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CONTENTS

PHYSICAL EDUCATION SECTION

GANCIU Oana Maria

Physical education and sport in the University of Bucharest..... 8

GOZU Bogdan

Study regarding the motor proficiency age of the primary school students 13

GULAP Monica

Comparative study regarding the optimization of the physical training and the effort capacity of the female students, participating in the physical education courses at the University of Bucharest..... 17

OLĂNESCU Mihai-Adrian

Assessment of learning in physical education and sport lessons..... 26

SPORT SECTION

MOISE George Dan

Training and development of children's interest for the practice of tennis 31

NEDER Florina Liliana

Study on the players' athletic preparation junior handball IV (12-13 years) 36

OLTEANU Mircea – Ionuț, BONDOC-IONESCU Dragoș

Study about the impact of the free throw in basketball games ended at the difference no greater than 2 points during the 2018-2019 Romania's men's national basketball league season 44

ROZSNAY Radu Adrian, GROSU Vlad Teodor , TOADER Florian, CIOCOIU Vasile, GROSU Emilia Florina

Correlations between the indicators of motor qualities: speed and explosive force, with the use of micogate witty manager system technology, in football 50

KINETOTHERAPY SECTION

BUGHIRICĂ-GEORGESCU Magdalena

Application of kinetoprophylaxis by parents at the children with Scoliosis in special education 60

ȘUȚĂ Vicol Eduard, TĂTARU Tiberiu, VASILE Marinela, ȘUȚĂ Lizia Ioana

The ratio between height and body mass for 8th grade special need education pupils 66

VARIA SECTION

BUTURĂ George-Cosmin

Dance therapy – the psychotherapeutic use of movement to promote the emotional, social, cognitive and physical integration of the elderly 73

POPESCU Darius-Liviu

The essence and basic concepts of the recreation process in the daily life of citizens 80

ZAHARIA (BUTURĂ) Magdalena

Animal assisted therapy for inmates 84

PHYSICAL EDUCATION SECTION

PHYSICAL EDUCATION AND SPORT IN THE UNIVERSITY OF BUCHAREST

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Abstract.

Background. Physical education is an important component of education in general, along with the intellectual, aesthetic, technical and the moral parts of it. Moreover, it is a process of educating the physique with impact on not one but many aspects of personality formation of each individual.

Cucoş considers physical education as one of the "oldest forms of exertion of formative action", having in its composition a number of activities with a role in the development of the human being "by maintaining the harmony between the physical and the mental".

The general conference of UNESCO in Nairobi states that: "education, far from being limited to the period of schooling, must extend to all components and fields of knowledge, be acquired through various means and favour all forms of personality development. The educational processes in which they are employed, throughout their lives, in any form, children, young people and adults of all ages, must be considered as a whole."

Objectives. Physical education and sport are an inseparable part of the general education system, representing a necessity in ensuring the balance between intellectual and physical activity. In the conditions of an increasingly intense professional activity, the importance of physical education as a means of improving the regime of life, maintaining and increasing the working capacity of students during the study period, as well as the active resting regime, increases undoubtedly.

In non-profile higher education, the training of students should not become a purpose itself. The system of knowledge, skills and motor skills must have a practical, applicative value and find its use in the future profession. The content of the lessons must be reoriented according to the specific of the profession, thus ensuring the possibility of applying the knowledge acquired in the lesson in practice.

The purpose of physical education in higher education is to consolidate and maintain health, improve work capacity, improve motor skills and skills, develop intellectual, aesthetic, behavioral and moral traits, stimulate creativity, increase interest for independent practice of motor activities during spare time etc.

During student hood, the activities of physical education and sport have as main objective the continuous training and the self-training action of the future specialist.

The system of physical education and sport is regulated in Romania by the Law of physical education and sport. The institution that organizes the activity of sport- physical education in pre-university and university education is the Ministry of Education and Scientific Research.

The university has 18 faculties, whose students participate in the physical education and sports lessons during four semesters, with a total volume of 112 hours of applications, whose norms are done in groups, the distribution being one lesson of two hours per week. Due to the autonomy of the university, it can be said that there is no unitary line and a common program at the faculty level, especially at the non-profile ones, as there is no well-defined status.

Conclusion. There is an increased interest expressed especially by students and less by the management factors, for the improvement and promotion of this discipline, as an efficient and accessible means of training and educating young people.

It is necessary to carry out complex national programs for young people, which aim to stimulate interest and to create the habit of systematically and continuously practice of physical exercises in order to integrate more quickly into social life.

Keywords: physical education, sports, students

Introduction

Physical education is an important component of education in general, along with the intellectual, aesthetic, technical and the moral parts of it. Moreover, it is a process of educating the physique with impact on not one but many aspects of personality formation of each individual.

Cucoş considers physical education as one of the "oldest forms of exertion of formative action", having in its composition a number of activities with a role in the development of the human being "by maintaining the harmony between the physical and the mental".

The general conference of UNESCO in Nairobi states that: "education, far from being limited to the period of schooling, must extend to all components and fields of knowledge, be acquired through various means and favor all forms of personality development. The educational processes in which they are employed, throughout their lives, in any form, children, young people and adults of all ages, must be considered as a whole."

Physical education and sport are an inseparable part of the general education system, representing a necessity in ensuring the balance between intellectual and physical activity. In the conditions of an increasingly intense professional activity, the importance of physical education as a means of improving the regime of life, maintaining and increasing the working capacity of students during the study period, as well as the active resting regime, increases undoubtedly.

At the same time, the means used in physical education ensure general and specific physical training, in relation to the conditions of the future profession skills are developed with a wide applicability and a special practical value, thus ensuring future specialists the opportunity to adapt to the conditions of work imposed by the chosen profession, arming them with skills, abilities and knowledge, which they can use in independent activity.

Physical education is the process of training and development of motor skills and abilities, optimization of motor qualities, which positively influences the development of intellectual qualities, because the practice of physical exercise requires attention, thinking, memory and imagination; In the practical activity, young people solve complex actions, thus contributing to the formation of their personality.

Integrated in the general education with a deep prospective character, the physical education brings its contribution through its specific content, to the realization of the educational and the social ideal, of the formation of a multilateral personality. (Cârstea, Gh., 2000)

Issues addressed

Physical education is an important aspect of education, which is found in formal education, for a long time, from kindergarten to pre-university education and then to university compared to other educational disciplines.

Physical education lessons in higher education have a major contribution in maintaining health, in the positive evolution of general and specific motor skills required by subsequent professional activity, in compensating for increased intellectual effort, generated by taking exams, and achieving the necessary recreation. and playing their favorite sport.

Due to its permanent and formative character, physical education is, in the opinion of specialists in the field of physical and sports education, a systematized process, with a role in the physical and mental development of students, in accordance with:

- Age peculiarities;
- Maintaining health;
- The specific requirements of the professions for which the young people opted;
- The level of social integration; (Cârstea, G., 2000, p. 21)

In non-profile higher education, the training of students should not become a purpose itself. The system of knowledge, skills and motor skills must have a practical, applicative value and find its use in the future profession. The content of the lessons must be reoriented according to the specific of the profession, thus ensuring the possibility of applying the knowledge acquired in the lesson in practice.

The purpose of physical education in higher education is to consolidate and maintain health, improve work capacity, improve motor skills and skills, develop intellectual, aesthetic, behavioral and moral traits, stimulate creativity, increase interest for independent practice of motor activities during spare time etc.

During the student stage, the main purpose of the physical education and sports activities is the continuous training as well as the self-training action of the future specialist.

Physical education in non-profile higher education is an instructive-educational process that has ideal, objectives, functions and principles, specific to the field.

The specific tasks that physical education in higher education is called upon to solve give it, along with other scientific disciplines, an important place in the complex and complete training of future specialists. (Netolitzchi, M., 2009).

The physical education and sports system is regulated in Romania by the Law on physical education and sports and put into practice by the existence of a specific organizational structure, designed to operate from the national level to the school unit level. The institution that organizes the activity of sports physical education in pre-university and university education is the Ministry of Education and Scientific Research.

The decision of September 13, 2001 for the approval of the Regulation for the implementation of the provisions of the Law on physical education and sports no. 69/2000, contains provisions related to physical education and school, university and military sports, with the following specifications:

Art. 3. - Physical education in universities is the educational discipline with the weekly frequency provided in the curricula over the number of hours allocated on profiles, during 4 semesters, optionally on sports branch or sports groups.” The decision of 13 September 2001 implementing the provisions of the Law on physical education and sports no. 69/2000, la cap.2, p.3, 4

So, the number of hours allocated to universities is suddenly low from pre-university level, where they are allocated 3 hours per week.

In non-profile faculties, although this curriculum is introduced in the complementary disciplines that are part of the compulsory disciplines along with the fundamental and specialized ones, due to unclear documents, each faculty interprets as it pleases the obligatory or optional regime of this educational discipline.

Curricular Area Physical Education and Sports at the University of Bucharest

The University of Bucharest has also undergone transformations that have had repercussions at the level of the physical education and sports department. , starting with the year 2002-2003, according to the decision of the Senate at the end of the academic year, students are given grades (admitted-rejected) as well as credits that are granted additionally, but there were also faculties that preferred the verification system with grades (Faculty of Foreign Languages, Geography, Mate - Info, Geography, Psychology, Theology)

The university has 18 faculties, whose students participate in the physical education and sports lessons during four semesters, with a total volume of 112 hours of applications, whose norms are done in groups, the distribution being one lesson of two hours per week.

