, abdominal strength, abdominal perimeter) which confirms the effectiveness of the work programs implemented. Thus, resistance training can increase muscle mass resulting in an overall increase in body weight easily compartment. Another benefit of this type of training allows caloric intake based on the use of body fat, increasing metabolic rate, because in the muscle cell mitochondria produce energy and therefore consumption of calories. Therefore more muscle

cell means more mitochondria and so, caloric intake.

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AN ASSESSMENT OF ROMANIAN FEMALE TRACK AND FIELD SPRINT IN THE LAST DECADE

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Abstract

Sports performance in sprinting are influenced by a number of factors including competition strategies, physiological needs, running biomechanics, neural influences, muscle composition, level of development of motor capacities, training and material conditions and environmental factor, etc. World records in sprinting have improved drastically in the last years, which show a combined major contribution of modern technology in areas such as physiology, biophysics, biochemistry, in minimizing the effects of limiting factors. To support the above we intend to present briefly the dynamic of the best performance Romanian female sprinters, both senior and junior level I and II. The period which was studied and analyzed is 2004-2013. Romanian women's sprint has never reached the level of Romanian semifond and fond, but along with the international declining of Romania semifond and fond, the female sprint in our country showed signs of internal reviving. Therefore, both the interest of technicians in the development of this athletic branch at juvenile level and the results of national and international competitions have generated a wave of young female sprinters with great potential in their internationally ascension. Unfortunately this trend has been broken somewhere in the period we studied, 2004-2013. The transition from junior to senior level in high performance, for Romanian athletics, generally has been a major milestone, but in this period studied an unexplained rift was materialized domestically in juvenile level too, mainly in the continuous selection process of the female sprinters also on the number of participants both in the training process and in national competitions.

Key words: *women sprinting, dynamics of performance, rankings, decline*

Introduction

In order to support the above referred, we proposed to present briefly the dynamics of the best sports performances, both male and female seniors in the 100m, the shortest classic running event existing in a track and field competition. As in any other sprint events, the primary objective of the sprint events is to cover the running distance in the shortest time possible.

The 100m sprint event first appeared in the 1896 Olympics, in Athens, Greece. In the inaugural race, Thomas Burke, the athlete of United States, won with 12.00 seconds, being the only sprinter

who followed a squat starting stance. During the next ten years, the track used in Olympics and World athletic events was predominantly made of crushed cinder, clay or dirt. Today's tracks are made of synthetic material designed to offer a better cushioning and elastic recoil.

Since the late 1900's, the sprint events has remained relatively unchanged, except for the improvements in track conditions and footwear worn by the athletes.

In the following table are presented the top of the best 100m results for male and reveals that they are obtained after 1999.

Table no.1 Top 10 All time best results in 100 sprinting male

Rank	Time	Name	Country	Date
1	9,58	Usain Bolt	JAM	2009
2	9,69	Usain Bolt	JAM	2008
3	9,72	Usain Bolt	JAM	2009
		Asafa Powell	JAM	2009
4	9,74	Asafa Powell	JAM	2008
5	9,76	Usain Bolt	JAM	2008
6	9,77	Asafa Powell	JAM	2007
		Tyson Gay	SUA	2008
		Usain Bolt	JAM	2005
7	9,78	Asafa Powell	JAM	2008
8	9,79	Maurice Green	SUA	2008
9	9,80	Maurice Green	SUA	2007
10	9,82	Maurice Green	SUA	1999

(taken and adapted from www.iaaf.org)

In the following table are presented the top of the best 100m results for female and reveals that they are obtained after 1988.

Table no.2 Top 10 All time best results in 100 sprinting women

Rank	Time	Name	Country	Date
1	10,49	Florence Griffith-Joyner	SUA	1988
2	10,61	Florence Griffith-Joyner	SUA	1988
3	10,62	Florence Griffith-Joyner	SUA	1988
	10,64	Carmelita Jeter	SUA	2009
4	10,65	Marion Jones	SUA	1998
5	10,67	Carmelita Jeter	SUA	2009
6	10,70	Florence Griffith-Joyner	SUA	1988
		Marion Jones	SUA	1999
	10,71	Marion Jones	SUA	1998
7	10,72	Marion Jones	SUA	1998
8	10,73	Christine Aaron	FRA	1998
9		Shelley-Ann Fraser	JAM	2009
10	10,74	Merlene Ottey	SUA	1996

(taken and adapted from www.iaaf.org)

Figures 1. and 2. shows the progression of male and female world records in the 100m sample flat since 1912. As can be seen there are some interesting features in the improving world records. Therefore appear periods of relative stability of performance, such as the period 1936-1956 for male and the period 1935-1952 for female. Another period of stability was between the years 1968-1988 for male.

The current women's world record in 100m sample held since 1988 by US athlete, Florence Griffith Joyner, certainly deviate significantly from the trend of world records from the period 1948-1984, being remarkably higher for this time period. The difference between the two slopes (Fig. no.1) indicate interesting changes in the female 100m world record progression before and after the Second World War.

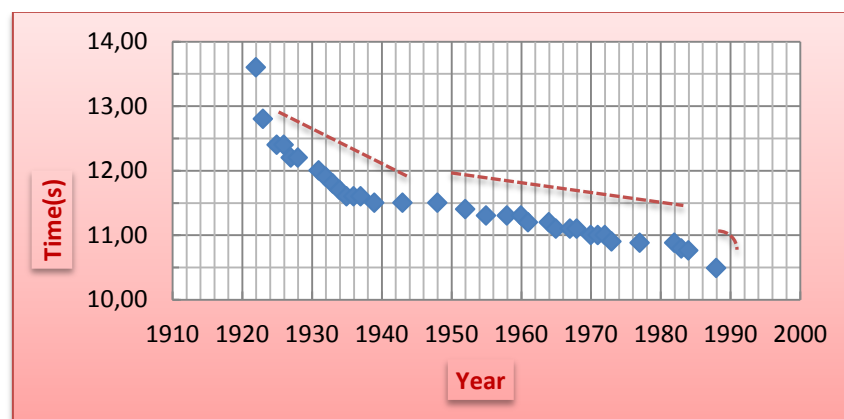


Fig. no.1 – The progression of female world records in the 100m sample
(taken and adapted by Aditi S. Majumdar, Robert A. Robergs, 2011)

Also interestingly, men's 100m world record reflect substantial improvements both before and after Second world War. Like the women, men improved world records experienced a slowdown period between 1983 and 1999, but then surprisingly had the most auspicious period in history between 1999 and 2009 (Fig. no.2). The current world record of 9.58 seconds, belonging to Jamaican athlete Usain Bolt (obtained in August 16, 2009 in the World Championship IAAF Athletics held in Berlin, Germany) with over 0.11 seconds beat record of the same athlete, the 9.69 seconds obtained in the Olympic Games in Beijing (China, 2008) and demolished the 9.74 record of his compatriot Asafa Powell. Like the women, men's world record show a major deviation from the current trend of records.

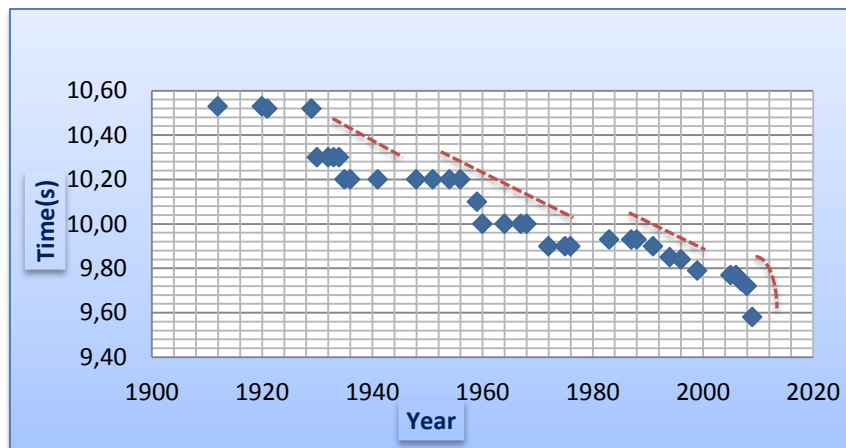


Fig. no.1 – The progression of female world records in the 100m sample
(taken and adapted by Aditi S. Majumdar, Robert A. Robergs, 2011)

In Romania athletic speed samples are represented internationally by several names and notable results, but we have to say much less compared to Romanian semifond results. Therefore sprinters as Daniel Cojocaru, Ioan Vieru, Ionela Târlea, Mihaela Stoica Pogăceanu, Angela Moroşanu are just a few names that were able to impose their results both national records and notable international results.

Comparing the best results of both Romanian sprint female and male, we can observe that only the female sprint penetrated the global level of performance and notable results in international competitions.

Even so, it can not be unnoticed the minimum number of Romanian athletes that have succeeded at internationally level to confirm the value of performances in female sprint at senior level.

Comparing with world records mentioned above below we present national samples sprint records, both seniors male and female (Tab. no.3,4).

Table no.3 National male senior records in sprinting

Sample	Time	Name	Birth date	Nationality	Date
100m	10.21	Daniel Cojocaru	1969	ROM	17 IUN 1994
200m	20.70	Florin Suci	1983	ROM	24 IUL 2005
400m	45.60	Ioan Vieru	1980	ROM	02 IUL 2006
110mg	13.34	George Boro	1964	ROM	18 IUN 1993
400mg	49.22	Alejandro Argudin Zaharia	1974	ROM	04 SEP 1994

(taken and adapted from www.fra.ro)

Table no.4 National female senior records in sprinting

Sample	Time	Name	Birth date	Nationality	Date
100m	11.30	Ionela Târlea	1976	ROM	19 IUN 1999
200m	22.35	Ionela Târlea	1976	ROM	13 MAI 1999
400m	49.88	Ionela Târlea	1976	ROM	12 IUL 1999
100mg	12.62	Mihaela Pogăcean	1958	ROM	29 IUN 1990
400mg	53.25	Ionela Târlea	1976	ROM	07 IUL 1999

(taken and adapted from www.fra.ro)

A noteworthy aspect of the women's sprint from our country, is that we found in the charts of the best world results of all time Romanian names, regardless of the age. Therefore, data from the official website of the IAAF (International Association of Amateur Athletics), we disclose the names of Romanian in the top 100 best ever results both at the senior and junior I and II (Tab. no.5).

Table no.5

Proba	Nume Prenume	Categorie concur	Alltime Best Place / Resulte
200 mp	Ionela Târlea	Sen.	90 22.35
400 mp	Ionela Târlea	Sen.	69 49.88
		J II	30 52.13
	Magdalena Nedelecu	J I	12 50.87
	Mariana Florea	J II	18 51.75
	Bianca Răzor	J II	23 51.96
100 mg	Mihaela Stoica- Pogăceanu	Sen.	63 12.62
400 mg	Ionela Târlea	Sen.	25 53.25
		J I	10 55.26
		J II	8 56.43
	Angela Moroşanu	Sen.	43 53.85
	Cristieana Cojocar Matei	Sen.	94 54.55

(taken and adapted from www.iaaf.org)

It is also noteworthy that Romanian sprint remained in Olympics pages of history by some exceptional athletes such as Valeria Belmega-Viscopoleanu the silver medalist in 100 m hurdles at the Olympic Games from Munich, 1972 or Cristieana Cojocar-Matei bronze medalist in the 400 m hurdles at Los Angeles in 1984, not least by Târlea Ionela Manolache with her silver medal in the same sample of 400 m hurdles, at Athens, Greece, in 2004.

Romania women's sprint succeed returning the attention of specialists in athletics, more prominent in the last 15-20 years, which materialized through international junior level results along with some notable results at senior level. More than that Romanian Athletics Federation, in an attempt to revive the national athletics, focused primarily on base broadening selection of national competitive system scaled down to children III, which creates first an advantage for samples sprinting and jumping, if we refer to the selection.

However this study aims to point out and bring into question a state of decline less desirable of female sprint. After 2004 notable results in major competitions, missed for the Romanian female's sprint at senior level.

This situation represents a problem for Romanian athletics in general or just for the sprint in particular? We believe that in the present form of athletics organization, founded in the sport

policies and strategies of the Romanian Athletics Federation (FRA), any imbalance occurred in the certification capacity of performance potential in any of athletic samples or groups of samples, can not be signaled, evaluated and corrected in a due time, fact that certainly will be reflected soon or later on all athletic samples and performances.

The high national level of performance of a sports branch in generally or of a particular sports events, shall be established by notable international results obtained in major competitions at the highest category of the competition, namely the seniors. The same important international results achieved in lower competition categories (junior I, II or III) certify the international value of that distinctly sport branch, even more and it ensure us by the efficiency and quality of coordination and planning activity from the training strategic process, thereby reflecting a normal continuity of sports performance and the fact that things are well done.

Based on these statements we considered it appropriate for our study to examine the performances of Romanian female sprinters in the last decade, performances which according to international value are included or not in the best performance rankings worldwide each year . So for three competition categories namely seniors, juniors I and juniors II, we extracted from official documents of the IAAF all Romanian female

sprinters performances that ranked in the top 100 results in each year from 2004 to 2013.

The following table nominal for each sample and each sprint competition category studied, we extracted from the top 100 best results of each year, from 2004 to 2013 period, all Romanian

female sprinters with both ranking and the result. In order to easily identify the extracted data depending on the category of the competition. We used three different colors for several categories of competition.

Table no.6 The top 100 international best results for Romanian female sprinters between 2004-2013

Proba	Nume Și Prenume	Category	All Time	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013			
100 mp	Angela	J I			10	11.4										
100 mp	Andreea	Sen.									84	11.3	86	11.3		
100 mp	Andreea	J I						29	11.5	9	11.4					
100 mp	Andreea	J II				25	11.6	18	11.6							
200 mp	Ionela Târlea	Sen.	90	22.3	82	23.1	93	23.2		45	22.9	46	22.8			
200 mp	Angela	Sen.				40	22.9						57	22.9		
200 mp	Angela	J I		28	23.6	14	23.3									
200 mp	Andreea	Sen.											53	22.9		
200 mp	Andreea	J I						37	23.5	8	23.2					
200 mp	Adelina Pastor	J II								23	23.9					
200 mp	Bianca Răzor	J I											38	23.6		
400 mp	Ionela Târlea	Sen.	69	49.8	12	50.4	86	52.0		47	51.5					
400 mp	Ionela Târlea	J II	30	52.1												
400 mp	Magdalena	J I	12	50.8												
400 mp	Mariana Florea	J II	18	51.7												
400 mp	Bianca Răzor	Sen.									66	51.9		39	51.4	
400 mp	Bianca Răzor	J I							8	52.6	5	51.9	11	52.2	4	51.4
400 mp	Bianca Răzor	J II	23	51.9						5	52.6	3	51.9			
400 mp	Angela	J I		18	53.0	11	52.4									
400 mp	Angela	J II														
400 mp	Elena Mirela	Sen.											90	52.1	78	52.0
400 mp	Elena Mirela	J I						16	53.2	28	53.3					
400 mp	Elena Mirela	J II					8	53.2								
400 mp	Adelina Pastor	J I								49	53.7	16	52.7	27	53.2	
400 mp	Adelina Pastor	J II								21	53.7					
100 mg	Mihaela	Sen.	63	12.6												
100 mg	Carmen Zamfir	Sen.		32	12.8											
100 mg	Viorica Țigău	Sen.				62	13.1									
100 mg	Bianca Cornea	J II		13	13.8											
100 mg	Cristina Sandu	J II			50	14.0		9	13.5							
100 mg	Andreea Ionescu	J I								34	13.6					
400 mg	Ionela Târlea	Sen.	25	53.2	4	53.3		24	55.4	32	55.8					
400 mg	Ionela Târlea	J I	10	55.2												
400 mg	Ionela Târlea	J II	8	56.4												
400 mg	Angela	Sen.	43	53.8			28	55.3	15	54.4	39	56.0	6	53.9	10	54.5
400 mg	Angela	J I		13	58.3	32	59.2									
400 mg	Cristiana	Sen.	94	54.5												
400 mg	Andreea Ionescu	J I					10	57.3	22	58.2						
400 mg	Andreea Ionescu	J II	24	57.3			3	57.3								
400 mg	Maria Rus	Sen.		50	56.0											
400 mg	Andreea Pătrașc	J II			35	1:00										
400 mg	Anamaria	J II			38	1:00										
400 mg	Sanda Beligan	J I									29	58.9				
400 mg	Sanda Beligan	J II							18	1:00						

(taken and adapted from www.iaaf.org)

Discussion

If we study the presence of Romanian women athletes among the best of all time rankings and results, we note that we have at senior level 6 records whose results are positioned between 25th and 94th, at junior level I we have 2 records whose results are positioned seats 10th and 12th and at junior level II we have 5 records whose results are positioned between 8th and 30th. Of the five appearances in the top senior level, only Ionela Târlea and Angela Morosanu were active in period studied. So only two senior athletes which are found in the top level were active at a high level of performance in the period 2003-2014. In both instances in which the junior I are positioned in this top, we can only say that both appearances are made before 2004. Gratifying aspect appears when we refer to juniors II, where of 5 records belong to this top, two appearances by two female sprinters were recorded in the period studied by us.