Of these faculties, Public Administration, Business Administration, History, Marketing, Foreign Languages, Mathematics and Physics have compulsory physical education and sports, at the other faculties this is carried out on an optional basis.

In some faculties the evaluation is done by awarding grades, and in other faculties are provided ‘admitted / rejected qualifier.

It is also found that the number of students participating in these courses has not increased progressively with the number of integrated faculties over the years within the University. This leads us to believe that this way of organizing the physical education system is not one of the most effective.

Due to the autonomy of the university, it can be said that there is no unitary line and a common program at the faculty level, especially at the non-profile ones, as there is no well-defined status. (Decision of September 13, 2001 implementing the provisions of the Law on physical education and sport no. 69/2000).

In the academic year 2019-2020, 5137 students enrolled in the subject of Physical Education. Of these, 1282 chose the discipline Fitness-bodybuilding; on the 2nd place being the self-defense and aerobic gymnastics with 427 and 425 students respectively, and on the 3rd place table tennis and sports dance with 343 students.

Followed by football with 311, badminton with 292, chess with 282, mountain sports with 221, swimming with 218, medical gymnastics 205, basketball 191, tennis 169, volleyball 166, handball 81, folk dance 72, karate 36, judo 24 and activities nautical 13.

Physical education is also a bilateral process where under the guidance of the specialist, students are systematically and continuously subjected to influences, which coincide with the objectives of education in general and the objectives for each stage in terms of improving cognitive, motor and emotional capacity, because

both the training and the preparation of the young generation cannot be conceived in the absence of physical education.

Physical education is organized as:

- instructive and educational process;
- independent activity.

Physical education has both a pronounced formative and competitive character.

The content elements of the other sides of education contribute to the fulfilment of the educational function of physical education. These elements are of an intellectual, moral, technical or aesthetic nature and are, in turn, strongly influenced by the practice of physical exercises.

Specialists in the field believe that physical education activities in the university environment should primarily pursue the ideal of physical education, which is the healthy man both physically and mentally, with a correct and harmonious physical development, with skills and motor skills developed multilaterally. It is necessary for students to master a "baggage" of theoretical knowledge on the benefits of practicing physical activities, which allows them to use their leisure time in a useful and enjoyable way, thus acting on a healthy lifestyle (Stoica, A., 2004).

The objectives of physical education

For non-profile higher education, Stoica A. highlights the following objectives (Stoica A., 2004, p. 62-63):

- Forming a healthy lifestyle by practicing outdoor physical exercises, invigorating tourist activities;
- Maintaining health and increasing the ability to adapt to various environmental conditions;
- Development of team and competitive spirit, aiming at the integration of young students in society;
- Independent and continuous practice of physical exercise or a sport;
- Integration of EF specific knowledge and techniques in actions to optimize physical development and individual motor capacity etc.

In the presentation of the objectives of physical education and sports, we notice that there are also objectives related to the role of physical education in optimizing the quality of life, by forming a healthy lifestyle, due to the practice of motor activities.

In non-profile higher education, the activity of physical education and sports is carried out differently, from one university to another. In principle, physical education is found in the curricula, in compulsory or optional regime as follows: in the first years of study, respectively years I and II, 2 hours / week of physical education and sports are provided, to which are added 2 hours / week for the preparation of the representative teams, on different sports branches and the organization of some sports competitions within the university championship.

The systematic involvement of the subjects in these practical activities will lead to the education of some personality traits that will then manifest in other fields.

In non-profile higher education, the training of students should not be transformed into a goal in itself, the system of knowledge, skills, motor skills must have a practical, applied value and find its use in the future profession. The content of the lessons must be reoriented according to the specifics of the profession, thus ensuring the possibility of applying in practice the knowledge acquired in the lesson. The teacher must carry out the physical education activity taking into account the requests to which the future specialist will be subjected. Harmonious physical development and improvement of motor skills must be done in accordance with the needs of future professional activity. (Colectiv DEFS, 2012)

Conclusions

There is an increased interest expressed especially by students and less by the management factors, for the improvement and promotion of this discipline, as an efficient and accessible means of training and educating young people.

In other countries such as France or Sweden, physical education is considered an act of culture, which aims to develop the motor skills and mental qualities of the future citizen. Students are provided with conditions to

participate in physical education and sports classes, to maintain or improve their health, to initiate and improve in a branch of sport.

It is necessary to carry out complex national programs for young people, which aim to stimulate interest, create the habit of systematically, and continuously practice of physical exercises in order to integrate more quickly into social life.

There is a need for a general change in the social mentality of sport. Combining the forces of governmental and non-governmental bodies in creating material conditions to ensure every young person the opportunity to move and play sports.

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STUDY REGARDING THE MOTOR PROFICIENCY AGE OF THE PRIMARY SCHOOL STUDENTS

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Abstract

Background. In the primary school cycle, physical education and sports plays an important role in the development of the child's personality. From the point of view of its special objectives, psychomotricity offers the child both the details and the frame favorable to the development and the improvement of a system of acquirements, by means of which he can act in an efficient way and adapt in optimal conditions to the request imposed by the environment in which he develops his activity. This elicits from the point of view of those involved in a direct and indirect way in the instructional-educational process the comprehension of the internal mechanisms which lie at the basis of the psychomotor phenomenon and the identification of the main evaluation modalities of its different components, in a certain moment, in order to emphasize the possible deviations from a child's normal ontogenetic development.

A correct and specific approach of all the psychomotor components that takes into account both the age and the objectives of the instruction already established, will be reflected at the level of the child's behavior by getting some essential acquisitions, which will form the premises of his development to a superior stage and the acquirement of new behaviors.

Purpose. Using a part of the Bruininks-Oseretsky Test – Second Edition, the main goal of this study was to analyze a possible difference between motor proficiency age and chronological age of the subjects, in the Upper-Limb Coordination subtest.

Methods. Regarding the methods, 40 subjects, male and female primary school students, coming from urban and rural areas, were selected to participate in this research experiment.

Results. The average motor proficiency age for the Upper-Limb Coordination subtest is 10 years and 5 months. The average chronological age of 9 years and 3 months is lower than the average motor proficiency age by 1 year and 2 months. The standard deviation and the coefficient of variation indicate a nonhomogeneous structure of the lot in relation to the motor proficiency age. The effect size index of Cohen indicates that the differences between the two ages are medium towards high. The verification of the statistical hypothesis through the dependent t-Test indicates a statistically significant difference of means ($P=0.002$ is smaller than 0.05).

Conclusion. Besides the outline of an objective image regarding the psychomotor development of the students in the primary school cycle, at the level of the evaluated aspects, the analysis of the results of this experiment constitutes an essential feed-back in the design and monitoring of the training programs specific to the educational process.

Keywords: psychomotor development, primary school students, upper-limb coordination

Introduction

In the primary school cycle, physical education and sports plays an important role in the development of the child's personality. From the point of view of its special objectives, psychomotricity offers the child both the details and the frame favorable to the development and the improvement of a system of acquirements, by means of which he can act in an efficient way and adapt in optimal conditions to the request imposed by the environment in which he develops his activity. This elicits from the point of view of those involved in a direct and indirect way in the instructional-educational process the comprehension of the internal mechanisms which lie at the basis of the psychomotor phenomenon and the identification of the main evaluation modalities of its different components, in a certain moment, in order to emphasize the possible deviations from a child's normal ontogenetic development.

A correct and specific approach of all the psychomotor components that takes into account both the age and the objectives of the instruction already established, will be reflected at the level of the child's behavior by getting some essential acquisitions, which will form the premises of his development to a superior stage and the acquirement of new behaviors.

Purpose:

Due to the large scale use of the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition for testing of different psychomotor components or the entire psychomotor capacity led to its recognition as one of the most important and valid evaluation instruments. Using a part of the Bruininks-Oseretsky Test – Second Edition, the main goal of this study was to analyze a possible difference between motor proficiency age and chronological age of the subjects, in the Upper-Limb Coordination subtest.

Hypothesis:

The results obtained from the assessment of primary school students through the Bruininks-Oseretsky Test – Second Edition will reveal significant differences between motor proficiency age and chronological age of the subjects, in the Upper-Limb Coordination subtest.

Methods:

For the research, part of the author's doctoral thesis, a number of 40 subjects were selected (20 boys and 20 girls), 1st up to 4th grade students, coming from urban and rural areas alike. Regarding the urban area, of the 20 selected subjects, 15 were students from David Praporgescu 113 Elementary School, while the remaining 5 belonged to 162 Elementary School. In the rural area, the subjects were students of Simion Bărnuțiu Elementary School from the village of Tiur, Alba County.

As an assessment tool, we used the improved version of the Bruininks-Oseretsky Test (BOT-2), a series of tests administered individually, with very precise and well-targeted objectives, which aim at evaluating a large range of motor skills, on subjects between the ages of 4 and 21. This test was conceived to be used, among others, by kinesiotherapists, psychologists, sports teachers, coaches and it seeks to offer them an efficient instrument for measuring fine and gross motor skills. BOT-2 evaluates abilities from four different motor areas:

- Fine Manual Coordination/ Fine Manual Control: Subtest 1 – Fine Motor Precision; Subtest 2 – Fine Motor Integration;
- Manual Coordination: Subtest 3 – Manual Dexterity; Subtest 7 – Upper Limb Coordination;
- Body Coordination (General): Subtest 4- Bilateral Coordination; Subtest 5 – Balance;
- Strength and Agility: Subtest 6 – Running Speed and Agility; Subtest 8 – Strength.