But if we study the presence of Romanian women athletes among the best annual performances for each sprint athletic event, during 2004-2013, we can distinguish that over this period were active at a high international performance level, a number of 8 senior in 5 speed running samples whose results are positioned throughout this period between 4th and 93th, at junior level I a number of 7 athletes in 5 speed running samples whose results are positioned throughout this period between places 4th and 49th and junior level II a number of a total of 10 athletes in 5 speed running samples whose results are positioned throughout this period between places 3th and 50th.

If we look at nominal athletes that have activated at a high performance level in the period 2004-2013 we find that the 68 appearances in the top of best annual results in female sprint samples in all categories in the period 2004-2013, were made 15 athletes. Four of seniors in the period studied, excepting Ionela Târlea, scored only once in this annual ranking, all 4 being already senior in 2004. The other four seniors are athletes that have matured in the period studied, evolving at the highest level of performance from junior level to senior level. Unfortunately there are 7 junior I and II which were unable to confirm, in the period studied, a good performance at senior level.

The only athlete that appears in these charts every year about our study and among the best results of all time is Angela Moroşanu.

Conclusions

The problem we want to point out is that at all categories of the competition and all sprint samples, during the period studied, primarily observed a decrease in athletes number founded in the international charts, so that in 2009 and 2013 Romania was still present in these charts, at all categories of the contest, with 3 to 5 athletes.

Obviously this period, mostly towards its end, is presented itself as a Romanian sprint time of crisis, that if in addition we associate it with the sprinting situation at the Romanian Athletic National Championships. The presence of female sprinters from one lower competition category to the next higher one decreases dramatically, so in recent years, national championships final samples have failed to gather a complete series of senior female sprinters.

Concluding thus far is evident the internationally decline of Romanian athletics, but the authors believe that the real danger in the present is the decline uncontrollable of the national athletics. When we say these things that it is hard to imagine a very rich infrastructure (171 athletic clubs) of athletics in Romania fails to gather at a National Championship more athletes than does our neighbours from Hungary, a country with a population twice as small.

Representing this a cause for concern? We believe that yes, there is a danger that sprint which seemed to be found itself in Romania after year 2000, is now in great danger to disappear, the same like Romanian semifond and fond. We want to caution that Romanian sprint for survival need material support throughout the country to align and develop at least minimally level, both inside and the outside practicing.

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More information on:

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SPEED DEVELOPMENT OF FUTURE LAWYERS BY SPECIFIC BASKETBALL MEANS

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Abstract. Engaging in movement activities can have many beneficial repercussions on students. By participating in various competitions, sport offers the chance of self-improvement, development of certain skills and positive attitudes by empowering young and the ability to meet the challenges of competitions. The research purpose was to detect the influence of the basketball specific means on speed repetition, reaction and execution of the student's from nonspecific faculties. In extracurricular activities, 16 students attended 2 times a week in training and basketball competitions for 6 months. The results recorded by them were compared with the results of 16 students who did not participate in extracurricular activities, but only in physical education class. There have been significant advances in the motor ability of the subjects in both groups, however higher for the experimental group, they improving their performance in terms of speed of repetition, the reaction and execution.

Key words: *law students, basketball, speed.*

Introduction

Despite all the efforts of specialists in physical education, pedagogical research has neglected, sometimes unacceptably, the biological component of the human being, generally, and physical education in particular. Everyone agrees that such consequences are visible and are detrimental to health, ultimately to the very integrity, to the bio-psycho-social entity of man.[1]

„Children and adolescents today, compared to those two or three decades ago, have become sedentary, due to the irrational use of computers and IT-tools, the multiple channel television, plus the reduction of physical education classes in schools and to the almost complete disappearance of the weekend sports.[2]

Considering the evolution of basketball game pace, players are demanded to possess a wide repertoire of technical and tactical aspects [3]. For that, we create a playing model, following especially the speed execution of movement.

Method

The research was conducted in the University of Craiova, the experimental group (n = 16) consisting of the Faculty of Law representative team components in "The Hexagon of the faculties of Law" competition. The data were compared with the control group (n = 16) comprised of students who attend only the physical education classes. The experiment group followed a specific training program containing the proposed model, from January 2013 to June 2014, the extracurricular activities taking place in this period twice a week, lasting for 90 minutes.

To have a proper training, the experiment group subjects received, as training partners, students who took part in the past representative team or athletes who have simulated the role of "adversary".

The proposed game pattern.

The player must participate consistently in the counterattack system, knowing all the playing positions tasks:

- point guard;
- center;
- shooting guard.

He must apply the individual tactical actions within the fast attack and the positional attack, having as dominance the jumping shooting and the recovery.

He must apply within the organized attack a universal attack with tandem:

- against man to man defense;
- against zone defense .

Using his own defense systems in defense, as a priority, pressing:

- man to man pressing across the court and across the half of the court;
- pressing zone across the court area and on half of the court and the application of the individual defense actions depending on the game situation, alternated with collective actions, double marking, penetration lane closure and change of opponents.

The technical training

-improving the technical procedures of attack and defense previously learned in terms of increasing the execution speed and the efficiency.

- Learning the techniques specific to the position.
- Strengthen the technical elements with and without the ball in the relationship to 1x1.

The individual technical training.

Fullback player:

a) in attack:

- achieving increased penetration and effective over-takings;
- demarking in the most favorable positions to receive the ball;
- the use of optimal passing, dribbling and shooting procedures with efficiency in the relationship 1x1;
- fullback (the head of the game) -directs the conduct of the attack on the opponent's defenses.

b) in defense:

- applies the normal marking and interception;
- executes the line closure and the opponent change;
- participates to the "trap";
- achieves balance defensively.

The winger:

a) in attack:

- demarking in specific positions to receive the ball and finalization with jump shooting;
- achieving penetrations and over-takings completed with shooting close to the panel;
- uses effectively turn shooting close to panel,
- participates in achieving duplication, recovery, volleyballing;
- to use the most effective methods of passing to the pivotal, the center or the offensive fullback player in the actions of demarking and penetration into the panel;
- participates in the completion of the outnumbered situations and the relationships 2x1, 3x1 and 3x2;
- knows the specific movements of pivot and center players in the 3 zone."

b) in defense:

- makes the marking on interception and the double marking;
- makes line closing, slipping and exchange of adversary;

- defensive recovery:

- participates to the defense against the counterattack.

The pivotal player:

a) in attack:

- uses basic technical passing procedures;
- uses highly effective techniques for specific pivot shooting;
- participates in offensive rebounds and volleyballing;
- participates in making combinations of 2-3 players in the attack systems with winger and fullback
- makes the combinations specific to the two pivots in the attack with tandem;
- ensures the launching of the counterattack after the defensive recovery and participates in achieving the outnumbering.

b) in defense:

- stops or delays the counterattack launching after losing the ball possession;
- makes the defensive blocking and recovery;
- uses the interception marking in relation to the position of the attacker and that of the ball;
- intervenes to stop the attacker's basket shooting, the attacker who escaped from the marking made by a teammate.

Results*The results of the left foot tapping*

In the experiment group, by initial testing of the repetition speed of the left foot, the values recorded in the experiment group are between 45 and 68 repetitions, averaging 53.73, the standard deviation being 4.83 and the frequency curve is around 55. (table 1). In the second test, the average is 54.81 repetitions (± 5.33), with two repetitions in advance against the initial testing.

Applying the simple pair T test, among the initial and final repetition speed testing averages, there is a value of $t = -8345$, a value that falls within a high significance level ($p < 0.05$).

Table 1. The results on the left foot tapping

Tapping.stg.T1		Tapping.stg.T2
N	16	16
Average	52,18	54,81
The standard deviation	4,83	5,33
Minimum	44.00	47
Maximum	63	68

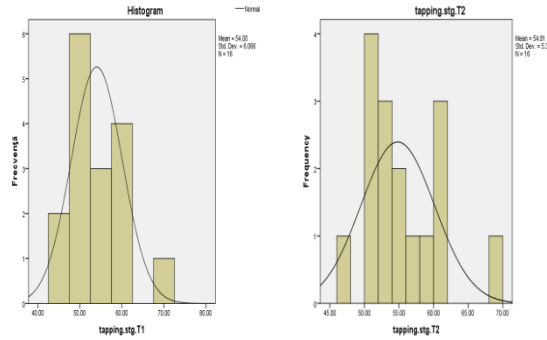


Chart 1. Frequency histogram of the left foot tapping T1, T2 test in the group experiment

In the left foot repetition speed, the values recorded in the control group is between 42 and 65 repetitions, averaging 49.38 repetition, the standard deviation is 4.96. Compared to the experiment group, the values are relatively close, with a difference of 2 repetitions for students participating in the Hexagon, the frequency curve is around 50 repetitions.

Table 2. The results from the control group left foot tapping

Tapping left.T1		Tapping left.T2
N	16	16
Average	49.38	50,37
The standard deviation		5,68
Minimum	42.00	43
Maximum	65.00	66

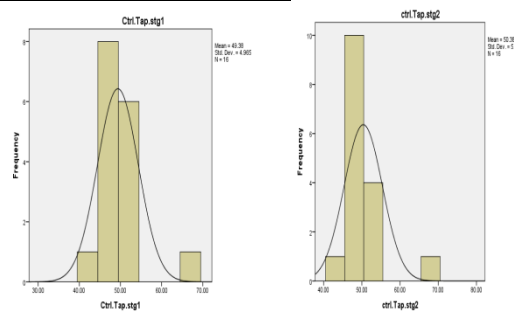


Chart 2. The frequency histogram in the left foot tapping test - the control group

• The difference between the repetition speed rate on the left lower limb scores in the experiment group subjects and those in the control group is 4,43s. The 95% confidence interval for this difference varies from 0.699 to 8.175. Since the interval contains no point, 0.00, the difference is statistically significant at the bidirectional level of 5%. (Table 3).

Tabel 3 T Test for left foot tapping

Tapping left foot	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sign. (2-tailed)	Average differences	Standard error of dif.	95% confidence interval	
								Minim	Maxim
Equal Disp.	0.830	.369	2.42	30	0.022	4.43	1.83	.699	8.175
Unequal Disp.			2.42	29.8	0.022	4.43	1.83	.698	8.176

The d (Cohen) index of the effect size (1.38) indicates a large effect, an important difference between the final averages of the two groups which shows the effect of the work programs on the rate of the repetition speed in the experience group.

The results in taping right foot

In the experiment group, at the level of the right foot, the average is 54.53 repetitions, ranging between 42 and 63, the standard deviation is 6. There is a slight difference in favor of the right foot, most subjects having a right predominance. The final test values vary between 50 and 64, the frequency histogram (chart 8.3) showing close grouped values, averaging 58.56 repetitions. Applying the student test, there is a value of $t = -8.34$ $p = 0.000$ ($p < 0.05$), the initial and final averages differences being statistically significant. (Table 4)

Table 4. The results in right foot taping

Tapping.right T1	Tapping rightT2	
N	16	16
Average	54.87	58,56
The standard deviation		4,67
Minimum	42.00	50
Maximum	63.00	64

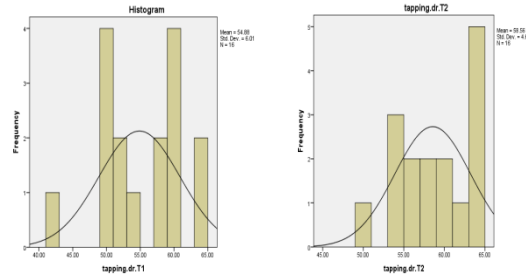


Chart 3. The frequency histogram test in right foot taping - the experiment group

In the control group, the initial testing indicates at the level of the right foot an average of 53.37 repetitions, ranging between 45 and 65, the standard deviation is 6.18. As in the experiment group, in the control group there is, also, a slight difference in favor of the right foot, most subjects having a right predominance. In the final testing the control group subjects recorded an average of 53.81, with no great progress in the repetition of the right leg. Applying the student test, there is a value of $t = -1.60$, $p = 0.13$ ($p > 0.05$) the differences between the initial and final averages being statistically insignificant.

Table 5. The results in right foot taping

tapping.right.T1	tapping.right.T2	
N	16	16
Average	53.37	53,81
The standard deviation		5,68
Minimum	45.00	46
Maximum	65.00	65

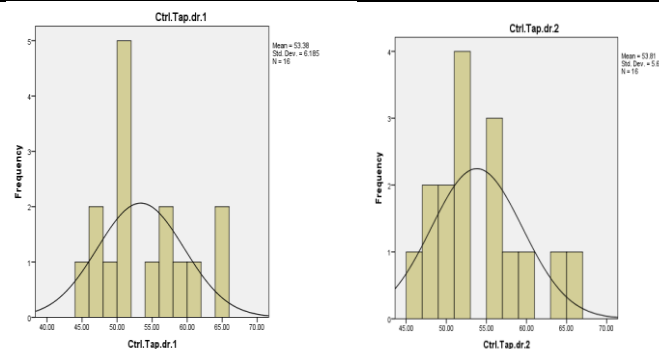


Chart 4. The frequency histogram in the right foot tapping test - the control group
 Table 10.5 the T test for the right foot tapping - the control-group

Tapping foot	right	Levene Test for Equality of variable		t-test for Equality of Means						
		F	Sig.	t	Df	Sign. (2-tailed)	Average differences	Standard error of dif.	95% confidence interval	Min.
Equal Disp.		0.43	.515	2.58	30	0.015	4.75	1.83	0,99	8.50
Unequal Disp.				2.58	28.9	0,015	4.75	1.83	0,98	8.51

The difference between the repetition speed rate on the right lower limb scores in the experiment group subjects and those in the control group is 4,75. The 95% confidence interval for this difference varies from 0.99 to 8.50. Since the interval contains no point, 0.00, the difference is statistically significant at the bidirectional level of 5%. The d (Cohen) index of the effect size (1.40) indicates a large effect, an important difference between the final averages of the two groups which shows the effect of the work programs on the rate of the repetition speed in the experience group.