For this research, from the total of eight subtests specific to the motor areas described above, we opted for the Upper-Limb Coordination subtest, which involve the following items:

Item 1: Dropping and Catching a Ball – Both Hands

Item 2: Catching a Tossed Ball – Both Hands

Item 3: Dropping and Catching a Ball – Both Hands

Item 4: Catching a Tossed Ball – One Hand

Item 5: Dribbling a Ball – One Hand

Item 6: Dribbling a Ball – Alternating Hands

Item 7: Throwing a Ball at a Target

Results:

Statistical processing of the research results was accomplished using the BOT-2 ASSISTTM, Scoring and Reporting System (software belonging to the Bruininks-Oseretsky Test, Second Edition) and EXCEL 2003 Software of Microsoft Company. The BOT-2 ASSISTTM converts total scores obtained by subjects after applying the Bruininks-Oseretsky Test, Second Edition into derived scores, which shows a common significance in terms of their interpretation from a subtest to another and from one age group to the other.

As part of our scientific approach, interpretation of the results was based on scale score, which tells how far an examinees' point score is from the mean point score of examinees of the same age, taking into account the standard deviation of point scores in the population sampled.

Table 1: *Statistical interpretation of the results obtained by the students on the Upper-Limb Coordination subtest:*

Upper-Limb Coordination Subtest		
Statistical indicators		
	Chronological Age	Motor Proficiency Age
Arithmetic mean	9.22	10.44
Median	9.42	9.83
Standard deviation	1.21	2.64
Maximum value	11.42	19.00
Minimum value	7.08	6.83
Amplitude	4.33	12.17
Coefficient of variation (%)	13.1%	25.2%
Difference of means	-	1.219
Effect size (Cohen)	-	0.53
<i>Dependent T Test</i>		
T critical		2.02
Degrees of freedom between the groups		39
-df		
<i>T Test (Student)</i>		
T calculated		3.37
P		0.002

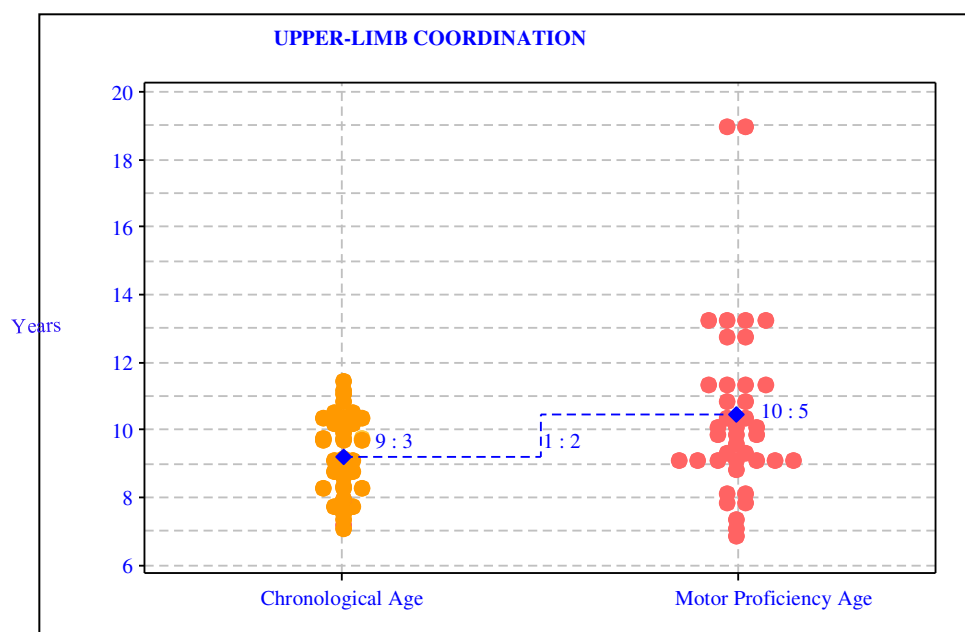


Fig.1: Individual Value Plot of Chronological and Motor Proficiency Age for Upper-Limb Coordination subtest

Conclusions

Psychomotricity represents a fundamental psychobehavioral component with an extremely high influence over the ontogenetic development of the individual. Of major importance for the physical education field and not only, it offers the child, through a systematic and correct approach of its inner components, a favorable climate for an efficient adjustment to the requirements of the social and school environments.

The values for the Upper-Limb Coordination subtest were measured for 40 subjects. The average motor proficiency age for Upper-Limb Coordination is 10 years and 5 months. The average chronological age of 9 years and 3 months is lower than the average motor proficiency age by 1 year and 2 months. The standard deviation and the coefficient of variation indicate a nonhomogeneous structure of the lot in relation to the motor proficiency age. The effect size index of Cohen indicates that the differences between the two ages are medium towards high. The verification of the statistical hypothesis through the dependent T Test indicates a statistically significant difference of means, $P=0.002$ being smaller than 0.05. Thus, we reject the null hypothesis and accept the alternative hypothesis.

Besides the outline of an objective image regarding the psychomotor development of the students in the primary school cycle, at the level of the evaluated aspects, the analysis of the results of this experiment constitutes an essential feed-back in the design and monitoring of the training programs specific to the educational process.

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COMPARATIVE STUDY REGARDING THE OPTIMIZATION OF THE PHYSICAL TRAINING AND THE EFFORT CAPACITY OF THE FEMALE STUDENTS, PARTICIPATING IN THE PHYSICAL EDUCATION COURSES AT THE UNIVERSITY OF BUCHAREST

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Abstract.

In the paradigm of the modern pedagogy, a "physically educated" person is a person: with a good physical condition, aware of the importance of practicing physical exercise in order to maintain and strengthen health, keen to move and who enjoys the physical effort, which promotes an active, dynamic, healthy and balanced life style as a social value, which develops social relations.¹

Starting from this premise, we propose in this paper to identify the extent to which the objectives of physical education in higher education, related to physical, somatic and functional parameters, are achieved through the participation of female students in aerobics, fitness, volleyball and table tennis courses.

The hypothesis of our experimental approach: The means specific to each sports discipline listed above, used in the physical education lessons with the female students in the higher education, will influence differently the level of the physical training and the somatic and functional parameters of them, some of the sports being more efficient in this regard.

The research methods used: the analysis of the specialized literature, the pedagogical observation, the method of the tests, the pedagogical experiment, the statistical method of data processing and the graphical method of presenting the results.

Subjects: In our study, were involved 80 students from first year enrolled in aerobics, fitness, volleyball and table tennis courses, 20 for each sports discipline mentioned.

Results: We recorded the results aimed at the somatic, motor and functional evaluation both at the beginning of the academic year 2018-2019 and at the end of it, after completing the specific programs of the four sport disciplines.

Conclusions: The sports disciplines included in our experimental study had different effects at the level of the investigated parameters, the specific means of aerobics having by far the most significant contributions to the somatic and functional progress that the girls, in general, and the students of our sample in particular, wish from a motor activity.

Keywords: students, physical education, aerobics, fitness, volleyball, table tennis

Introduction

In the paradigm of the modern pedagogy, a "physically educated" person is a person: with a good physical condition, aware of the importance of practicing physical exercise in order to maintain and strengthen health, keen to move and who enjoys the physical effort, which promotes an active, dynamic, healthy and balanced life style as a social value, which develops social relations.

At the University of Bucharest, within the physical education lessons, students can choose one of the many sports disciplines included in the educational offer: aerobic gymnastics, dance sport, fitness, folk dance, karate, self-defense, football, basketball, volleyball, handball, badminton, tennis, table tennis.

All the sports disciplines included in the DEFS educational curricula aim to fulfill the general objectives of physical education regarding the general and the specific motricity, the harmonious physical development, the baggage of technical-tactical skills, the effort capacity etc.

Over the years, through various surveys that we have carried out among the students who have enrolled in the physical education course, we have tried to identify what are their motivations underlying the participation in a motor activity. The opinions ranged from satisfying the need for movement, to the desire to improve their

¹ Stoicoviciu, A., (2009) – Probleme actuale ale educației fizice în învățământul superior de neprofil, Editura Universității din București, București, pag. 15.

physical appearance, to enrich their technical repertoire, as well as their motor luggage, to the desire to increase their effort capacity, to the need for socialization, etc.

The research organization

The purpose of the paper

The idea of this study started from the curiosity to identify at the girls participating in the aerobics, fitness, volleyball and table tennis courses, the extent to which the somatic, motor and functional objectives are met through the specific contents of the mentioned sports disciplines.

We also aim to disseminate the results of this study in the sense that, in the future, students will be guided to practice those sporting disciplines that satisfy their main sporting needs, which should be in my view the main criterion for choosing a sport. sports disciplines.

The research objectives

To achieve the proposed goal, the following research objectives were set:

- Establishing the research sample –80 students, 20 in each of the 4 sports disciplines;
- The initial evaluation of somatic, motor and functional parameters;
- Carrying on the programs of aerobic gymnastics, fitness, volleyball and table tennis;
- The final evaluation;
- Analyzing and interpreting the results.