The "Ruler" test results

Table 6. The results from the reaction speed and performance - experiment group

Ruler.T1	T2 Ruler
N	16
Average	5.50
The standard deviation	0,61
Minimum	3.50
Maximum	8.00

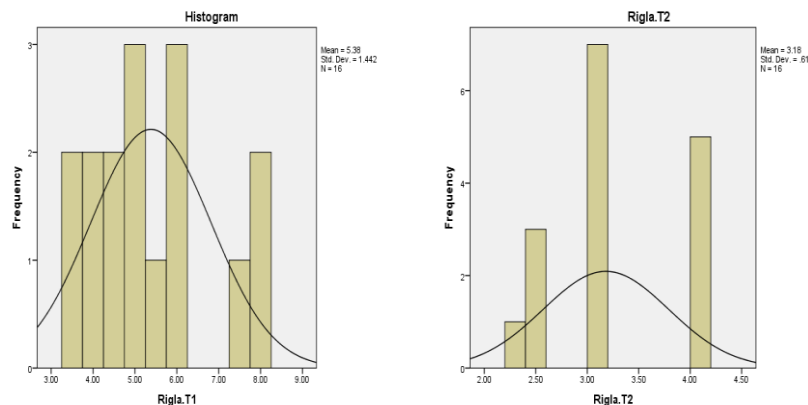


Chart 5. The frequency histogram in the reaction and execution speed - the experiment group

The speed of reaction and execution, tested through "the ruler" test, recorded at the initial testing of the experiment group an average of 5.5 (± 1.44 cm), with values between 3.50-8 cm. With the final testing, as a result of the work programs, this parameter registered a particular progress to 42.18%, with an average of 3.18 (± 0.61 cm).

Applying the simple pair t test, between the means of the initial and final repetition speed tests, there is a value of 8.38, a value that falls at a high significance level (p <0.001).

Table 10.7. The results from the reaction and execution speed -the control group

Ruler T1	Ruler T2
No. of subjects	16
Arithmetic means	5,36

The standard deviation	1.66	1,41
Minimum	2.90	3
Maximum	8.50	7

The reaction and execution speed, tested through "the ruler" test, recorded an average of 6.23 cm (± 1.66), with values between 2.90-8.50 cm, at the initial testing of the control group. The values are similar to those of the experiment group in this stage of the experiment. With the final testing, this parameter shows a mean value of 5.36 (± 1.41 cm), with values ranging between 3-7cm.

Table 8 The T Test for the Ruler Test

Ruler Test	Levence Test		t-test for Equality of Means						
	F	Sig.	t	Df	Signif.	Means Diff.	Standard deviation Error of diff.	95% Confidence interval	
								Min.	Max.
Equal dispersions	8.92	.006	-5.67	30	0.000	0.38	1.83	-2.96	-1.39
Unequal dispersions			-5.67	20.42	0.000	0.38	1.83	-2.98	-1.38

The difference between the reaction and the execution speed scores of the experiment group subjects and the control group subjects is 0.38. The 95% confidence interval for this difference varies from - 2.96 to 1.39. Since the interval does not include point 0.00, the difference is statistically significant at the bidirectional level of 5% percent.

The d (Cohen) index of the effect size (2006) indicates a large effect, a significant difference between the means of the final two groups in terms of response and execution speed.

Conclusions

The initial motor tests showed relatively equal values for both subjects groups, and following the application of the work programs in the experiment group, their results are significantly better for this group of subjects.

Thus significant advances in the motor ability of the subjects in both groups have been registered, however higher for the experiment group, they have improved their performance in terms of speed of repetition, reaction and execution.

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THE ROLE AND INFLUENCE OF DANCE ON THE COORDINATION ABILITIES OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

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Abstract

Dance as a form of motor movement attractive, its content can be an effective means of driving capacity development in children with specific educational needs. Implementation of work programs tailored training methods can lead to social integration of children with special educational needs. The objective of this paper is to determine the role of dance and how it affects the coordination abilities of children with special educational needs. Subject group consists of 25 students, 9 girls and 16 boys, enrolled in special education with ages between 9 and 15 years old. The subjects were tested initially, intermediate and final for functional, biomechanical and somatic measurements. As aims we want to develop a rehabilitation program, allowing a significant change in the quality of life and motor potential of children with special educational needs, based on assessment of specific complex; introduction of specific elements of dance as a means of improving the qualities biometric ability for exercise, functional performance and quality of life associated with traditional means of kinesiology; training and development psychomotor components (body schema and laterality); promote the development of balance and coordination through dance; and objectification results of implementation assessments dance complex.

Key words: *dance, special educational needs, quality of life, coordination*

Introduction. Piaget [1] argues : verbal communication is not essential. Of course, it may be difficult or may take longer to express an abstract idea without speaking, but at the same level a whole idea can be communicated, emotions can be transmitted and whole stories narrated by signs, movement and dance. If Piaget 's ideas are accepted, then it means that dance has a huge role to play in the education of children with special educational needs.

Wood [2] suggests that memory is the result of intellectual development. When I started working with pupils with special educational needs, especially with deaf students I have been informed about how deaf children have a poor memory. Anyway, on to recall sequences of movements, we found no evidence that would be. On the contrary, sometimes their visual memory was impressive. For example, a week or even several months after seeing a number of dance, many children are able not only to remember what they saw, but whole dance sequences, reconstructing movements, quality, dynamism and

emotional content. Also they can remember the routines they had danced if the dance was repeated and if the movements were such nature to require use of the whole body.

Materials and Method

If dancing as a form of motor movement attractive by its content may be an effective means of driving capacity development in children with specific educational needs [3], then by practicing dance, quality of life of children with special educational needs can be improved considerably [4].

The sample to be carried study consists of a group of pupils with special educational needs (SEN), enrolled in Secondary Special School "Sf.Vasile" Craiova. The group is made up of 25 students with hearing disabilities and special motility in primary and secondary education.

Subjects will be tested initially, intermediate and final, and the data were tabulated and statistically analyzed. Work programs chosen will be applied 6 months after intermediate testing will eventually change their content.

The battery of tests applied subjects consists of :

Evaluation sheet

Date

Last name:	
First name:	
Date of birth:	
Sex:	

Height :	
Weight :	
Diagnosis:	

A. Tests to assess the balance , posture and motor control :

1. Test " Get up and go ";

2. Tinetti test drive : is an analysis of several components of walking, which can be done at normal speed of the patient and / or high speed. In this test, degrees of judgment may be from 0 to 1 , as follows: 0 - do not provide 1 - carried out;

3. Scale gait assessment is more complex than Tinetti test drive because it contains a series of automatic movements of the joints went lower and upper limbs. The degrees of appreciation of this scale are from 0 to 3, 0 representing normality and 3 worst aspect;

4. Test " Climbing and down stairs " - consists of: the subject is asked to climb a number of steps, until fatigue or inability appears. At that time, the test is stopped and record the number of steps that managed to climb. For down we do the same. Test may be performed with or without help from the physical therapist if necessary.

5. Romberg test - investigates balance in sitting position, legs close, upper limbs or trunk in addition to previously targeted plan (elbows extended). Runs with eyes open and closed (we reduce the sensorial control only if the subject can maintain the position with eyes open). It will be appreciated for 60 seconds the attempts of loss or maintaining the balance (recoveries) by oscillations or excessive stepping. In the vestibular lesions we can observe the affected lateral deviation. Normally with eyes open or closed, the subject has no deviations or falls.

6. Thrust test - is done in two ways: the patient is standing and we apply short thrusts unannounced to the subject in the sternum, on the basin side and we appreciate stability. The second way to implement test is similar to the first, except that here we ask the subject to oppose, not to be pushed.

B. Tests for the assessment of motor skills :

1. Frosting test - measures the perceptual and motor abilities by 5 sub-tests (hand-eye coordination, fund object perception, constant shape, spatial position and spatial relations).

2. Ozeretzki – Guillman test

It is an adaptation of L. P. Picq and Vayer aimed at identifying the main components driving in five aspects:

- Speed;
- Force;

- Resistance coordinates;

- The dynamic coordination of hands - D.C.H.;

- General dynamic coordination - G.D.C.;

- Balance - B;

- Speed - S.

C. Tests for evaluating the quality of life:

1. KINDL [5] is a german questionnaire for assessing quality of life of children and adolescents and has three complete forms.

- Form A (Kiddy) for children aged 4-8 years, 40 items;

- Form B (Kid) for children aged 8-12 years, 40 items;

- Form C (Kiddo) for adolescents aged 12-16 years, 47 items.

Have been applied only two types of test: Form B and Form C, due to the age of the subject.

D. Tests for evaluating static and dynamic balance - biomechanical tests:

1. RSScan pressure platform able to carry out measurements at a frequency of 500 Hz in the 2D mode and record the complete intervention of both plants.

2. Platform for balance and posture Pagani is a platform equipped with pressure sensors which analyzed subject sits upright.

The results obtained from the application evaluation form and questionnaire were summarized in tables using the Microsoft Excel program that enabled statistical processing and graphics.

Results

For "Get up and go" test 21 subjects received listing 1 (no instability), 3 subjects got quoting 2 (mild instability, slow performance, easy deficit) and one subject a rating of 3, which represents hesitation of the trunk and limb.

For Tinetti test 24 subjects received quotation 1 and a subject topic 0.

For gait evaluation scale rating of 4 subjects received 2, 1 subject topic - 3, 11 subjects - 0 and 9 subjects quotation 1. Following the results, the majority of subjects achieving normality presents a series of automatic movements of the joints went lower and upper limbs and only one subject can not perform movements ,getting quoting three wich means worst aspect.

Romberg test investigates balance in sitting position, legs close and the upper limbs besides the trunk, or face in the previous plan. Normally, eyes closed or open. Deviations with open eyes

showed three subjects-one deviation, one subject experienced two deviations both in lateral and anterior plan, and the remaining 21 subjects showed no deviation. For testing with eyes closed appear more deviations : 2 subjects have two deviations each, 2 subjects presents 3 deviations, 7 subjects one deviation and 14 subjects no deviation.

Thrust test - 4 subjects showed each 3 deviations without opposition, 4 subjects 2 deviations, 6 subjects with one deviation, and 11 subjects without deviations. For the test with opposition, 5 subjects showed 2 deviations each, one subject experienced four deviations, 1 subject five deviations, a subject presented three deviations, four subjects with one deviation and 13 subjects with no deviation.

For Frostig test:

- I subject: 32 points out of 83
- II subject: 37 points out of 83
- III subject: 62 points out of 83
- Iv subject: 41 points out of 83
- V subject: 58 points out of 83
- VI subject: 56 points out of 83
- VII subject: 63 points out of 83
- VIII subject: 20 points out of 83
- IX subject: 15 points out of 83
- X subject: 79 points out of 83
- XI subject: 60 points out of 83
- XII subject: 52 points out of 83
- XIII subject: 83 points out of 83
- XIV subject: 83 points out of 83
- XV subject: 83 points out of 83
- XVI subject: 70 points out of 83
- XVII subject: 72 points out of 83
- XVIII subject: 28 points out of 83
- XIX subject: 20 points out of 83
- XX subject: 25 points out of 83
- XXI subject: 83 points out of 83
- XXII subject: 83 points out of 83

- XXIII subject: 83 points out of 83

- XXIV subject: 83 points out of 83

- XXV subject: 83 points out of 83

In this test subjects achieved an average of 58,96 points from 83 - full marks.

Most subjects are able to draw smooth straight lines or broken meandering between different distances. Hand-eye coordination is very good.

For substestele subject - background perception, constancy of shape and spatial position the points indicates a good ability of subjects to differentiate between perception and object perception fund, funds that are complicated gradually and they recognize geometrical figures while they change shape, size, the construction and placement space. Spatial relations - subjects fulfill sucuces most tasks, and analyzes both the simple and complex shapes.

Test Ozeretzki - Guillman was applied only to 9 subjects from this group, as others under the age allowed. Four of the subjects raised by a single point, 2 subjects 0.25, one subject 0.417 and one subject 0.082 points.

Discussions

Following the results we chose 6 students with the highest scores and have formed a troupe of modern dance at the school level. In our help rushed 6 students from the Technical College of Arts and Crafts "Constantin Brancusi" Craiova, in order to form a dance competitions as required under the National Strategy for Community Action. With a colleague, we managed to put together a choreography and a theme to be able to participate in various competitions in the field.

Under the National Strategy for Community Action the troupe attended the National Dance Contest "Together for the Future", where they reached the final winners.

At the National Contest the children were classified first from 5 dance teams. (fig.1)



Figure 1. Imagines from the Dance National Contest

At the Regional the children were classified on first place of 10 teams (fig.2).



Figure 2. Imagines from the Dance Regional Contest

Conclusions

Promoting and supporting children with hearing impairments is a unique experience, a struggle against the refusal and rejection. These children despite weaknesses they have demonstrated that they can ensure a successful path in life

Dance is the most expressive method for body manifestation, involving the driving capabilities of each, and the expression of message emotions, states.

Dancing means excitement, dancing means the conquest of space, courage to overcome mobility. It is entirely plastic movements, gestures and steps that are executed sequentially in the rhythm of certain music, exteriorizing the emotional content. The dance offers many rewarding and teaches us to be harmonious in the whole language of gestures.

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SOCIOLOGICAL STUDY ON THE ROLE OF PHYSICAL TRAINING IN VOLLEYBALL

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Abstract. Physical training is one of the most important components of sports training. In this context, the present study aims to identify the views of junior coaches on physical training volleyball players, the means used in their preparation, aiming especially at muscle preparation. The 30 coaches were introduced in research and subjected to questions in order to give us information on the physical training of athletes they train. Most respondents argued that physical training is a priority in training juniors and also muscle training is extremely important in preparing athletes. Only 20% of respondents consider the training level of volleyball players as high, considering that most of the trained athletes level of preparedness is good or mediocre. Additionally asked, they consider what the causes are, most blame the training conditions, the lack of appropriate selections due to the need to include as many in the sports classes for students as possible to form groups and lack of motivation. The solution may come from the introduction of non-specific means in training junior volleyball players.

Key words: juniors, physical training, volleyball.

Introduction

In sport, the degree of development of motor skills is given by the general physical training, which is actually the athlete can perform acts in different regimes motor speed, strength, flexibility, strength, etc., for the achievement of individual actions and collective sports that are part of the technique.[1]

Alexe Nicu talking about the importance of physical training athletes, presented muscle training programs based generally on working with loads. The same author showed, in addition to theoretical aspects of force and strength training and muscle training programs based on working with weightlifting bar for various in the sports fields[2].

Bompa [3] addresses theoretical aspects of force and strength training in a chapter devoted to sports training periodization. The same author [4] also presents some particularities of force in the post pubertal development, paying special attention to his methodical aspects of training force during this period, recommending specific muscle training programs, without reference to methods of force development in specified fields or sports events.

Multilateralism training process is one of the most important requirements of sports training . It is this too early lack of multilateralism and specialization, since his debut in professional sports, often leads to the formation of players that cannot cope with the changes in time on

the volleyball game, can not change registers when a game situations asks for it.

Material and methods

In order to investigate the role of muscle training in physical training, we considered necessary to conduct a sociological survey using questionnaire method through which we analyzed the coaches' opinions on the use of working methods, binding approach which gives precise data on the motor current methodology volleyball.