The hypothesis of the research

The means specific to each sports discipline listed above, used in the physical education lessons with the female students in the higher education, will influence differently the level of the physical training and the somatic and functional parameters of them, some of the sports being more efficient in this regard.

The research stages

The initial testing took place at the beginning of the academic year 2018-2019, during the week 1-5 October, being evaluated a series of somatic, motor and functional parameters. During the academic year, the subjects of our research participated once a week in the chosen courses, acting on them with the specific means.

The final testing took place in May 2018, at the end of the academic year, to highlight the changes recorded at the level of the measured parameters.

The Subjects and the place of the research

To conduct the experiment, the sample was composed of 80 UB students (girls), year I, aged 18-21 years, enrolled in aerobics, fitness, volleyball and table tennis classes.

The research methods

In our approach we used the following research methods:

- The study of the specialized literature;
- The statistical-mathematical method;
- The graphical method;
- The tests method:
 - For the evaluation of somatic parameters: BMI calculation, waist perimeter measurement and thigh perimeter measurement;
 - For the evaluation of the motor parameters: push-ups, trunk crunches / 30 s, long jump, mobility test, speed evaluation test.
 - For evaluation of functional parameters: heart rate measurement, Harvard test, Ruffier test

All courses last 90 minutes, during which the motor density varies, depending on the characteristics of each sport discipline.

The aerobics lessons are held on a continuous musical background, which establishes the rhythm and tempo of the work, and also gives a feeling of good disposition and attractiveness. The form of exercise is the global one, with no "dead times", the intensity of the exercises can be gradually graded, and the main muscle groups are engaged in action one at a time.

In sports games, volleyball and table tennis, the physical component is approached globally, by the whole group, but the technical-tactical topics involve the practice in pairs, which leads to the decrease of the motor density at certain moments of the lesson.

Within the fitness lessons the students are working in circuit, 3 sets x 30 seconds on each device, 2 girls on each device.

Results

The Somatic/morphological evaluation

Table 1. *The Dynamics of the somatic parameters*

Tests	Aerobics		Fitness		Volleyball		Table tennis	
	I.T.	F.T	I.T.	F.T	I.T.	F.T	I.T.	F.T
	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}
BMI	21.57	20.15	21.75	20.51	21.55	21.42	21.54	21.47
Waste perimeter (cm)	66.5	62.2	66	64.8	65.8	65.4	66.1	65.9
Thigh perimeter (cm)	53	52	53.1	52.3	53.2	53	53.1	53

In order to determine the somatic/morphological level of the students participating in our study, we calculated the body mass index and we measured the perimeter of the waist and the thigh. (table no. 1)

Regarding the body mass index, the differences between the initial and the final tests are statistically significant for the girls participating in the aerobics, fitness and volleyball courses, because the statistical t is greater than the tabular one, for $p < 0.05$. The students participating in the table tennis lessons also recorded differences between the two tests, but by calculating the significance test it was shown that they are not significant.

The changes in the values of this index are accounted for by the fluctuations in weight, because the height no longer supports changes at this age in the case of girls. Consequently, we can say that the systematic practice of aerobics, fitness and volleyball lessons by the subjects of our research has positively influenced this parameter, weight, and implicitly the body mass index.

Regarding the perimeter of the waist and thigh, as shown in table no. 1, there are differences between the values recorded in the 2 tests, for the students participating in all sports, but by calculating the significance test it was shown that only the girls who accessed the gymnastics and fitness classes obtained statistical significance results. Thus, we can say that the specific means of these sports disciplines have positive effects on these parameters, which are so important for girls in terms of aesthetic.

The graphical presentation of the somatic/morphological parameters are shown in figure no. 1, figure no. 2 and figure no. 3.

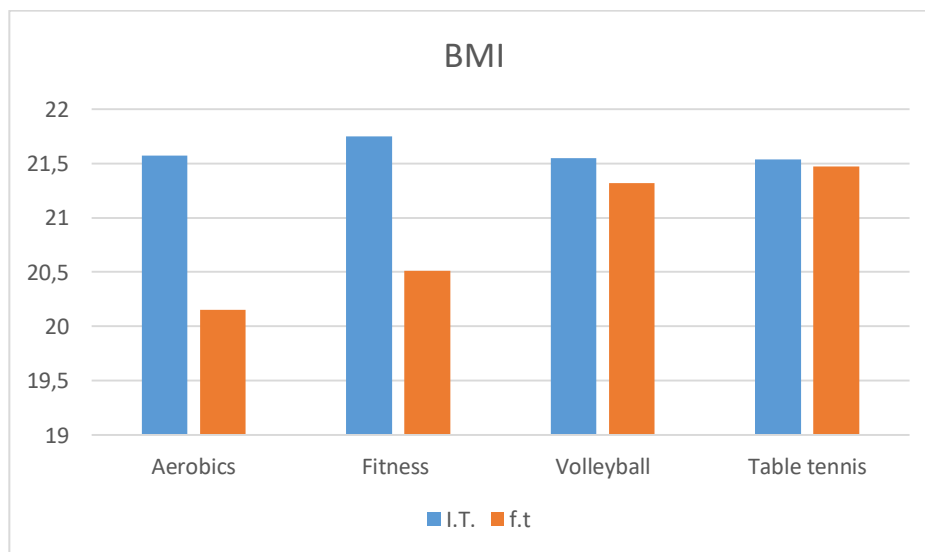


Fig. 1 – The average values of BMI

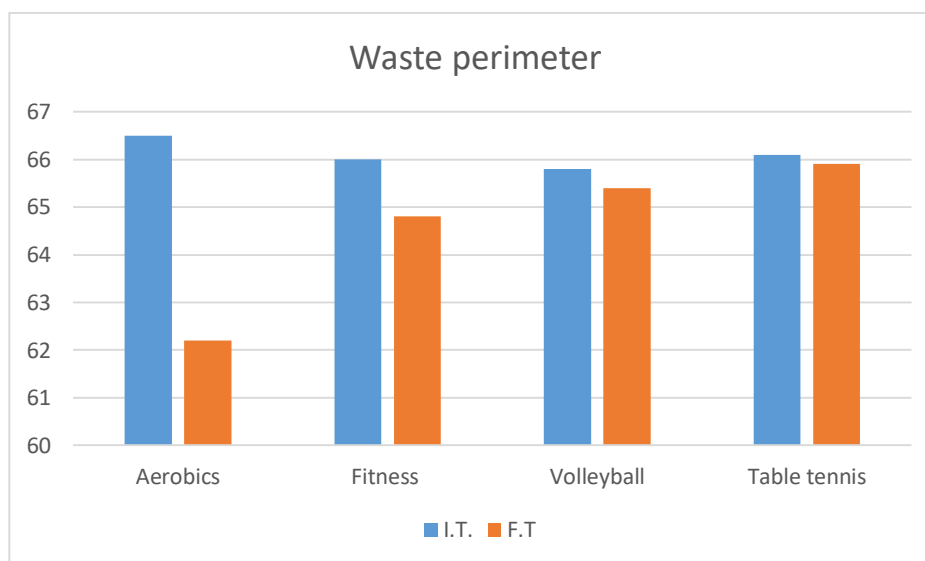


Fig. 2 – The average values of waste perimeter

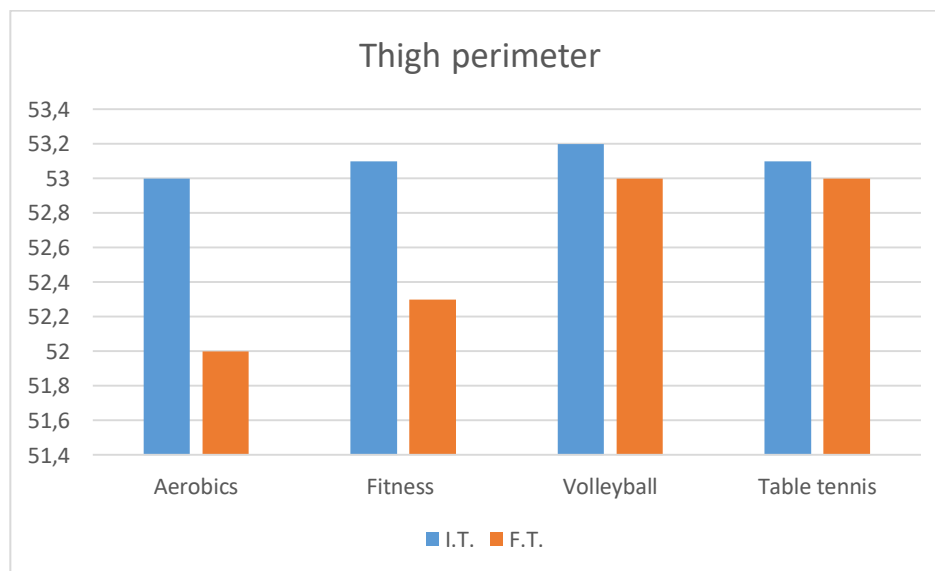


Fig. 3 – The average values of thigh perimeter

The functional evaluation

Table 2. The Dynamics of the somatic parameters

Tests	Aerobics		Fitness		Volleyball		Table tennis	
	I.T.	F.T	I.T.	F.T	I.T.	F.T	I.T.	F.T
	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}
Heart rate(beans/min)	73.05	70.3	74	72.5	73.2	72.9	73.1	72.9
Ruffier Test	11.3	9.6	11.2	10	11.3	10.9	11.4	11
Harvard Test (HI)	65.12	67.1	64.9	65.6	65	67.1	64.8	65.7

One of the objectives of physical education is the harmony between morphological and functional indices.