The coaches questionnaire comprised 10 questions with one answer possible embodiment, each of these questions with a specific purpose, namely to obtain reliable data on the way in which the physical training in the junior volleyball players.

Research Hypothesis

In order to investigate the role of muscle training in physical training, we considered necessary to conduct a sociological survey using the questionnaire method through which we analyzed the coaches' opinions on the use of working methods, a binding approach which gives precise data on the motor current methodology of volleyball.

The coaches' questionnaire comprised 10 questions with one answer possible, each of these questions with a specific purpose, namely to obtain reliable data on the way in which they do the physical training in the junior volleyball players.

The first question related to the preparation of national junior volleyball players, 2% of respondents believe that part of sports training as very good, 33% think it is good, 53% think

that is mediocre and 7% a considered poor. It follows that the coaches are not completely satisfied with the training level of Romanian juniors.



Figure no. 1. The coaches' opinion on the current level of preparation of volleyball players

The second question referred to the weight of training in volleyball performance factors, 40% of respondents considering physical training a priority in preparing athletes, 27% believe that technical training is a priority, 17.5% inclined to tactical preparation. Psychological preparation has the highest share for 13% of respondents, while the theoretical 3% of patients. So most subjects considered a physical training athletes priority.

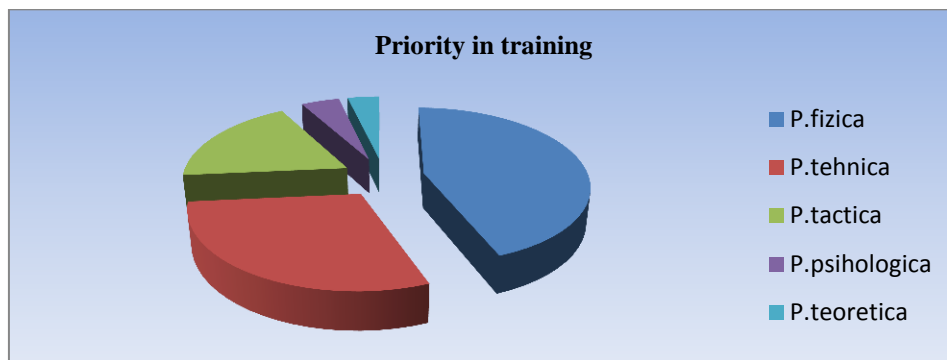


Figure no.2. The coaches' opinion on the current level of preparation of volleyball players

The second question referred to the weight of training in volleyball performance factors, 40% of respondents considering physical training a priority in preparing athletes, 27% believe that technical training is a priority, 17.5% inclined to tactical preparation. Psychological preparation has the highest share for 13% of respondents, while the theoretical 3% of patients. So most of the subjects considered athletes' physical training a priority.

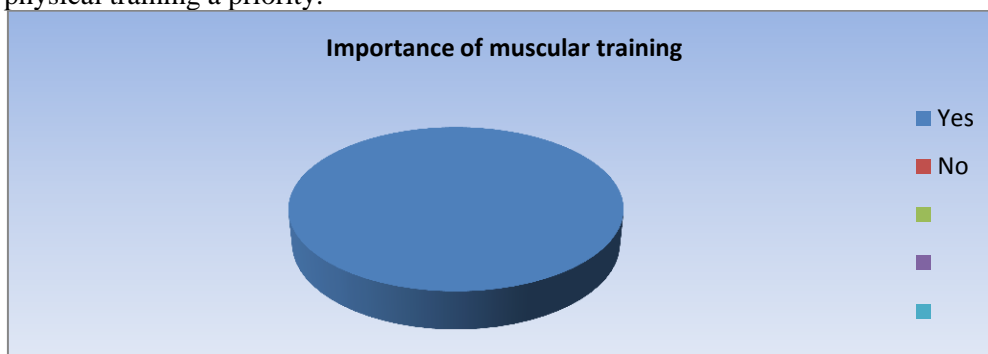


Figure no. 3. The coaches' opinion on the weight of training factors in volleyball

When asked about the level at which the physical training lies in the players trained by them, 20% of respondents felt that it is good, 40% find it good, 34% think it is mediocre and 7% of coaches believe that level is weak. It was meaning that there are still problems in the physical training of junior volleyball players, especially in the practical aspect. Regarding the muscle training, according to their coaches, athletes are situated as follows:

Very good for 13 percent; good for 33% of the respondents; mediocre for most subjects (43%); weak 10 percent. Unfortunately, only 13% of the rank coaches athletes in terms of muscle training in the first hierarchy (very good).

The next question concerned the need to adapt the physical training specific to the game post, where 83% of coaches investigated answered positively and 17% denied the need to adapt physical training at this level. It is recommended therefore, an individualization of junior volleyball players physical training in adjusting to play according to duties and job requirements of the means used in their preparation.

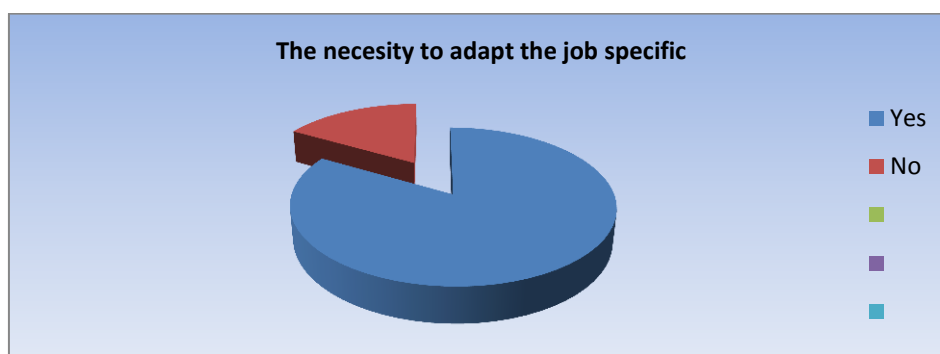


Figure no. 4. The coaches' opinion on the need for job-specific adaptation of the game

Although most consider very important to prepare muscles there are few who regularly test this area (17%). Unfortunately, the periodic evaluation of sportsmen is a neglected aspect in the current volleyball in the absence of referential very difficult to follow their evolution. Also, the lack of efficient and affordable devices investigative muscle may be one of the reasons that assessments are made only at the beginning of the championship, when athletes are required to pass certain tests motor.

When asked what made reference to the periodic use of exercises based plyometric contraction type, half of the interviewed coaches use this kind of work equipment. It follows, then, that there are many coaches who do not focus on plyometric training in volleyball.

The last question concerned the opportunity of an investigation that would investigate muscle training exercises of the plyometric type, most respondents (83%) considering beneficial considering such action, 7% disagree and 10% abstain or are not sure. In conclusion, it should launch an investigation to identify the role and

impact of plyometric type exercises in training junior volleyball players.

Discussion

The questionnaire gave us important data on opinions from Romania who are involved in the training of junior volleyball players. Most respondents believe that physical training is a priority in training juniors and also muscle training is extremely important in preparing athletes. Unfortunately, only 20% of the respondents consider the training level of volleyball players as high, considering that most of the trained athletes preparation is good or mediocre. Additionally asked if they consider what the causes are, most blame the preparation conditions, the lack of appropriate selections due to the need to include as many in the sports classes for students as possible to form groups and the lack of motivation. Most respondents do not regularly test the muscle training. Half of the coaches in the study stated that they use mainly exercises of the plyometric type in training. Most coaches welcome the research on the role of plyometric exercises in training junior volleyball players.

Conclusions

The place of the muscle training in the sports training periodization is better or less determined according to the specific concerns of the branch and the sports specialists in the field. In any case, the use of special training exercises produces higher quality motor force than the exclusive use of specific technical processes of that sport in some dim conditions. The sociological inquiry undertaken has provided us with important information needed in our approach, most are involved in emphasizing the importance of muscle training in the junior volleyball players. However, they do not consider that the junior volleyball players have a high level of muscle training, arguing that with a lack of training conditions, the barriers encountered in accessing scientific information on the actuation means and an

improper selection. Most respondents agree to start a research to investigate the role of plyometric exercises in the junior volleyball players training, while wishing to be notified of the results.

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THE MOTIVATIONAL SYSTEM OF THE TAEKWONDO ATHLETE

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Abstract. Motivation is one of the most important prerequisites of training and covers all internal processes that activate, guide and support our behaviors. Mobilizing and engaging in the task through the investment of cognitive, behavioral and time effort is the product of several factors, with concerted action: personality, personal abilities, social and cultural environment. In this study we used an alternative questionnaire on the athletes' practicing Taekwondo (TKD) options. The questionnaire had 20 items in its structure. The study was conducted on a group of 50 athletes with an average age of 15.5. The study explores the main motivational factors in practicing taekwondo. The results of the motivational system in subjects practicing TKD highlight that for 67% of the athletes, the main motivator in practicing TKD is given by the desire for performance; 19% practice TKD for self-defense; and for 12% of the athletes surveyed the main reason given is the desire of self development; and only 2% of the study subjects practicing TKD reported they do it because their friends practice this sport. In conclusion we believe that all these necessary conditions are required to be satisfied by trainers and instructors, because they fall within the athletes practicing TKD motivational sphere.

Key words: taekwondo, motivation, performance

Introducere

Motivation is one of the most important prerequisites of training and covers all internal processes that activate, guide and support our behaviors. Mobilizing and engaging in the task through the investment of cognitive, behavioral and time effort is the product of several factors, with concerted action: some related to personality (convictions, assessments, assignments, interpretations, emotions, etc.) and the student's personal skills and others concerning the type of interaction and the climate that teachers cultivate in the classroom and, of course, there are social, cultural and environmental factors and that belong to the student [1].

Motivation refers to all internal operating, guiding processes supporting our behaviors. By losing motivation, the activity becomes action, just as action, receiving motivation becomes activity [2]. It is responsible for all the behaviors above the reflex level [3].

We can say that motivation can be intrinsic (which comes from within) and extrinsic (from the environment), with a high relevance to the approach of learning, being influenced by the following factors: external influences represented by the context (family, education, socio- cultural); domestic referring to personal

characteristics (gender, temperament, knowledge, self-esteem). The external stimuli acquire motivational valence only if significant in relation to domestic conditions. "Connection" between inside and outside is formed over time as a result of inter-relationships between *the Subject* and *the World* [4].

Part of the acyclic sports, we can call Taekwondo (TKD), a heuristic sport as the adversarial relationship involves solving the opposition through motor actions, often original, depending on various conditions. Regarding evaluation, most experts say it is an integral and essential training part in TKD, it is a scientific enterprise, able to lead us to determine the degree to which the objectives set have been achieved or not, if the decisions taken are justified or not [5].

The purpose of this study is to achieve a diagnosis on the motivational system and to identify some of the Romanian TKD athlete's motivational gaps with major implications in athletic performance.

Material and methods

Alternative Questionnaire on practicing TKD

As a tool for research, the present study used a questionnaire formed of 20 alternative items.

The questionnaire had in its structure: introductory questions to familiarize the athletes with the subjects of the inquiry; questions of passage that marked the leap from one category to the other (such as questions that aimed at the athletes' performance experience within the category of questions concerning the reasons for practicing TKD); identification questions regarding athletes' characteristics (age, sex, weight etc.).

The questions requested from the subjects: the practical experience, the motivation to practice this sport, athletes' preferences within the training, as well as athletes' opinion on the

attitudes and the behavior of the coaches during the training sessions etc.

The Subjects

The study was performed on 50 athletes, aged between 10 and 21 years old, formed of the 26 clubs affiliated to the Romanian Federation of Taekwondo WTF, participating in the national technical seminar, Sovata, 2013.

Results

Next we will present and analyze the athletes' responses on the motivational system for practicing TKD. For the graphical data presentation we can observe the practical application results as follows:

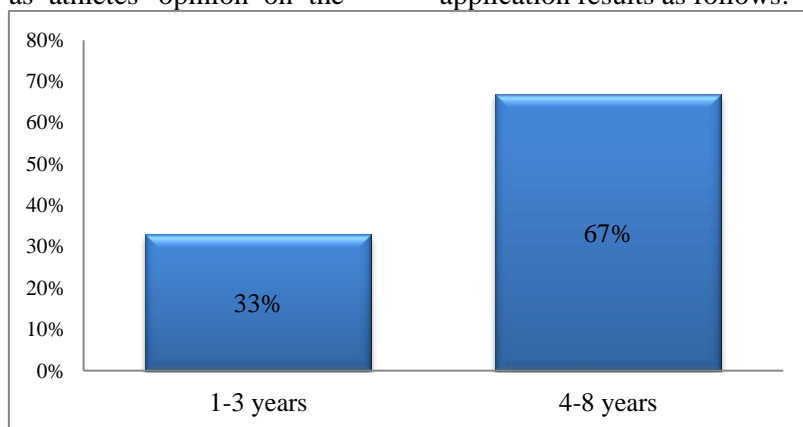


Figure 1. the subjects' taekwondo practical experience

The answers to the questions have you been practicing TKD? can be seen in Figure 1. Thus, it appears that 67% of the athletes said they had practical experience between 4-8 years. We can say that this gives legitimacy to the study, knowing that to get a black belt in taekwondo about four years are needed. In terms of competitive performance experience, 62% of the study subjects were on the top two places in national or international competitions, while only 4% had no results.

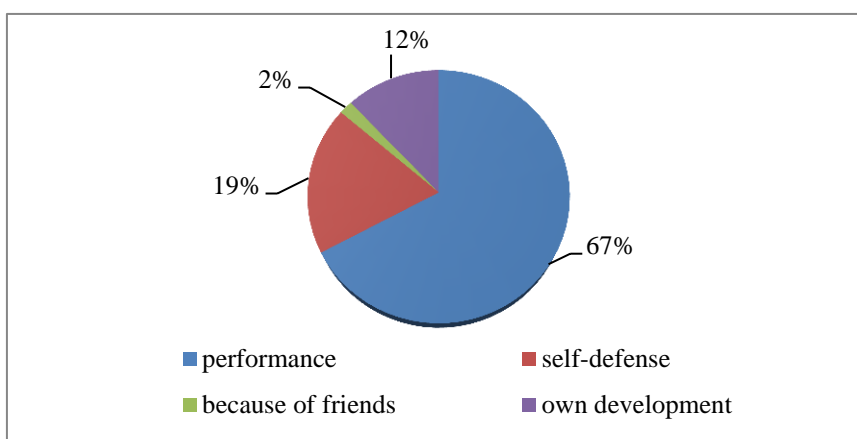


Figure 2. Options to practice sports

When asked *why do you practice TKD?*, Figure 2 shows that, for 67% of the athletes, the main motivator to practice TKD is given by the desire for performance; 19% practice TKD for self-defense; and for 12% of the athletes surveyed the main reason given is the desire for their own development; only 2% of the study subjects practicing TKD do it because their friends practice this sport.

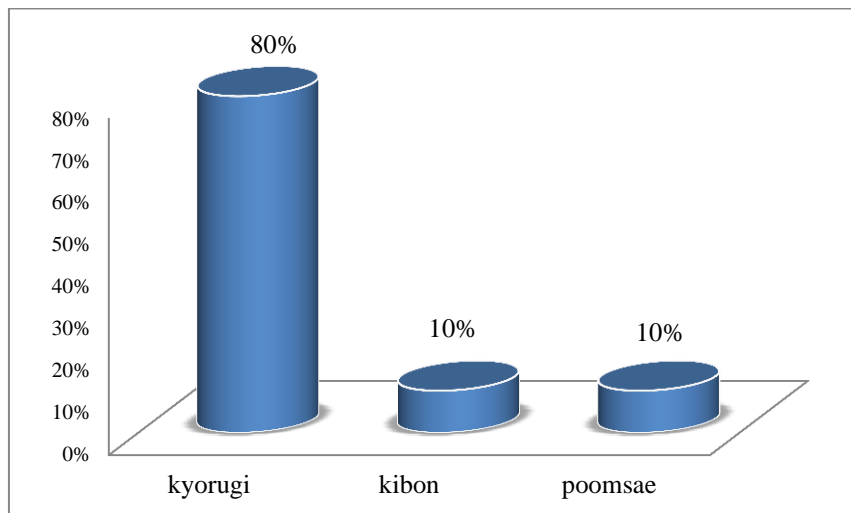


Figure 3. The athletes' preferences during training

The option to come to the training room to make performance is supported by the data in Figure 3. 80% of the athletes respondents answered that they prefer the fight training (kyorugi); 10% prefer kibon training or poomsae.

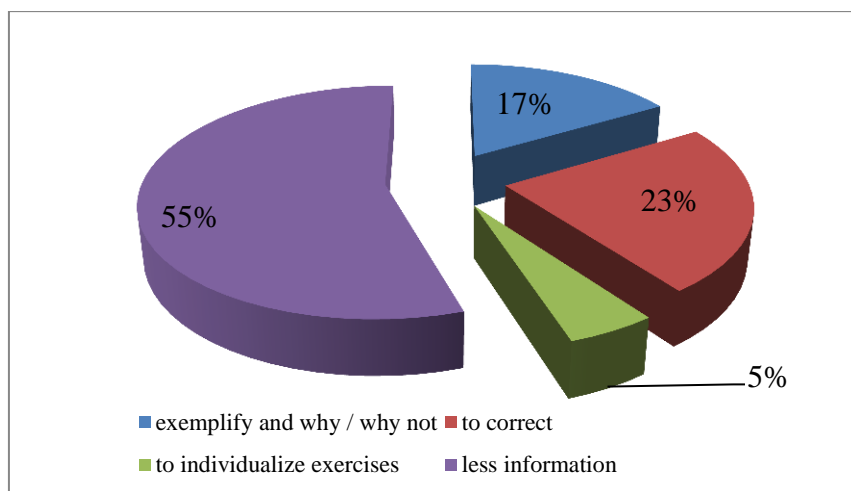


Figure 4. the Athlete's wishes regarding the coach

In Figure 4 we observe the athletes' desires regarding the coach's activity during training. It is found that most of them (51%) wish their coach to correct them during the technical and tactical actions; 36% of the athletes respondents want the coach exemplify and argue why / why not; 11% want the coaches to individualize during training exercises; and only 2% said they want the coach to give less information during training.

Discussions and conclusions

Taekwondo is a unique sport in that the master and student forge a symbiotic relationship. Through a proper instructive-educational process, TKD develops a harmonious, balanced individual, the development is physical ("Tae" and "Kwon")

and mental ("Do"). For those who choose TKD, perseverance, self-discipline and self-control are the main benefits. Practitioners learn a lot about themselves, about their skills and how to combine physical and mental aspects in solving all the problems of daily living [6].

Recent studies regarding motivation in practicing Taekwondo revealed that the main motivations of learning taekwondo is fashion and popularity, self-defense, certificate of higher dan, etc.while the main motivations of learning Sanda is self-defense, will-steeling, hobby and interest, etc [7].

A study on the participative motives of the members of the taekwondo club at elementary school, made by Huang 2006 [8],

demonstrated that the participation motivation of Taekwondo club for elementary school Taekwondo club members was higher, they had more optimistic and active viewpoint of participating Taekwondo exercise; also, the ratio of male members was slight higher than female members.

According to our findings, nationally, motivational interventions that do not comply with the Athlete's goals, emotions and beliefs related to preparation can produce minimal short-term positive effects, but in the long term, many interventions can direct them to fail. All these necessary conditions are required to be satisfied by coaches and instructors because they fall within the athletes practicing TKD motivational sphere. We believe that the emphasis should be on those internal stimuli causing the athlete to take a series of actions with consequences related to sports performance.

Following the results from this study we do not intend to rule on the coaches skills, but to draw attention to a poor motivational system among practitioners who cross the threshold of taekwondo theaters as a result of the training formed in the training rooms. We believe that great attention should be allocated to training cadets and junior categories, as it largely affects performance in seniority.

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ARTISTIC TRAINING AND ITS ROLE ON DEVELOPMENT FLEXIBILITY AND COORDINATION IN AEROBIC GYMNASTICS

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Abstract. The purpose of this research was to determine the role of artistic training means improving the flexibility and coordination of young female gymnasts. Thus, conducting this research, we chose a group of 12 athletes from Petrosani School Sports Club, who served in sport aerobics for 3-5 years. Proposed means proved effective, it is readily accepted and practiced by athletes with pleasure, accompanied by a pleasant musical accompaniment. Spatial and temporal orientation, lower limb strength and mobility capabilities anteroposterior are positively influencing the technical elements of Group D of difficulty. Means choreographic training contributed not only to achieve a form of movement, which formed the basis expressiveness and accuracy, but also to improvements in performance indices. The elements were executed with increased amplitude, which yielded better results in competitions. Differences averages are statistically significant at a threshold of $p < 0.05$.

Key words: *ballet, aerobic gymnastics, Group D difficulty, flexibility, coordination.*

Introduction

Aerobics is a competitive sport which captivates sports enthusiasts. It is a unique combination of aerobics choreography and elements of gymnastics. This sport offers the opportunity to compete in a sport that involves less risk than artistic gymnastics, keeping at the same time the artistic quality and aerobics' fun. The means provided by aerobic sport can define their own body image, social identity, willingness to work towards interpersonal communication. This leads to higher education of complex moral capacities, physical, psychological and behavioral. [1] (Hotting, K., Roder, B., 2013).

Superior aerobic represents the ability to execute complex and high intensity movements to the music that has its roots in traditional aerobic dance. The exercise must demonstrate continuous movement, flexibility, strength and the use of five basic steps with a high degree of difficulty. [2] (Codul de punctaj FIG, 2013).

The difficulty is one of the essential criteria of assessment and outs of aerobic exercises in sports. Exercises must demonstrate a perfect balance between specific aerobic movements (combinations of high and low movements) and elements of difficulty. There are allowed a maximum of 12 elements of difficulty, harmoniously selected from all four groups from Codul de Punctaj: Group A - Dynamic Force; Group B - Static force; Group C -

Jumping; Group D - Balance and Mobility. [2] (Codul de punctaj FIG, 2013).

The elements of group D of difficulty must show elasticity and suppleness, presenting the following general characteristics:

- alignment of joints and body segments should be very fair;
- postures should be easily recognizable;
- legs must be perfectly flat;
- if there are elements with different returns, they must be fully executed;
- if there is a majority of elements, the string must be maintained throughout the movement to its maximum amplitude - 180° .

Artistic preparation is a "special training component that provides physical and psychological support to achieve a personal style movements, the indexes of technicality, plasticity, suggestibility and expressiveness required by sport's features"[3] (V.Grigore – 2001), including subcomponents, dance training, for expression and communication, art education, music, artistic creation and performance of each branch of specific training from gymnastics. Artistic training base at children level is formed by some exercises borrowed from classical ballet. It is better not to insist on perfection of technique, because it is not intended to train dancers but gymnasts and choreographic training will be completed by a specific physical preparation of components from neuromuscular coordination. [4] (Lafont, L., Martin, L., 2014).

Material and methods

The aim of the research was to validate new work programs which have in their structure specific elements from classical dance, in addition to improve artistic execution they have an important role in the development of flexibility and gymnasts' coordination. To conduct this research, we chose a group of 12 athletes from Petrosani School Sports Club, who practiced aerobics for 3-5 years. The experiment was conducted in between 2013 and 2014 – a school year. At the beginning of the school year, athletes were tested: long jump from standstill (to determine the strength of the lower limbs), anterior-posterior mobility sample, Matorin test (to determine the overall coordination). Also there were tested, by scoring, according to the Code of Point, 3 elements in Group D of difficulty. After applying the proposed means was performed a final testing.

Operational model at the wall bar No.1

- 1) standing in position I with your face to the bar, leaning with both hands: 1 - bending knees apart oriented (demi-plie); 2 - return; 3-4 - is repeated; 5-6 - complete bending of the knees (grand-plie); 7-8 - return to start position
- 2) standing in position I with left shoulder at the bar, grabbing the arm on the same side, right arm lateral: 1 - bending the knees; 2 - stretching right leg resting on top; 3 - return right leg but bent; 4 - stretching knees; 5-8 repeat with right leg lateral; 1-4 - the same extent with right leg back; 5-8 - repeat with right leg a lateral extent
- 3) standing in position II with the front left shoulder, grabbing the arm on the same side, right arm lateral: 1 - carrying straight leg resting on top; 2 - raising the right leg 45°; 3 - lowering the leg like at the first time; 4 - return; 5-8 - the same side; 1-4 - the same back; 5-8 - the same side
- 4) standing in position I facing the bar, leaning with both hands: 1 - right lateral trunk bending; 2 - return; 3-4 - the same to the left; 5-6 trunk extension; 7-8 return
- 5) standing and facing the bar, grabbed with both hands: 1 - slightly knees' bent, momentum and vertical jump; 2 - landing with slightly knees' bent; 3-4 repeats; 5-6 are repeated movements from 1 to 4, making it with an apart easy legs' jump in the air and landing also apart; 7-8 jump with closed feet in the air and landing near closed feet

Model operational at the wall bar No.2

- 1) standing in the second position facing the bar, grabbed with both hands: 1-2 - high knees' bent (grand-plie); 3-4 - return; 5-8 - are repeated 1-4;
- 2) standing in the fourth position with the left shoulder at the bar, grabbed with the hand on the same side, right arm rounded down: 1 - shifting weight on the left foot, lifting right heel from the ground, tip lying on the ground (temps- lie); 2 - return;
- 3) standing in position II with the left shoulder at bar, grabbed with the hand on the same side, right arm lateral: 1 - bending the right knee (passe); 2 - stretching it forward (horizontal); 3 - bending the right knee (passe); 4 - return to the start position; 5 - bending the right knee (pass); 6 - stretching the right leg back, horizontal; 7 - bending the right knee (passe); 8 - return to the start position;
- 4) standing in position I with the left shoulder at bar, grabbed with the hand on the same side, right arm lateral: 1 - carrying right foot forward, resting on top; 2 - leading the right leg lateral (tip sliding on the ground) knee tightly; 3 - carry it on the same way back on top; 4 - return to the start position; 5-8 are repeated movements from 1 to 4; 1-8 - the same movement, starting with leg's lead
- 5) standing in the second position with the left shoulder at bar, grabbed with the hand on the same side, right arm lateral 1-2 - wave with the right arm; 3-4 - raising the right arm above; 5-6 - bending of the trunk forward, horizontal, 7-8 - return and right arm's descendent move; 1-2 - wave with lateral arm; 3-4 - raising the right arm above; 5-6 - trunk extension; 7-8 return with lateral arm's lowering
- 6) standing in the second position with left shoulder at the bar, grabbed with the arm on the same side, right arm lateral: 1 - small jump on the left leg, balancing the other forward; 2 - small jump on the left leg keeping the right leg forward(straight); 3 - small jump on the left leg, balancing the right leg on the ground but back; 4 - small jump on the left leg, keeping the right foot back; 5 - small jump on the left leg balancing the right leg on the ground forward; 6 - small jump on left foot keeping the right foot forward; 7-8 - two small jumps on both feet.

Exercises for flexibility development

1) standing with the left shoulder at the bar, grabbed with the arm on the same side, right hand on hip: 1- lifting right leg forward with the top twisted out; 2 - return; 3-4 - idem; 5-8 – keeping the right foot over 90°

2) the same exercise with lateral leg and then back

3) standing and facing the ballet bar with both hands grabbed: 1 - bending the left leg lateral, with the top near right leg (passe); 2 - stretching left leg back; 3 is repeated the movement from 1 to 4- return to the start position

4) standing in front of the left shoulder, left leg supported on the bar, upper arms slightly rounded: 1 - forward bending of the trunk; 2 - return; 3 - bend the trunk forward; 4 - return; 5 - left lateral trunk bending; 6 - return; 7 - right lateral bending of the trunk; 8 - return

5) standing with the back at bar, left leg supported on the bar, arms down, rounded: 1 - lifting arms forward; 2 - raising the arms above; 3 - right knee slightly bent (demi-plie) with trunk extension; 4 - return; 5 - lowering lateral arms; 6 - raising arms above; 7 - slightly right knee's bent (demi-plie) with trunk extension; 8 - return

Exercises for balance and equilibrium

1) standing with the left shoulder at the bar, grabbed with the arm on the same side, right hand on hip: 1- balancing the right foot forward and simultaneously lifting on the top from the left foot; 2 - return; 3-4 – balancing the right leg lateral and simultaneously lifting on the top from the left foot and return; 5-6 – balancing the right leg back and simultaneously lifting on the top from the left foot and return; 7-8 – idem 3-4

2) standing in position I with the left shoulder at bar, grabbed with the arm on the same side, right arm lateral: 1 – right leg forward resting on top; 2 - raising the leg horizontal; 3 –

moving the right leg descendent and forward resting on top; 4 - return; 5-8 - the same movement, with the lateral leg; 1-4 - the same movement, with foot back; 5-8 - the same movement with lateral leg

3) standing and facing the bar, grabbed with both hands: 1 – balancing the right leg back and then horizontal; 2 - return; 3-8 - same movements from 1 to 2

4) 1-8 - the same movement with the left leg

5) standing with the left shoulder at the bar, grabbed with the arm on the same side, right arm lateral 1-2 - watershed; 3-6 - maintenance; 7-8 - return

Exercises for pirouettes

1) standing in the fourth position and facing the bar, grabbed with both hands: 1 – knees's bending apart oriented (demi-plie); 2 - return; 3-4 - is repeated; 5-6 - complete knees' bending (grand-plie); 7-8 - return to the start position

2) standing with the left shoulder at the bar, grabbed with the arm on the same side, right hand on hip: 1-2 - grandbattement forward; 3-4 - grandbattement lateral; 5-6 - grandbattement back; 7-8 - grandbattement lateral

3) standing in the sixth position with the left shoulder at the bar, grabbed with the arm on the same side, right arm lateral: 1 - passe; 2 - developpe forward; 3 – porte lateral; 4 - passe; 5 - developpe back; 6 – porte lateral; 7 - passe; 8 - return

4) The gradual execution: 180°, 360°, 540°, 720°

5) The execution of the pivot using chaining (2-3 pirouettes) on both sides

Results

Table 1 illustrates the results from Matorin sample, with returning to the right and left, at the initial test and final test.