Thus, to determine the adaptation of the body to the effort by participating in the physical education courses, we measured the level of functional indices, through the following tests: heart rate measurement, Ruffier test and Harvard test.

As shown in table no. 2, the differences between the heart rate averages between the initial and the final testing exist for all the research subjects, but by calculating the significance test, it turns out that only the girls who participated in aerobic and fitness classes achieved statistically significant results. The same situation can be found in the case of the Ruffier index. We can come to the conclusion that the action systems specific to these sports disciplines are more effective for the increasing the adaptation to effort, compared to the specific content of volleyball and table tennis, in the case of girls.

In the case of the Harvard test, the return of the heart rate, following a submaximal effort, represents an indicator of the physical condition of the students included in our experiment. Analyzing the differences between the average values of the Harvard index between the two tests and by calculating the significance test, we observe that only for the girls participating in the aerobics course and those of the volleyball, the statistical t is greater than the tabular t at a significance threshold $p < 0.05$, which confirms the hypothesis that the results have statistical representativeness, which demonstrates the efficiency of the specific training.

The graphical presentation of the somatic/morphological parameters are shown in figure no. 4, figure no. 5 and figure no. 6.

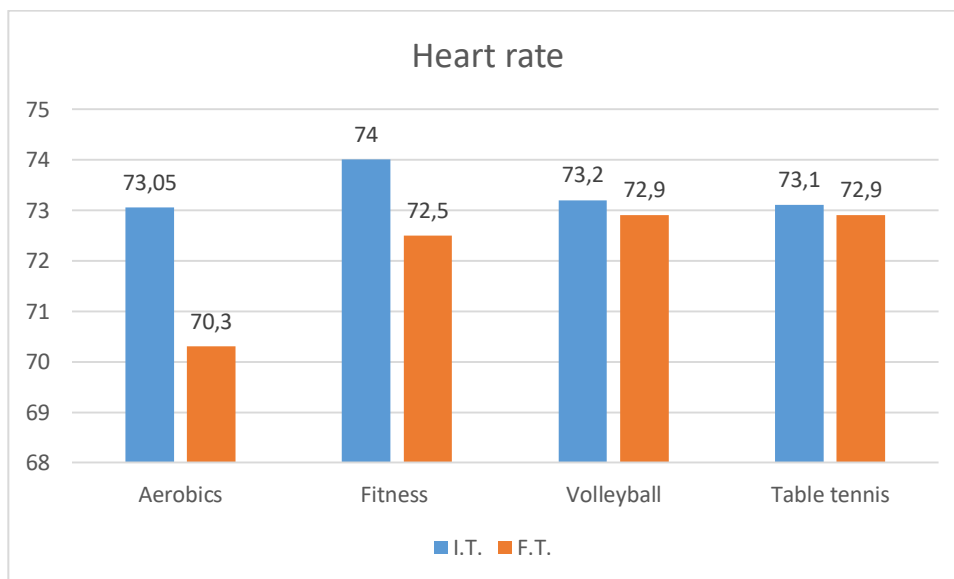


Fig. 4 – The average values of the heart rate

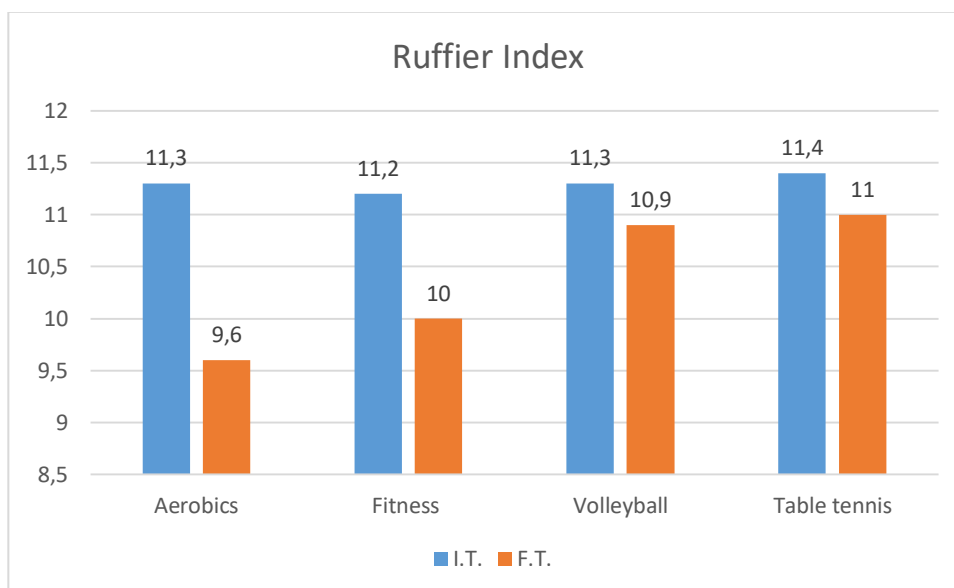


Fig. 5 – The average values of the Ruffier Index

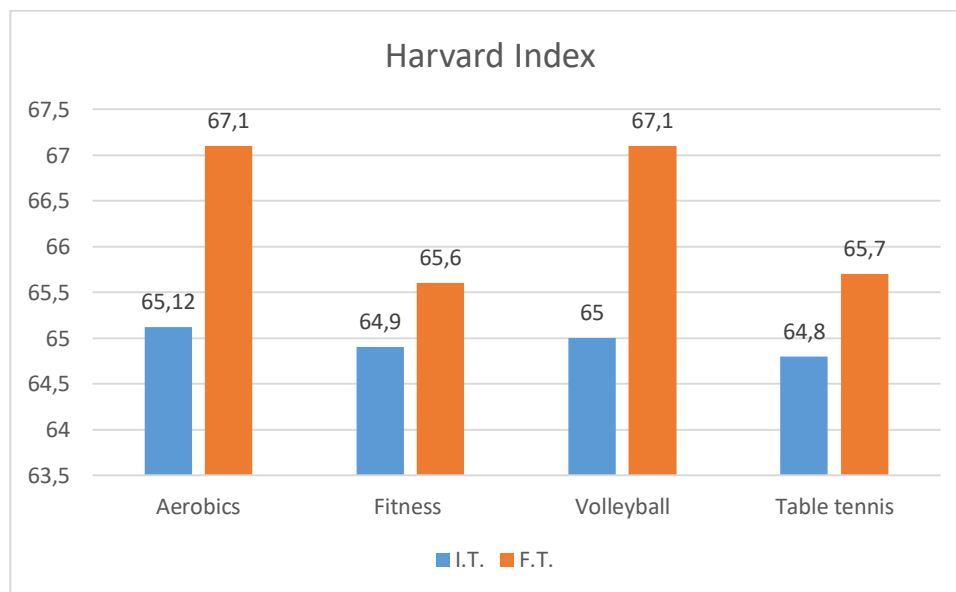


Fig. 6 – The average values of the Harvard Index

The evaluation of the general motricity

Table 3. The Dynamics of the motor parameters

Tests	Aerobics		Fitness		Volleyball		Table tennis	
	I.T.	F.T.	I.T.	F.T.	I.T.	F.T.	I.T.	F.T.
	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}	\bar{X}
Push ups	9.90	10.75	9.7	10.8	9.83	10.15	9.8	10.1
Crunches (rep./30s)	18.3	20	18.3	19.9	18.2	18.7	18.1	18.6
Long jump (cm)	170	175.2	171	175	172	180	171	179
Mobility (cm)	3.83	5.71	3.70	4.20	3.8	4.3	3.75	4.25
Speed– 50 m (m/s)	8.3	8.1	8.1	8.0	8.2	7.7	8.2	8.0

To perform this type of evaluation we used 6 tests of general motricity: push-ups, crunches/30 seconds, long jump, mobility, running speed / 50m.

In the table no. 3 are presented the arithmetic means of the values recorded by the students participating in our study, both at the initial and the final tests, at the tests of general motricity.

By calculating the differences between these values, as well as the significance test t, it is found that statistically significant results were obtained for the push-ups, the crunches, the mobility - at the aerobics and fitness lessons, the speed was significantly improved in the case of students participating in the volleyball courses, the explosive force in the lower limbs has made significant progress in the subjects participating in the table tennis and volleyball courses.

In other words, each component of the general motricity mentioned above has undergone obvious and significant improvements through the efficient use of the action means specific to the related sports disciplines.

The graphical presentation of some of the motor parameters are shown in figure no. 7 and figure no. 8.