Table no.1 Records from Matorin sample

No.	Name First name	Ti right	Tf right	Ti left	Tf left
1	A.S.	500 ⁰	540 ⁰	330 ⁰	430 ⁰
2	B.C.	460 ⁰	490 ⁰	350 ⁰	400 ⁰
3	C.C.	450 ⁰	480 ⁰	410 ⁰	460 ⁰
4	C.F.	530 ⁰	460 ⁰	490 ⁰	520 ⁰
5	E.D.	480 ⁰	490 ⁰	460 ⁰	510 ⁰
6	I.D.	400 ⁰	550 ⁰	450 ⁰	490 ⁰
7	M.A.	420 ⁰	570 ⁰	390 ⁰	460 ⁰
8	M.N.	430 ⁰	480 ⁰	440 ⁰	540 ⁰

9	N.O.	440 ⁰	550 ⁰	480 ⁰	560 ⁰
10	P.S.	460 ⁰	510 ⁰	480 ⁰	530 ⁰
11	S.S.	400 ⁰	550 ⁰	470 ⁰	500 ⁰
12	U.C.	440 ⁰	560 ⁰	450 ⁰	480 ⁰
Average		450,83	519,17	433,33	490
Stdv		38,00	38	52,45	46,7
Min		400	460	330	400
Max		530	570	490	560
TTest		-3.464		-7.745	
P		0.005		0.001	

Analyzing obtained data from the Matorin sample (space-time orientation), there is a substantial increase in athletes' results from initial testing to the final, regarding to the right returns (11.9%) and those executed to the left (13%).

If at the right returns, the string amplitude decreased from 270° (Ti) to 250° (Tf), which means a homogenous performance around the arithmetic mean, however, at the returns to the left, preferred sense of gymnasts, as obtained results say, amplitude increased slightly.

Averages' differences are statistically significant at a threshold of $p < 0.05$.

Table No.2 Records from Straight Long Jump on place

No.	Name and first name	Long jump		
		Ti	Tf	Dif
1	A.S.	1,82	1,88	0,06
2	B.C.	2,03	2,15	0,12
3	C.C.	1,96	2,08	0,12
4	C.F.	2,22	2,25	0,03
5	E.D.	1,99	2,13	0,14
6	I.D.	2,15	2,18	0,03
7	M.A.	1,88	2,08	0,20
8	M.N.	2,51	2,58	0,07
9	N.O.	2,42	2,45	0,03
10	P.S.	2,12	2,20	0,08
11	S.S.	2,23	2,30	0,07
12	U.C.	2,19	2,22	0,03
Mean		2,13	2,21	0,08
STDV		20.61	18.06	
Minimum		182	188	
Maximum		221	258	
TTest			-5.264	
P			0.001	

At the Straight long jump on the place, there is a increase of only 4% between the two tests.

Analyzing the differences obtained by the 12 athletes from initial testing to final, we can see increases from 3cm to 20cm, final average being 8cm, and we consider it a good value, considering the short period in which the experiment was conducted.

Averages' differences are statistically significant at a threshold of $p < 0.05$.

Table No.3 Records of Anterior-posterior mobility sample

No.	Name and first name	Anterior-posterior mobility		
		Ti	Tf	Dif
1	A.S.	+ 9	+ 13	+ 4
2	B.C.	+ 14	+ 20	+ 6
3	C.C.	+ 12	+ 19	+ 7
4	C.F.	+ 10	+ 16	+ 6
5	E.D.	+ 8	+ 15	+ 7
6	I.D.	+ 11	+ 15	+ 4
7	M.A.	+ 15	+ 21	+ 6
8	M.N.	+ 12	+ 20	+ 8
9	N.O.	+ 15	+ 22	+ 7
10	P.S.	+ 17	+ 20	+ 3
11	S.S.	+ 10	+ 17	+ 7
12	U.C.	+ 17	+ 23	+ 6
Average		+ 12,5	+ 18,42	+ 5,92

Table No. 4 Records obtained from jumping

No.	Name and first name	1 ½ turn		vertical split		Illusion	
		Ti	Tf	Ti	Tf	Ti	Tf
1	A.S.	7	8	6	7	5	7
2	B.C.	8	8	7	8	6	8
3	C.C.	6	7	7	7	7	8
4	C.F.	9	9	9	9	8	8
5	E.D.	9	10	5	7	6	7
6	I.D.	8	9	7	8	7	7
7	M.A.	7	9	6	7	6	8
8	M.N.	8	8	8	9	8	9
9	N.O.	9	10	7	8	7	9
10	P.S.	10	10	6	8	9	10
11	S.S.	9	9	8	8	8	9
12	U.C.	8	9	8	9	8	8
Average		8,17	8,83	7,00	7,92	7,08	8,17

This sample has sought technical execution of three important elements from group D – difficulty from Code of Points.

It can be said that this sample somewhat reflected what happened to the other three tests. So those who have lower values at lower limb strength testing, had difficulties in execution of elements being under evaluation. Also, the low values obtained by some athletes at Matorin test were reflected in the wrong execution of some elements with returns. Athletes who have shown a great mobility executed easily Vertical Split and Illusion elements. Note that some athletes have succeeded in final testing to correct their executions, which demonstrates that the means

used by us have been effective in achieving the proposed goal.

Conclusion

Although artistic training represents a difficult part of sports training, it should be approached using appropriate means to improve performance, especially because aerobics is a sub-branch in which the form is subordinated to the content which generates it.

Proposed means were effective, being easily accepted and practiced by athletes with pleasure, accompanied by a pleasant musical. Spatial and temporal orientation, lower limb strength and anteroposterior mobility are capacities which positively influence the

technique of elements from Group D of difficulty.

Means from choreographic training contributed not only to achieve a form of movement, expressiveness and accuracy were at its basis, but also to improve some execution indices. The elements were executed with increased amplitude, which yielded better results in competitions. Following the results, we believe that these tools need to be addressed with more courage and density in training, aerobics being a sport of beauty and body expression.

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STUDY ON THE EVOLUTION OF ROMANIAN SWIMMING AS A UNIVERSITY SPORT WORLDWIDE

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Abstract. The training and sports training influence the formation of student's personality and the competitions leave traces in the personality of each participant. We can say that the main objective of participating in a competition is either victory or improvement of a previous result, which makes the student be forced to show the maximum capacities. The first multi-sport university competition was organized in 1923, Paris, France, under the name of International University Championships. The representative Swimming Team of Romania, according to existing statistics, obtained the first results from the 1961 Summer Universiade held in Bulgaria. The editions where our students have won medals - 60% - were university championship titles. In the overall ranking on the number of medals obtained in the course of all the assignments, both male and female and mixed, during the 14 editions Romania ranked in the top ten in approx 70% of cases. The results from the competitions for students, have always had a personal value and permit the establishment of shape and the level reached after a period of sports training. The swimming events are held in accordance with the most recent technical regulations of the International Swimming Federation (FINA) and the International University Sports Federation (FISU).

Key words: *swimming, academic competitions, university sports.*

Introduction

The training and sports training influence the formation of student's personality and the competitions leave marks to each participant's personality. The results from competitions are always a personal value for athletes and permit the establishment of the shape and the level reached after a period of sports training [1]. Swimming events are organized according to the most recent technical regulations of the International Swimming Federation (FINA) and the International University Sports Federation (FISU). As shown in Table 1, the academic swimming competitions meet both individual and mixed tests. [2] (FISU, 2014):

Table. 1 Competition tests

Individual Medley		
	masculine	feminine
freestyle stroke/Front Crawl	50 m, 100 m, 200 m, 400 m, 800 m, 1 500 m	50 m, 100 m, 200 m, 400 m, 800 m, 1 500 m
<i>Arms</i>	50 m, 100 m, 200 m	50 m, 100 m, 200 m
Backstroke	50 m, 100 m, 200 m	50 m, 100 m, 200 m
Butterfly	50 m, 100 m, 200 m	50 m, 100 m, 200 m
<i>Mixed</i>	200 m, 400 m	200 m, 400 m
Relays		
freestyle stroke/Front Crawl	4 x 100 m, 4 x 200 m	4 x 100 m, 4 x 200 m
<i>Mixed</i>	4 x 100 m	4 x 100 m

The first multi-sport university competition was held in 1923, Paris, France, as the *International University Championships*. Since 1924 the name changed to *World Championship Summer Student competition* edition held in Poland and since 1930 it turns into the *International University Games* and is held in Germany. Since 1949 this type of competition turns into the *International University Sports Weeks summer edition* held in Italy, and since then the name would have been changed starting with the edition of 1957, France, to *World University Games*. Another university competition, the *World University Games*, would be held since 1947 until 1962. Historically described by the International Federation of University Sports, swimming was part of the sports participating in competitions for the first time with the International University Sports Weeks, edition held in 1951 in Luxembourg. However, swimming was not present until the 1959 Summer Universiade in Turin (name received with this issue), then swimming became compulsory. Due to the growing success, university swimming continued to attract more participants from around the world and increased the level of performance. In 1967, in Tokyo, the US swimming team victory (won 21 of 22 tests), remained without doubt one of the most remarkable performances of the summer Universiade history, with a total of nine (9) world records. The successful evolution continued throughout the eighties and nineties, the best example being the 1981 edition in Bucharest, where instead of 26 tests (13 male tests and 13 female tests) they increased to 29 tests (15 male tests and 14 female tests). Just two years later, in Edmonton, Canada, Soviet swimmers, led by world record holder Vladimir Salvikov, literally crushed their opponents, winning 22 of 30 tests. In 1997, for the Summer Universiade hosted in

Sicily, Italy, a new swimming complex was built specifically for it.

The 2013 edition was held in Kazan where the swimming sports events had 42 sport tests (21 male and 21 female). The International University Sports Federation predicts that the following edition, of the 2015, in Gwangju, Upper Korea will have the largest level of participation in history.

This international forum that coordinates and organizes academic competitions is the International Federation of University Sports (FISU). The competition where swimming is among the participating sports is the Summer Universiade ("mini Olympics students") with the following sports: basketball, judo, weightlifting, Diving, golf, volleyball, taekwondo, tennis, aerobics, archery, shooting, athletics, badminton, swimming, football, table tennis, gymnastics, fencing, sailing, gymnastics, chess, polo, cycling and beach volleyball.

The Romanian representative swimming team, according to the results posted on Wikipedia [3] (2014), obtained the first results starting with the 1961 summer Universiade held in Bulgaria.

Materials and methods

The main *purpose* of this study is to highlight the evolution of Romanian university swimming worldwide.

The working *hypothesis*: by increasing the number of students participating in various competitions we can provide a solid basis for selection that will lead to an unexpected outcome of the representative swimming athletes team worldwide.

Results

We can say that the main objective of participation in the competition is either victory or improving a previous result, which compels the athlete to show maximum capacity.

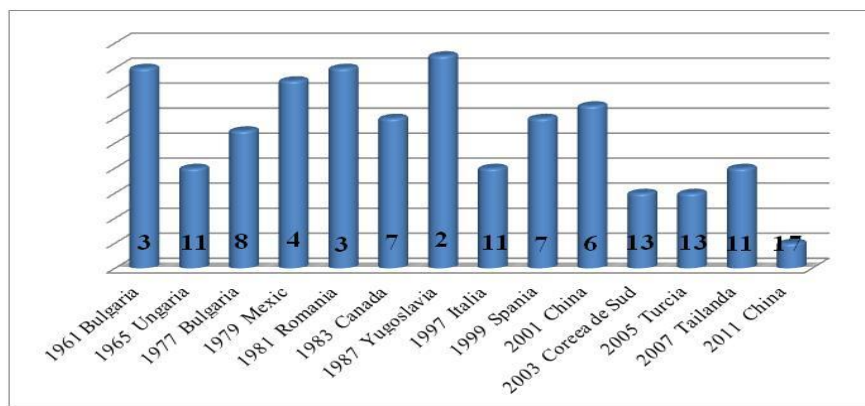


Fig. 1. The rank achieved by Romania in the general classification

In the overall ranking on the number of medals obtained in the course of all the assignments during the 14 editions, Romania came three times on the top three and five times on places 4-10 (Figure 1).

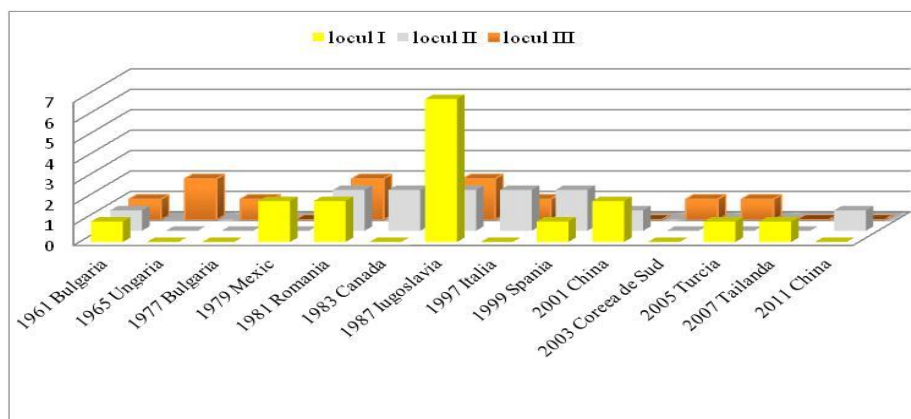


Fig. 2. The medals type obtained by the Romanian team

As shown in Figure 2, most medals were won in Yugoslavia edition, a total of 11 medals of which 7 were gold medals. We mentioned that all these medals were won only two times by the national sports team.

Conclusions and discussion

During all editions where Romania obtained all these medals, they have been won by more than two athletes per edition, and 60% were champion titles. Female student swimming, during universiades, was best represented, winning 87% of medals and only by 13% of the students, which shows that performance sports is more developed in our country in women.

As is clear from the results presented above, the Romanian team in the last editions had the

lowest ranking in the general classification, the 13th place and the 17th, culminating in the 2013 edition of Kazan, where, being represented by six students, failed the ranking on the podium.

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THE IMPACT OF EXERCISE ON THE PERCEPTION OF MEDICAL STUDENTS FOLLOWING THE INTRODUCTION OF INTERACTIVE TECHNOLOGY IN THE PHYSICAL EDUCATION CLASS

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Abstract. The physical education lesson in the academic environment requires a permanent refocusing so as to be more attractive to students and give them concrete reasons to practice physical exercise. This innovative technology-based interactive systems can be practical solutions of modernising the lesson. The research aims to identify the perception of students following the introduction of HopSport system in the physical education class through the use of questionnaires, divided into seven modules, each module having a specific objective. The survey was conducted on 60 students (15 boys and 45 girls, age 19-21) who participated for 9 months in ed.fiz classes. After considering the answers given by the subjects, it appears that HopSport system used in the physical education lesson improved the motivation to practice physical exercise and promote active lifestyle through movement among them.

Key words: *physical education class, interactive technology, well-being*

Introduction

Physical activity can be considered a basic element of a healthy lifestyle and a condition of everyday life. The health formula consists of mandatory daily physical activity by age, sex and type of activity.[1] A report by the European Union in 2010 regarding practicing physical exercise showed that we are among the countries that do not consider this a priority, the Romanian population stood at the bottom of the ranking. In that barometer, in descending order, Romanians are surpassed only by Hungary, Greece and Bulgaria. The Nordic countries are the most active in this regard.

Unfortunately, the report made in 2013 and published in March 2014 with regard to sport and physical activity, the situation has not changed yet in Romania, our country still hovering the fourth place among those who are not physically active at all, before us standing Bulgaria, Malta and Portugal.[2] Physical education is a compulsory subject in the UMF Craiova, stipulated in the curricula of students in the first year and second year of study, with a share of 30 hours per semester. At this time, the program has as objectives the following:

a) Improving the health of students through a harmonious physical development.

b) Improving the overall level of traction and learning the basics by practicing sport branches.

c) Assuming a system of multilateral practical skills training.

d) Determination of beliefs and skills to practice physical activity independently.