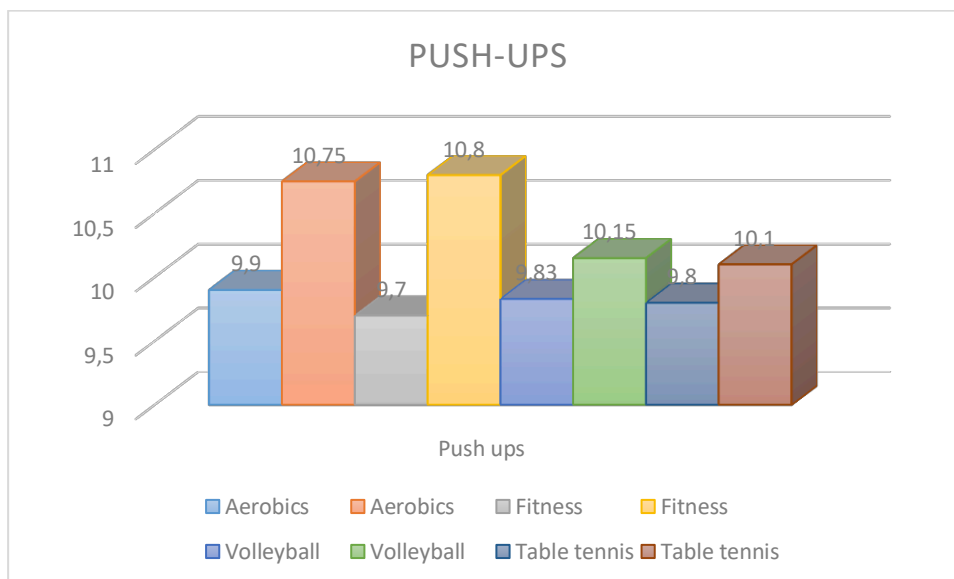


Fig. 7 – The average values of the push-ups

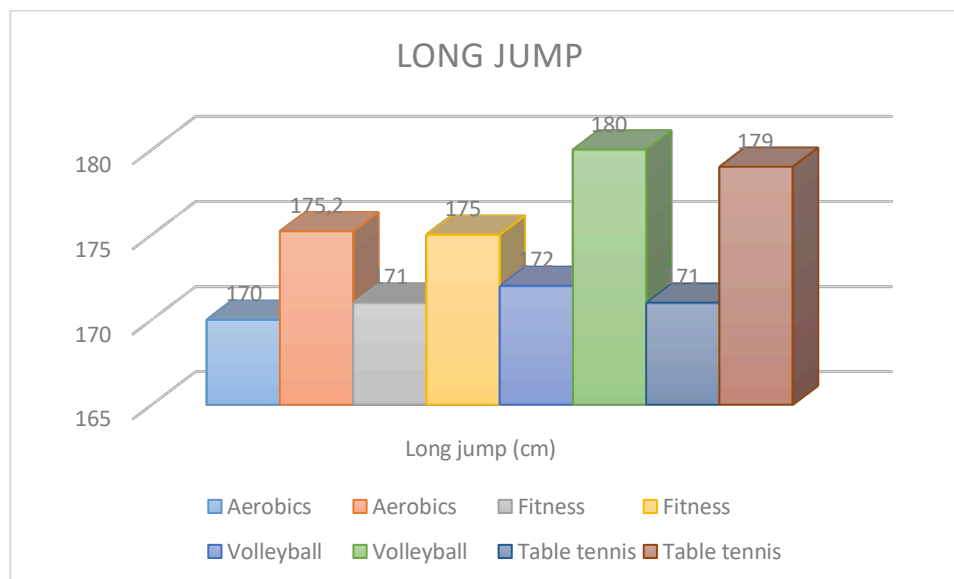


Fig. 8 – The average values of the Long jump

Conclusions

Regarding the dynamics of somatic/morphological indices, all the subjects of our approach registered progress during the training year, but it was proved that the representative results were obtained by the participants in the aerobics and fitness lessons. Therefore, it has been demonstrated statistically that through the content of these sports disciplines, the somatic parameters that interest girls to a large extent, can be positively influenced.

The functional adaptation of the body to the effort had significant improvements for girls who practiced aerobics and fitness, a good physical condition recording at the end of the training period, according to the results of the Harvard test, also the girls practicing volleyball.

The general motricity parameters were influenced differently by the four sports disciplines used in our experiment. Thus, the strength of the upper limbs and the trunk, as well as the mobility, have obviously

improved by participating in aerobics and fitness lessons. The operational structures specific to volleyball and table tennis have led to significant progress in the strength of the lower limbs, while the speed of the girls participating in the volleyball course has improved.

We consider it appropriate to disseminate the results of our study among students who enroll in physical education courses at the University of Bucharest, so that their choice will be made according to what expectations they have by participating in such an activity.

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ASSESSMENT FOR LEARNING IN PHYSICAL EDUCATION AND SPORT LESSONS

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Abstract

The study focuses on clarifying the terms and purposes of assessment for learning in Physical Education and Sport lessons and how we can use them to support the progress of our students, provides examples of different types of assessment for learning in physical education and explains why teachers should include them as part of their instruction.

This article describes the most used forms of assessment in physical education and emphasizes the importance of using them in both physical activity and physical fitness for promoting physical activity. Effective evaluation practices are needed to optimize the effectiveness of physical education programming. Assessment for learning is an essential part of education as it defines whether or not the objectives of teaching are being met, assessment affects decisions about grades and educational needs of students. Assessment for learning involves using it, as part of teaching and learning, in ways that will raise the student's achievement.

Assessments are the tool that physical educators use to measure the skills and fitness levels their students learn and achieve in the Physical Education class. They help to show yourself and others that your students are learning and becoming more physically fit as a result of being in your class. Assessment is very important in Physical Education as it provides information on strengths, weaknesses and educational requirements, it gives students the opportunity to demonstrate what they know and are capable to do, determines student progress and motivates them to improve their performance, informs future planning and teaching and judges which aspects of teaching have been effective or inefficient.

Student assessment is "the gathering of evidence about student achievement and making inferences about student progress based on the evidence". Physical Education teachers collect and track assessment data to make decisions about instruction and to measure student learning continually throughout the learning sequence (SHAPE America, 2014).

Keywords: assessment for learning, physical education and sport, student assessment

Introduction

Student assessment is essential to measure the progress and performance of individual students, plan further steps for the improvement of teaching and learning and share information with relevant stakeholders.

Student assessment refers to processes in which evidence of learning is collected in a planned and systematic way in order to make a judgement about student learning (OECD, 2013, p.140).

Objectives

The study focuses on clarifying the terms and purposes of assessment for learning in Physical Education and Sport lessons and how we can use them to support the progress of our students, provides examples of different types of assessment for learning in physical education and explains why teachers should include them as part of their instruction.

The approached issues

The physical education teacher use learning objectives and learning outcomes to communicate clear criteria to students and help them to achieve. His main role is to monitor and assess student's achievement. He needs to be aware of the progression made by all his students and it is responsible for reporting this progress twice annually to students as well as sharing important information with other staff.

Assessment for learning is "the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there" (Assessment Reform Group, 2002)

Student assessment is "the gathering of evidence about student achievement and making inferences about student progress based on the evidence". Physical Education teachers collect and track assessment data to make decisions about instruction and to measure student learning continually throughout the learning sequence (SHAPE America, 2014).

Assessment is very important in Physical Education, as it provides information on strengths, weaknesses and educational requirements, determines student progress, informs future planning and teaching and judges which aspects of teaching have been effective or inefficient.

In Physical Education there are three types of assessment that can be used to assess student achievement: Preassessments to learn where students are in the beginning of a learning sequence, Formative Assessment that are ongoing during instruction to check for understanding, and Summative Assessment at the close of a unit or instructional sequence to provide a comprehensive summary of each student's progress (SHAPE America, 2014).

Preassessments or diagnostic assessment is the first type of assessment we do with our students as we prepare to learn a new skill. Diagnostic evaluation is a way in which the teacher can learn what skills the students already have and on which areas the teacher should focus. The results of this evaluation are not used for grades.

Table 1. *Difference between Formative and Summative Assessment*

Formative Assessment or Assessment of Learning	Summative Assessment or Assessment of Learning
Characterized by: <ul style="list-style-type: none"> • Assessment for learning is an integral part of the learning process; • Aims to identify aspects of learning as it is developing in order to deepen and shape subsequent learning (OECD, 2013, p.140); • Information is shared with the student on the quality of learning; • The comparison between objectives and outcomes; • Feeding forward to the next stage of learning about how to improve. 	Characterized by: <ul style="list-style-type: none"> • Assessment that happens after learning has taken place; • Aims to summarize learning that has taken place, in order to record, mark or certify achievements (OECD, 2013, p.140); • Information is gathered and recorded by the teacher is usually transformed into marks or grades; • Performance with others is often compared and it is reviewed in the context of the past learning.

Formative Assessment refers to a variety of assessment procedures that provides the required information to adjust teaching during the learning process. Summative Assessment is defined as a standard for evaluating learning of students.

Formative Assessment is diagnostic in nature while Summative Assessment is evaluative.

Formative Assessment is an assessment for learning, whereas Summative Assessment is an assessment of learning.

Formative Assessment occurs on an on-going basis, either monthly or quarterly. On the other hand, Summative Assessment occurs only at specific intervals which are normally end of the course.

Formative Assessment is conducted to enhance the learning of the students. Conversely, Summative Assessment is conducted to judge student's performance.

Formative Assessment is undertaken to monitor student's learning. As opposed to Summative Assessment, aims at evaluating student's learning.

Characteristics of Assessment for learning are as follow:

- a) sharing learning objectives with learners;
- b) helping learners to know and recognize the standards they are aiming for;
- c) involving learners in peer and self-assessment;
- d) providing feedback that leads learners to recognize their next steps and how to take them;
- e) promoting confidence that every learner can improve and
- f) involving both teacher and learner in reviewing and reflecting on assessment information (Assessment

Reform Group, 1999).

According to Black and William (1998), the big idea of Assessment for learning is to adapt the teaching and learning to the needs of the students. This can be achieved by means of five key strategies: (1) clarifying and sharing learning intentions with the students; (2) engineering effective classroom discussions, tasks and activities that elicit evidence of learning; (3) providing feedback that moves the learner forward; (4) activating students as learning resources for one another and (5) activating students as owners of their own learning.

Assessment for learning is a significant way to raise a student's academic achievement and is centered on the belief that in order for students to progress they must understand the purpose of their learning (What are they trying to achieve?), where they are in relation to this purpose and how they can progress (How can they take steps toward good?) and achieve their goals (What are the key teaching points to achieve a good performance of the desired activity or task?). We can help students to do that through a combination of: teacher demonstration, student demonstration, written and verbal explanation, videos, pictures, diagrams and illustrations.

Anybody in a learning situation need information about how we start and some support about where we might progress to next and how to get there. As such feedback must be clear and constructive and opportunities must be provided to improve. A lesson that is structured so that: a skill is progressed, eventually applied in a performance then individuals, groups or whole class evaluate the applied skill performance (be it game or composition) and then the lesson draws to a close – doesn't allow opportunity for students to improve – especially if a new skill is introduced the following lesson.

Assessment will help students to reflect on their own development, which in turn will help them to recognize and appreciate their own strengths as well as developing an insight into themselves as students. We can build confidence and motivate our students by giving them the opportunity to discuss their learning either with a teacher or with one of their peers that will lead to a deeper understanding of their learning. Individual's self-esteem and confidence can be increase by giving them the responsibility of learning. Engaging with the learner in their preferred learning style can also promote confidence. This involves assessing the learning style and then creating environments to support a range of styles. Visual, auditory and kinesthetic (VAK), multiple intelligences and thinking style (abstract sequential, abstract random, concrete sequential and concrete random) form the major considerations that need to be made here. If students are reaching a stage where they are reflecting on performance, they are becoming independent in their learning and allow them to take control of their own learning.

Effective assessment will identify individual educational needs of all students as well as informing them about their specific performances and achievement. This will then allow teachers to use approaches that are personalized to the needs of a student.

Assessment can be used not only to measure learning but also to promote learning by teaching students how to ask questions as well answering them, by emphasizing to a student that it is acceptable to "have a go" and that by giving the wrong answer is still an opportunity to learn.

Any assessment information collected by the teacher during lessons and over the course of a unit should be used to further support of challenge students. For example, if an objective of attacking with width and depth hasn't been met in games then further tasks to enable this can be planned for the next lesson. Assessment for learning allows the teacher to make informed and appropriate decisions about where to progress next in their learning.

Strategies such as focused observation or effective questioning can help by giving the teacher information about students current understanding of a performance.

Conclusions

The most used method of assessment in Physical Education and Sport lessons is the testing of motor skills using fitness tests which provides quantitative results that can be used to determine a student's fitness level, comparing the results with a set of rules and then evaluating them. If the fitness test is given at the end of a unit, you should be able to compare the results of the student's pre and post fitness test to determine if an improvement has been made. It is very important that in the evaluation process to consider the progress made by the student

throughout the learning unit and his degree of active and conscious involvement during the Physical Education and Sports hours.

More complex activities and movements never done before by students may require much more time for learning. Using the traditional assessment methods may show that students are not improving, as they may not be able to complete the activity. If we evaluate the quality of each part of the movement/activity, not just the final result, we will find that student actually improves, even if he cannot finish the activity, which means that learning occurs.

In the assessment for learning in Physical Education and Sport lessons we must take into account the following criteria: the ability of the subject to apply the acquired elements in practice, the ability to practice independent exercise by the subject, the capacity of the subject of restructuring, assembly, etc., of the acquired elements, the level of theoretical knowledge, acquired by the subject, regarding the practice of physical exercises, attitude of the subject towards physical education and sport, materialized by attending lectures, participating in competitions, how to perform organizational tasks, etc. and the level of physical development of the subject.

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SPORT SECTION

TRAINING AND DEVELOPMENT OF CHILDREN'S INTEREST FOR THE PRACTICE OF TENNIS

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Abstract

The tennis coach must be a good psychologist, especially at the level of the children, from whom he expects performances according to their ability. To be a good psychologist, not a professional but a conjuncture one. The tennis coach must have, besides the specialized and basic knowledge of psychology, which helps him to know, understand, make decisions regarding the behavioral manifestations of the children, both during the training and in the official games.

Specialists and technicians in the field are constantly striving to define a methodical, scientifically and practical concept to attract as many children as possible to practice tennis with great pleasure. Play is an indispensable element in the development of the child, at all ages, and the playful spirit must be present in all forms of child preparation.

At children, physical training is an essential condition of harmonious physical and mental development. Even from early childhood, the child is unable to limit his effort, he is playing all the time, anywhere, with anything, at any time.

A healthy child, can practice the sport without restrictions. Up to the age of 12, the number of workouts at children can be 3-4 per week, and above this age, can be practiced daily or sometimes there may be two workouts per day.

In all stages of training, the trainer must be in permanent contact with the doctor, psychologist, physical trainer but also with the sportsman's parents.

The development of the interest for playing tennis by children, must be generated by more cumulative aspects that must be agreed by children: the space environment for the lessons, materials needed for the tennis lessons to which we add respect, patience, communication, understanding of the coach.

Physical exercise represents a predominantly bodily action which, carried out with joy, in children, influences considerably the processes of harmonious physical development, the functional and mental capacities that rationally converge to the general development of children, while also ensuring the basis of motor skills.

Key words: concept, specific skills, physical exercise, functional capacities, motor capacities.

Introduction

Training in current tennis begins at the level of children (beginner stage), and the person who can and must perform this noble activity is the coach (tennis teacher), who is the undisputed craftsman who has the ability to conceive, direct and make decisions. major in the sense of carrying out the whole process of initiation and further preparation of the future performance tennis player (champion).

Everything that the coach undertakes aims at the continuous improvement of the student in terms of ability and physical and mental performance, to model his psychomotor skills and biological functions to confirm in practice the performance virtues of training.

The starting hypothesis of this paper is that when the child is attracted to the beauty of tennis it goes without saying that he plays tennis for the sake of playing this sport, but he must gradually understand the importance of this activity for his future. For this, the coach must be a good psychologist, because he works with people in training, with future tennis champions, from whom he expects performances according to their abilities and potential.

In order to be a psychologist, even if not by profession but by circumstances, the coach must have the necessary knowledge about the child's psychology, so he can know, understand and make optimal decisions about the psycho-behavioral manifestations of children, both during and outside of tennis lessons (training).

Main directions in children's training

This topic is up to date, because specialists and technicians in the field are constantly striving to define the concept of "preparing children" as much as possible in accordance with the rigors / principles of high performance.

The development of children's interest in playing tennis is generated by several cumulative aspects, which must be largely "agreed" (appropriated) by children.

The tennis coach must stand out with a strong character, temperament, exigency and fairness in relations with children-athletes, close to children and their efforts, so he must be a good professional and also a model for his athletes. Thus, in the preface of Mrs. Maria Serban's book - "In the shadow of the champion" the renowned sportsman and associate professor Univ. Nicu Alexe defines the coach in his relationship with the athlete as "the attentive and patient grinder of this talent, the craftsman, teacher, scientist who designs, maintains, restores and raises his value as a performer, carefully and constantly moving his boundaries of expression."

The main coordinates that structure the personality of the coach are: general culture, specialized culture, pedagogical culture, organizational qualities, ethical and moral qualities, capacity for analysis and decision, as well as permanent desire and work for improvement. Also, the tennis coach is the person who can contribute decisively to the formation and development of the child's interest in tennis.

Starting from the analysis of the results of high performances and the rigors of the training process at the peak of performance, it can be easily seen that the main source of progress is the scientific direction of the whole process of preparation and play, starting with children. Tennis training from an early age and continuing on the scale of sportsmanship, must be understood as a complex dynamic system, training and information, with seemingly "infinite" ways of self-regulation and self-organization, which together contribute to optimizing sports performance at all levels.

The process of preparation or rather the formation of children in the beginning periods of 5-7 years, stands out as an essential problem through the knowledge and strict observance of the efforts that the athlete goes through. These stages involve on the one hand evolutions and changes on the biological, psychomotor level, of the specific skills (game technique), as well as of those of competitive experience, especially the tactical side.

The predominant aspect that combines an infinity of influences refers to physical exercise, which addresses both technical training and those that are subject to simple but attractive forms of physical training that take place in the form of games and relays

In order to better understand the scope and addressability of physical exercise, we can say that physical exercise is a predominantly bodily action, which performed systematically and with great joy in children, influences to a considerable extent the processes of harmonious physical development. functional and mental abilities, which rationally converge on the general development of children, ensuring the basis for improving specific motor skills.