The positive changing of the social phenomenon in physical education and sport must begin with the change of the fundamental general concepts of physical education and sport in a society in transition. The new concepts will be required to meet all the demands of the social, individual and group interests. In this situation, physical education and sport should be studied as a complex dynamic nationwide social phenomenon, with diverse and ever-changing implications, motivations, concepts, individual interests, and group. [3]

Trying to make the physical education classes and sports more attractive, a group of Americans have created a HopSports system that combined hundreds of lesson plans video programs projected on a screen. The use of HOPSports combines a projector, a sound system and a variety of training equipment. The lessons are conducted by athletes and celebrities or cartoon. Figure 1 illustrates a sequence during a physical education class that uses HOPSport system.



Figure 1.1. HOPSport system

HOPSports redefined the perception of students on the participation in the physical education classes by providing practitioners the attractive choice and rewarding forms of physical activity that enables them to live in a sustainably healthy lifestyle throughout adulthood.[4]

The system currently exists in 1,000 schools, after school programs, recreation and treatment, and the US military bases worldwide, HOPSports being a bridge between home, school and community to encourage an active and healthy lifestyle lifelong learning. [5].

According to a study young people who use the HopSports system are 55% more active than those who participate in classical courses of physical education and sport.[6]

In the same study, it appears that students who are obese or overweight using this system are 23% more active compared to those who attend traditional physical education and sport.[7]

The founders of this system adds that the system does not replace the tasks physical education teacher's but it is an auxiliary tool, very useful for this.

In the US, HopSports training system is currently used by more than 600,000 young people per week. The HopSport system is a multimedia training tool for the 21st century.

HOPSports allows teachers to work with small groups or individual students while the entire group remains fully committed. Students improve their health and gain the confidence to be active for life.[8]

Thus, the promotion of physical education is done in fun and attracts students to move.

Even if BrainBreaks and the HopSport systems are used also abroad as a means of recreation between the courses intervals, in our

research these means were placed in physical education time, representing one or more themes of the lesson, the motivation is given by the impossibility to quantify the movements executing during breaks and the difficulty of the synchronization of students, the program of each group being different.

Material and methods

Thus the HopSport system was introduced in physical education class of the medical students in Year 1, being offered as support for teacher and student, being accepted and appreciated by them. The research began in November and involved the placing in each physical education lesson some work programs based on the theme of interactive technology lessons, which are used as aids in the fundamental lesson, according to themes and objectives. The research included a sample that was composed of 60 subjects, aged 18-26 years, 15 of whom were male also 45 female students in the General Medicine and Pharmacy Craiova, year I, who accepted willingly to participate in this research also they manifested an interest in the new work programs that included interactive technologies to practice aerobic gymnastics physical exercise and also specific means of maintenance.

After participating in the physical education classes, the subjects were interviewed about the effects HopSport system had on them, the method used being the survey. A direct survey research method which involves applying a special form called questionnaire containing a series of questions, so-called items, in writing.

Results

The questionnaire developed by the HopSport specialists, provided seven modules. The first referred to the influence of motor activities on the body as a whole. From the subjects' answers it appears that: 97% of respondents

totally agree with the statement that the motor activities relax mentally. None of the respondents reject this claim; 55 subjects (out of 92%) totally agree that physical activity reduces their anxiety. The majority (99%) totally agree that the motor activities help them improve their skills. Many of the students (58) totally agree with the statement that the practice of motor activities makes them more confident in themselves. 83% of

the respondents discover new experiences whenever they practice exercise; 92% agree that their motor activities ensure a better health status. The question of the influence of physical exercise on a good night's sleep, 67% totally agree, 20% disagree, 3.33% disagree with this statement. Most students (83%) say that motor activity greatly influence school performance.

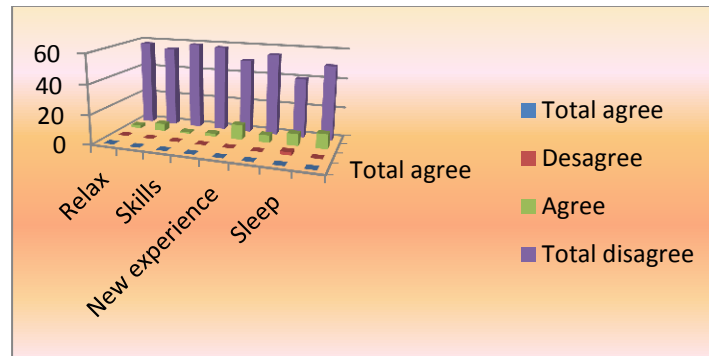


Chart 1. The responses to the first module of the HopSport questionnaire

As part of the second module, the questions referred to the attitude towards exercise. All respondents were aware of the importance of practicing physical exercise, 90% totally agree with this statement, 10% stating that they agree. None of the subjects show disagreement in relation to this matter; 97% of students totally agree that it is important to form the habit of practicing the exercises. All subjects (100%) totally agree with the statement that it is important to be physically active to benefit from a state of optimal health. Also, 40 of them (67%) would never give up being physically active and also only 2 subjects disagree with this. 58% totally agree that if they had done many other things, they would not give up practicing physical exercise, 17% agree, 20% disagree and 5% totally disagree.

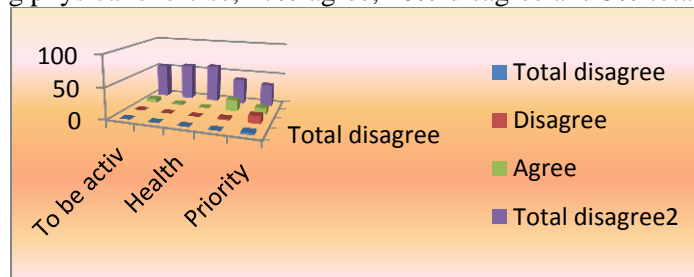


Chart 2. Responses to the second module of questionnaire the HopSport

The third module aimed at out-put the achieved after practicing physical exercises using the HopSport system. 97% of the respondents say that they totally agree that through the HopSport video they learned about culture, these dances using specific exercises drawn from different nations. Students also agree with the statement that they learned about art through video exercises and also a healthy lifestyle. 97% totally agree that they learned through the videos about how to describe a physical exercise. 80% totally agree that they learned about hygiene through video exercises offered by the the HopSport.

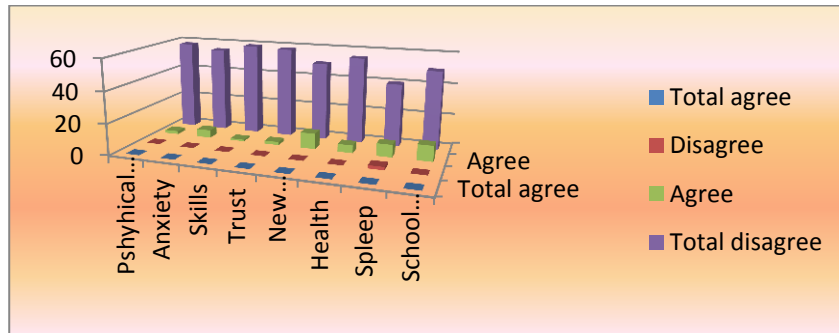
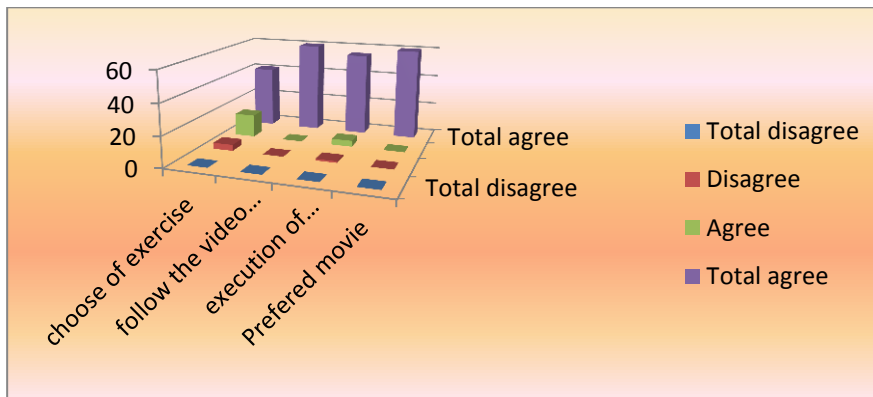


Chart 3. The responses to the HopSport third module questionnaire

The fourth module of questions aimed at the subjects' gaining from practicing physical exercises using the videos offered by the HopSport system.

Following the application of the work programs that had in their structure the HopSport movies, 94% of the subjects say that they are able to choose their own exercises, those that suit them. Also, all students fully agree that they know how to practice motor activities if they have a movie to watch, and that 92% succeed in executing movements without many mistakes even without a teacher. 100% of the subjects identified and also favorite exercises that the HopSport system provides.



Graph 4. The responses to the HopSport fourth module questionnaire

Module 5 targeted the detection of the personal opinions emerged from the practice of physical exercise and they were resumed in another form.

When asked about the fact that motor activities are fun, all subjects agreed with this, 80% totally agree. Only 2 subjects (3.33%) are not anxious to work out, the remaining 97% cannot wait to practice physical exercises. Most subjects are delighted to practice physical exercises, feel stronger, more self-confident and also agree that they are reasoning better. The majority (97%) agree with the statement that their school performance are improved after practicing physical exercise. All agree that their colleagues enjoy practicing physical exercises. However, in the adults, students do not give much endorsement to practicing physical exercise, 42% stating that their teachers do not like to execute motor activities and 55% disagree that their parents like motor activities.

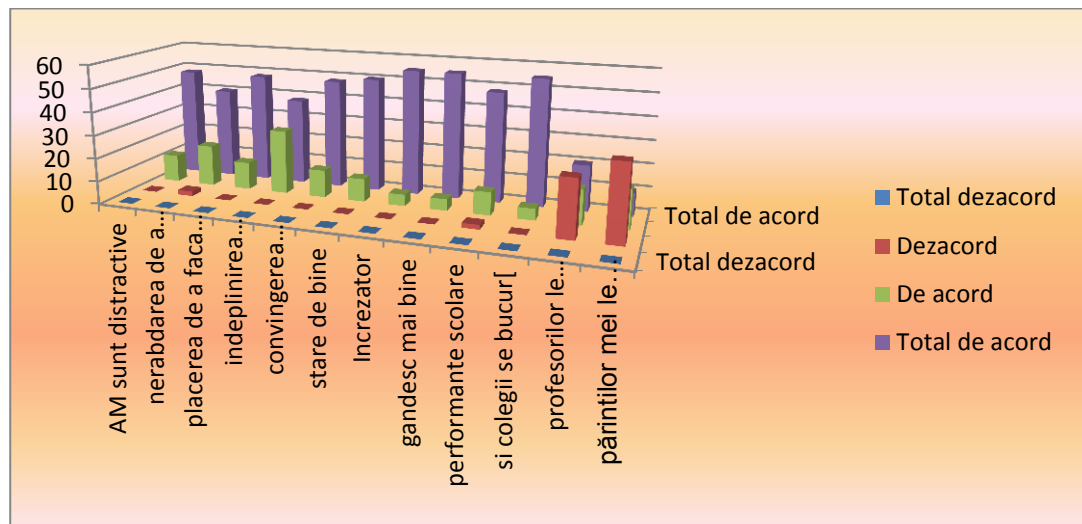


Chart 5. The responses to the HopSport module 5 questionnaire

The sixth module referred to the students' motor skills current level. Students are satisfied with their strength and endurance in 93%, 7% stating that they disagree. All subjects were satisfied with the current balance, agility and flexibility of their rhythm and oculo-motor coordination. 17% disagree with that they have elegant exercises execution.

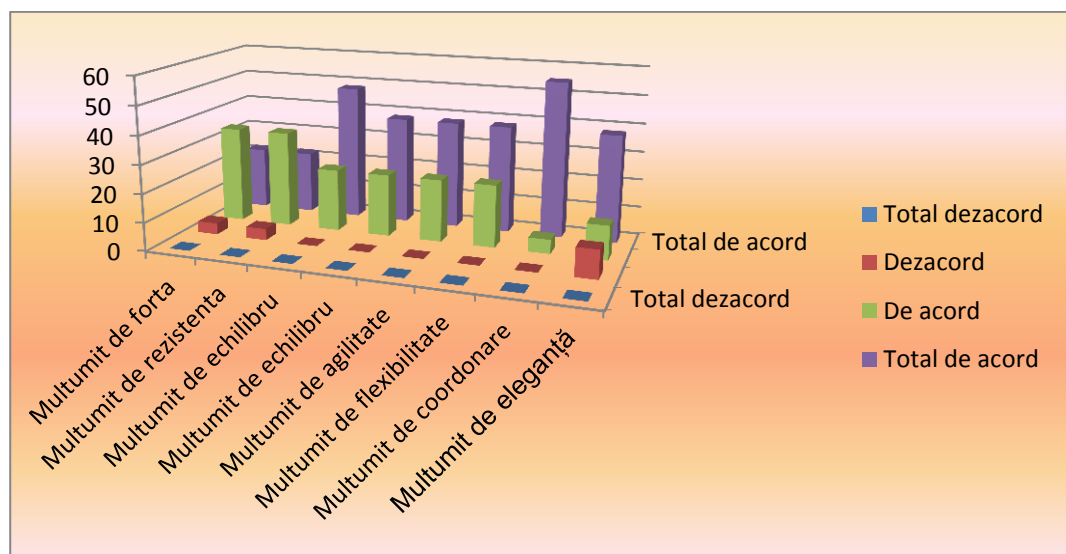


Chart 6. The responses to the HopSport questionnaire module six

Module seven targeted the trends and necessities to make the move. Most subjects agree that they are working hard to practice exercise, that their goal is to exceed the level achieved in motor activities. Also, 99% want to discover new further motor activities motor. Most respondents do not compare with others, but with themselves and want to overcome barriers. All seek to exploit their biomotor potential, as well.

Conclusions

Physical education and sport, an integral part of general education, presents content and

specific tasks, with significant influence over the individual, on the bio-psycho-intellectual plan. At the same time, physical education can be regarded as a special form of education through the physical component of the human body, leading not only to the biological finality, but also to important intellectual, psychological, social and ethical aspects. Health must be a stable psychophysical balance and provide good adaptability to varying requirements of the physical and social environment. The concepts of physical education and sport are specific biological and

social concepts while acting on physical, mental and social health. The systematically practiced sport and physical activities will reduce the risk of morbidity and mortality in many chronic diseases in adults. Although young people engage in a greater extent than adults to practice physical exercises, adolescence is marking a decline to their physical activism. To this end, the development of attractive programs in physical education classes will mitigate this trend by attracting students to exercise, also, independently and it will raise awareness to the need of practicing motor activities, to form an active and healthy lifestyle.

The questionnaire developed by HOPSport specialists applied to subjects revealed that our students appreciated positively the motor activities performed, that they are satisfied with the information received at the classes of physical education, with the concepts for a healthy lifestyle, the opportunities to practice physical exercise during leisure and that they are aware of the influence of exercise on the organism on a bio-psycho-social plan.

We can say, therefore, consistent with the above mentioned, that the HopSport system, used in the physical education class, successfully contributed to improving the motivation to practice physical exercise and

promote active lifestyles among medical students through movement.

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THE CONCEPT OF INSURANCE AND MANAGEMENT OF MATERIAL RESOURCES IN PRIVATE CLUBS

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Abstract. The material insurance concept differs fundamentally from the concept of material and technical supply, both in content and especially by the new mindset that must exist in addressing material insurance consumer processes. Thus, the management of material resources is not just a summation of fixed stages through which a certain supply circuit is done, but requires a profitable joint of the activities conducted by the purchasing department. In this respect, they emphasize the following components: the application of supply, the supplier selection, the purchase order, confirmation of order, delivery and billing and the reception of products. All this is done according to the most representative financial decisions both by the nature of the objectives - strategic, tactical or operational in nature and the activities that generate financial flows - investment, financing and profit distribution. They must be designed in a way to harmonize the natural desire of shareholders to earn money now, but also to ensure sustainable development of the club sports in the future. The private clubs are functional level managerial structures occupying an important role in the national, Sports Federations promoting sports. They must provide consumers in terms of efficiency and maximum utility with the optimal material resources necessary to practice some sports branches.

Keywords: *material resources, management, private clubs.*

Introduction

One of the most important parts of a project (regardless of its type), is the material resources. Due to the complex requirements in order to fulfill them we need to adopt a coherent management strategy. They assigned two definitions to the management concept [1], namely:

- All operations of receipt, storage and issue of material goods or money values, performed by an employed person, to be found within the main service tasks;
- All of the property entrusted to one or more persons to preserve and handle.

Thus, it can be argued that all of the property

management is the sum of goods entrusted to one or more persons for the reception, storage and dispensing them through legal operations to ensure their integrity [2]. The material security concept differs fundamentally from the concept of material and technical supply, both in content and especially through the new mindset that must exist in addressing consumer material assistance processes. Thus, the management of material resources is not just a summation of fixed stages through which a certain supply circuit is done, but requires a profitable joint of the activities conducted by the purchasing department. (figure 1).

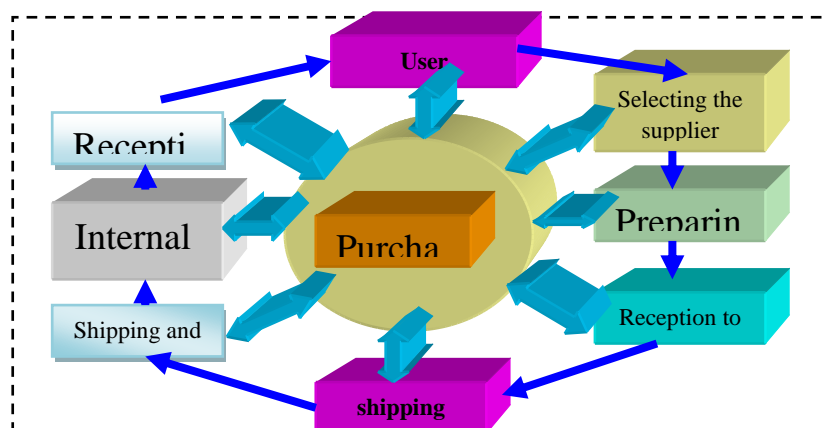


Figure no 1 Cicle of aprovision in a project [3]

From this point of view we should highlight both the emergence and the development of new features of the material insurance tool and, also, that of developing new courses of action in the market economy.

From the foregoing, the main features of the material insurance tool are:

- a. strong commercial emphasis in the club;
- b. to ensure the targets, they should be based on strategic prospective studies;
- c. in order to increase efficiency on a short term, they should be based on plans and management systems, arising directly from the general objectives;
- d. the efficiency of material insurance activities must be assessed both in terms of the material recovery of the efforts made in achieving their own activities, but especially for the effectiveness with which objectives are achieved through effective action taken.

The main purpose of this paper is to highlight the importance and necessity of the concept of insurance and management of material resources in the private type clubs to ensure the market demands in terms of offers and services sought (required) mainly by different categories of citizens (children, pupils, students, parents, etc.).

Materials and methods

The main method used in this paper is the study of literature. Thus, at this stage of the research materials on the following research problematic issues were studied: managing sports facilities, administration and management of material resources and strategic management components.

Results

The supply management, within projects, includes procedures for the purchase of goods and services, to achieve the aim of the project, among which the most important are (Figure 2):

- supply planning - the process of identifying the first data on the type of product you need to purchase, the required amount, quality and long term reliability of materials

and, demands upon request, acquisition time and the first information identification, obtained by the potential suppliers. This includes products to be purchased and the time of their coming into the possession of the applicant;

- planning the request - is a process that involves careful preparation of documents necessary to support the request, the characteristics of the goods purchased and choosing the potential suppliers;

- the request - involves a process of obtaining bids from suppliers to be analyzed (price, delivery conditions, reputation, etc.) in accordance with the activities and objectives of the club;

- source selection - receiving and evaluating the suppliers proposals, and the implementation of the decision to contract with the most recommended one to provide the club necessities. We take into account the nature of the goods required and, according to it, one or more suppliers may be selected, signing a standard contract or a negotiated one;

- the management contract - means the process by which the supplier performances ensure the correlation between the supplier and the contractual arrangement. This includes an application of managerial processes to the contractual relationship, such as: the execution of the acquisition plan, the quality control and the control-changer. The method and conditions of payment should also be defined in a contract, creating a balance between the progress made by the seller and the payment rates;

- the conclusion of the contract - the reception of products required, checking them, the receipt of the price, the settlement of disputes arising during the contract.

To remember is that the buyer-seller relationship may exist at many levels within a project.

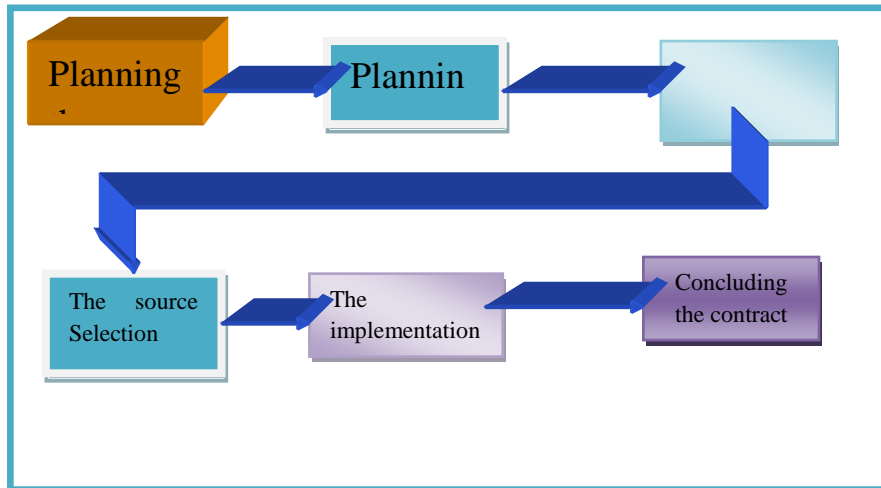


Figure no 2 Managementul of human resurse
(A Guide to the Project Management, 2008)

In terms of material insurance directions of development, they endorse particular strategic activities that are typical. Thus, depending on the role that they incur or which is granted to them, the material insurance business may have both a strategic communication role, as well as a role of active participant in the development of strategies.

Through the position they occupy on the upstream market, the material security tool receives a range of useful information, both to their own work and to that of the whole enterprise. This information, in terms of destination, may be information on sales strategies and policies that are on the market, as well as on the offer of products on the market, in terms of product characteristics.

The active participation in substantiating development strategies depends on the attitude of other activities towards insurance the material activity, as well as on their own work. This participation is found in several areas and involves the development of their own strategies which must be integrated into the overall strategy of the company. They must develop their own strategies in areas such as [4]:

- developing strategies in terms of product

offered on the market;

- developing strategies to suppliers;
- developing strategies for communication (transmission of information);
- specific strategies in insurance, and especially specific labor market training on the material insurance ;
- creation of specific organizational structures that highlight the role and place that is given to the material insurance activities;
- creating business management systems to allow the performance assessment of competence, stimulating competition.

To carry out the mission of the club the microeconomic level must be ensured that relies on a financial management with diversified financial decisions. The financial decision requires an effort of thinking from managers with such responsibilities, to choose the best option for action in several ways [5]. In this regard there are two basic criteria that emphasize the most representative financial decisions of the private club type, namely:

- a) by the nature of the objectives pursued there are strategic, tactical and operational decisions - Table 1.

Table. 1 Classification of financial decisions by the nature of the objectives pursued [6]

Type of financial decision	Incidence	No. of necessary pieces of information	Taking the decision
Strategic	long term	Raised	slowly
Tactical	medium term	Limited	slowly
Operational	short term	Limited	Rapidly

b) by the nature of activities that can generate financial flows, they are classified in investment, financing and profit distribution decisions.

All these are relative to the objectives pursued by type the management of private clubs.

4. Conclusions and discussion

In conclusion, the insurance and the material management can be defined as a tool of the organization which aims, in the short term, at the ensuring of consumption, within terms of efficiency and maximum utility with the necessary material resources and on a long-term, at taking effective decisions on ensuring the necessary conditions, based on the analysis of the possibilities of providing the material.

The interest of population for both recreational and performance sport is closely linked to the provision and management of material

resources.

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THE SPECIALIZED LANGUAGE OF SPORT

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Abstract. In this paper we will examine the status of the language of sport and try to define this kind of language by referring it to two concepts, sociolect and register. The language of sport has a rich lexical productivity. In many works of linguists, lexicologists and lexicographers, was analyzed the terminology of sport. Year after year, the dictionaries were enriched by loans from other languages with new words created during training athletes. Sport has always been active, so it is normal that vocabulary is becoming richer. In high level competitions, athletes are from all countries on all continents. So language is formed continuously that athletes talk between them and borrows words from other languages. Vocabulary of sport is used by ordinary people in everyday life. Vocabulary is known about everyone advised and uninformed. Very rarely we may encounter a word in sports that do not understand it. Vocabulary of sport is known by very young children if they do sport for three or four years. Thus, the vocabulary of sport is accessible, it is nice hearing and is very useful for athletes. If we encourage children to do sports, we encourage them also to and learn a new and useful vocabulary. Sports help us all, and his vocabulary helps us.

Key words: *language of sport, vocabulary, terminology, taxonomy.*

Introduction

The language of sport is very close to the language of war and army. From the language of army and war, the language of sport borrows its vocabulary: captains, offensive, strategy, tactics, reply, marching. The language of sport is not used only by athletes. Some of the expressions of sport are commonly used in our vocabulary.

The specialized language of Sport

„When it comes to social varieties of language, there have always been terminological problems related to naming miscellaneous subsets of language and placing them within varietal taxonomies. However, we will look at how these two notions (sociolect and register) were defined and described by Anglo-Saxon and Polish linguists. In Anglo-Saxon sociolinguistic thought [1; 2; 3; 4] the term sociolect is often used interchangeably with social dialect (the latter form seems to be more commonly used and preferred). P. Trudgill defines it concisely as ‘a variety or lect which is thought of as being related to its speakers’ social background rather geographical background’ [4]. In other words, it is the language spoken by a particular social group, class or subculture, whose determinants include such parameters as gender, age, occupation, and possibly a few others.”[5]

„There are terms from the language of sports that are used individual or in expressions: runner slides, athlete, belt, clinics, string,

hook, snare, to shirking, dribble, dodge, lunge, foul, empty, handball, jockey, k.o., match ball, offside, a pear, ping-pong, pirouette, towel, record, record-man, half, ring, round, score, smash, sprinter, relay, tandem, trampoline, time-out, uppercut.”[6]

There are many specific terms for each sport:

- team sports: basketball, football, handball, volleyball
- combat sports: boxing, wrestling
- individual sports: athletics, gymnastics
- opposition sports: tennis
- winter sports: skating, skiing
- Water sports: swimming

What’s the best word in sports? There’s vigorous competition for the worst word in sports.

The language of sport can be considered a specialized language? He can raise doubts and questions at all levels that would be used. Typically, the language of sport can be used by any speaker. You do not have to be athletes to use a specialized language of sport.

„In his studies about the language of sport, Robert Galisson described this language as a field of experience professionalized, without mentioning if the lexical component of this language can be considered as terminology.”[7]

„Georges Duhamel says that sports professionals use a jargon almost untranslatable, full of words borrowed from

other languages without having any meaning in the language spoken by them.”[8]

„It cannot be denied that the vocabulary of sport has certain specificities, and with technical terms, also appear words with emotional character, metaphor, metonymy, circumlocutions. All this marks the expressiveness. Georges Petiot noted that the duty of lexicologists is to draw the border that separates the technical vocabulary of sports of the collateral vocabulary from where results.”[9]

„In terms of strict terminology, language has the meaning given by definition. However, simply using the denomination proves his normative power, the definitions wishing to be only descriptive, as in dictionaries, and then only if they belong to a domain of experience can gain a precise meaning. Therefore, only by analyzing the semantic content of the definitions of words in sports, we can check whether it is proper terminology if the terminology, we mean a conceptual ensemble specializing where the relationships can be expressed as hierarchies, networks or certain types of logical links.”[10]

„Despite its development at the end of the nineteenth century, the sport does not always benefit by the research of his vocabulary. In 1949, A. Dauzat in his paper «Où en sont les études de français» analyzed this language.

Sports vocabulary is used a lot. [11] Studying language of sport is not only a section of the terminology that enriches the general language, but it is also an area to explore when studying foreign languages.”[10]

„Grabias argue that the interdependence between language and society is more prominent in sociolects than in any other varieties of language. This is because a social group generates its own language (sociolect), and at the same time this language creates or strengthens the social group in question. To support this point, Grabias in 2001 [12] enumerates a few group forming functions of social dialects. First of all, a sociolect assigns prestige to a group. It is also an important identity marker as it helps to distinguish a particular group from others. Lastly, and perhaps mainly, a sociolect, like every language, provides tools for interpreting reality, and imposes on its users an image of the world by strengthening the values that a particular group holds dear. This function

comes to the fore especially in the languages of violent groups: a violent group creates a violent language, which in turn reinforces the behavioral patterns of the group”. [5]

„Grabias [12] also proposed a comprehensive taxonomy of Polish sociolects which is based on three controlling variables: professionalism, secrecy and expressiveness. He distinguished between:

1. sociolects that are primarily occupational – dominated by the referential function:

a) occupational varieties (uncoded) – profesolects, according to Wilkoń [13], in which language items are designed to convey thoughts in a precise and effective manner; the sociolects of hunters, soldiers or sailors,

b) jargons (intentionally coded) – varieties used by groups excluded from society at large, such as criminals or prisoners. Halliday [14] calls such varieties antilanguages, which reflect the value of antisocieties.

2. sociolects that are primarily expressive – dominated by the expressive function:

a) slang (intentionally uncoded), in which language items are designed to convey emotions or attitudes; students’ or teenage slang,

b) unintentionally coded varieties – created to experiment or play with language; children’s language”. [5]

Conclusions

„At first glance it seems that the terms sociolect and register refer to similar, if not the same,

subsets of language. What they definitely have in common is that they both could be subsumed under the heading of social varieties. However, at the same time these two notions accentuate different aspects of language. The concept of sociolect is strongly linked with specific social groups (people sharing the same occupation, hobby, or ideology in the case of subcultures). This language variety has validity only if members of a particular group identify with that group to such an extent that their language is regarded as one of the group identity markers. By contrast, a register is associated with a situation calling for the use of specific language. While registers can facilitate communication, help establish the feelings of rapport with other people, or even express the speaker’s identity, they relate primarily to

particular occasions rather than to specific social groups.”[5]

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