So, it can be stated with certainty that physical exercise addressed to children in very varied forms (specialized and general means, games and selected relays), creates interest in tennis and ensures a harmonious physical and psychomotor development.

Excessive learning of the technique at very young ages 5-6 years, with the neglect of practicing these exercises in the form of play is a major obstacle in the child's motor development; moreover, these exercises must be harmoniously combined with a very wide variety of exercises in the school of gymnastics and athletics and not only, which will certainly lead to the formation of general motor skills and raising the functional capacities of the children's body.

Play is an indispensable element of the child's evolution and education, especially at an early age. The playful spirit must be present in all forms of preparation of children in a simplified form, which generates for children, interest, emotion, mood, all these components being much appreciated by the little ones.

The development of interest in playing tennis by children must be generated by several cumulative aspects:

- the ambiance of the space where the training lessons take place, we refer here to the tennis court, which should always be clean, well maintained and functional;
- the existence of an inventory of materials necessary for the development of lessons such as: balls and ball baskets, colored circles, jump ropes, medicine balls of 500 gr., marked areas for long jump, colored plastic bollards, improvised tennis nets and mobile (length 3m and height 60-80 cm); special spaces for running distances 10, 20, 30 m, jump boxes, etc. ‘

- the presence of the children on the field, as well as throughout the lesson, must enjoy the warmth and respect of the coach, who is always close to the children, to help them, to understand them, to have the due patience and to create in lessons pleasant emotions and enthusiasm as it encompasses;
- in order to create an increased interest in attracting children to play tennis, the child must first have in front of him the valuable model of the coach, desired by the child, always with him, easy and difficult, understanding, correct and demanding, always fresh and lively, friendly and good, with a chosen vocabulary and a pleasant and friendly voice and gestures;
- for the child's full participation in the lesson, it is necessary for his parents or grandparents to stay as far away from the tennis court as possible, so as not to interfere with various signs or gestures in the child's participation in the task, and the child he must know that the only source of communication must be the coach;
- of a special interest for the practice of tennis by children, remains a fundamental methodological problem that can be translated by avoiding long breaks, repetition of boring exercises, lacking content and attractiveness, syncope in the course of the lesson, such as: permanent assistance from the coach, regarding the scoring with grades or words of praise for the children's success, attitudinal warnings, general technical-tactical corrections, etc.;
- an essential element that contributes to sports education and increasing the baggage of specific skills from children, also refers to the quality of information given by the coach, related to the technique of tennis, the way children participate in learning general and specific skills (technical-tactical and motor skills), aspects related to preparing the body for effort, the role of breaks; how to breathe during exercise, rules of hygiene, nutrition, recovery of the body after exercise, etc. ; all these basic requirements and rules to the children's ability to understand.
- an essential moment that is added to those related to the presence of children in the lesson and the flawless assistance throughout the lesson given by the coach, also refers to the end of the lesson, which must be as pleasant as the lesson in general, where the coach must present in a few minutes some conclusions about the children's contribution to the lesson and how to present the children for the next lesson. The end of the lesson must be accompanied by joy, enthusiasm and the ability to wish for the next lesson.

The first aspect that must be taken into account for the initiation of the child in sports is his practice in the form of play, because from early childhood, he is unable to limit his efforts; he plays everywhere, all the time, in any weather, in any condition, with anything.

The healthy child can play sports without restrictions. He will be limited in effort only by himself, fatigue or pain.

Play is an indispensable element of the child's evolution and education, especially at an early age. However, the playful spirit must be maintained in any sporting activity, without it there are total risks, which can lead to abandonment of activity or lack of interest from the child.

Prepuberty and, after that, puberty are very special phenomena in the child's life, very rich in biological changes, which must be taken into account in the instructional-educational process that takes place in tennis at this level.

When the child is attracted to the beauty of tennis, it is understandable that he does not play tennis just for the sake of playing, but the child begins to understand that this is an activity of faith, where his personality, passion, desire for perfection and dedication are manifested.

The tennis practiced gradually begins to represent for the child a passion of life, an investment of the soul that triggers energies, with special rigors, which require preoccupations on all levels of sports training, of a happy union between physical and mental forces. Therefore, the child must have in front of him the valuable model - the coach - as the child may want, always with him, easy and difficult, understanding, correct and demanding, always fresh and lively, friendly and good.

In the field of sports practice there is a saying that "the coach does not teach children the technique of the game, but he builds souls". So, the coach becomes a "polisher" of the child's characters and desires. He ennobles the child with solid knowledge and skills, which, then applied in the game as rationally and efficiently as possible, will surely lead to sports performance.

Planting a passion for tennis must be a part of the coach's life and the child must be invested with the ability to understand personal efforts, because the practice of performance tennis measures his talent and work.

In order to dare to act on the child, it is necessary for the coach to first know his universe, the biological and psychological peculiarities of age and only in this way will he be able to gain the appreciation and esteem from the child.

We believe that the child must first develop the pleasure of having fun, training, learning and competing. It can be seen from practice that where the atmosphere of preparation and play is relaxed, the child makes great progress and is confident in his own possibilities. The long and difficult road that the athlete and the coach take together to achieve great performance, starting from the first stage and up to high mastery, can be crossed only through work, perseverance, doubled by passion, patience and talent.

The main objective of training at the level of children, but also of juniors is for them to discover, select and prepare biologically endowed elements, talents for great performance.

The goal of performance, at the level of children, must be to obtain titles, leading rankings and victories over the best tennis players nationally and internationally, which can be achieved only with a lot of work and talent.

We consider that in tennis, the stormiest and with many reversals of predictions, would be the age of junior and, in particular, the age of 15-16 years for boys and 14-15 years for girls, this being the age of great decisions to continue and achieve great performance in tennis. Of course, the main element that can slow down progress for the moment would be the transformations that take place during this period biologically and psychologically, but this stage can be passed if the athlete comes with a large "dowry" from childhood, biological accumulations, psychic, motor and technical-tactical and to allow him to cope brilliantly with the next stages, which are decisive for sports performance.

The organization, content and development of training for children, involve compliance with basic requirements, as follows:

- training at the level of children must be preceded by careful selection and an accurate and competent assessment of their state of health and their physical and intellectual possibilities. The basic and special methods and means intended for the physical training of children to aim at the harmonious physical development, the strengthening of the health, the development of the great functions of the organism, as well as the development of the basic and specific motor qualities;
- in children, physical training is an essential condition for the formation and harmonious physical and mental development, for which the development of basic and special motor qualities is at the forefront;
- the methods and means for technical-tactical training must focus in particular in the first years at the level of children, the classical side of the basic and special technique, after which to move to the modern side of technical executions, but this should be done in depending on the particularities of each athlete and their degree of efficiency in the game;
- the acquisition and technical-tactical improvement must focus on the technical content of the execution and then their tactical use in the context of the game phases;
- learning, consolidating and using with much discernment the five efficiency factors when hitting the ball (direction, length, effect, trajectory and speed), in the training stages and the particularities of the athlete.

Conclusion

The problem of developing the interest for practicing tennis at the level of children aged 6-7 is a national strategy to which the entire body of technicians contribute.

The pedagogical performance of the coach depends largely not so much on his specialized knowledge but especially on the quality of communication between him and the child athletes. His teaching skills are concretized and proven in the transmission of knowledge and in the way in which the coach makes accessible the specialized information for his student.

The value of the contemporary tennis coach is also given by his pedagogical imagination and creativity during training, his qualities of being a good examiner, his specialized training and pedagogical mastery, his professionalism in everything he undertakes, his art of work with athletes (even children) helping them achieve superior performance and improve the system of conducting practical lessons with a modern and effective content. The coach must use in his expression a clear and nuanced language with which to achieve a dynamic and clear dialogue, cultivating humor and using jokes carefully.

For children, the presence on the field with them of a coach always fresh and lively, friendly and good, fair, demanding but also understanding, is an invaluable help, a valuable model to be with them always, for better or worse.

The main objective of training children is to generate interest and pleasure among them, the pleasure of practicing / playing tennis and at the same time to select talented children and to create modern forms of training for them.

The permanent communication with the children during the learning sessions of the play technique creates a relaxed and full of enthusiasm atmosphere, absolutely necessary for their successes and successes.

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STUDY ON THE ATHLETIC PREPARATION OF JUNIOR HANDBALL PLAYERS IV (12-13 YEARS)

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Abstract

Background. Handball is accessible to everyone. It can be practiced by children and young people, men and women and even older people. Most technical procedures are executed by hand, and the ball being small can easily control. In the process of continuous lifting of athletes' capacities, physical and technical training are factors whose weight is special for the successful solving of the objectives and tasks of a certain stage of training. Their judicious ratio and connection depends to a large extent on the level of training an athlete can achieve.

Objectives.

- Studying the methodology for developing specific motor skills through investigations and documentation on the literature, as well as on the training programs used by junior handball players in the training process, in the preparatory stage;
- The collection of data from the coach's practice on the basis of which, by processing, the characteristics of the methods for developing specific motor qualities will be established;
- Comparing all these data and studying the existing concordances or discrepancies in the training plans of junior handball players. Based on this, the conclusions of the paper will be drawn up to improve the methodology for the development of motor skills in the preparatory phase.

Study hypothesis. If a systematization of the means and methods of developing the motor skills specific to athletics is achieved in the preparatory stage, of the training programmes, then we will be able to contribute to a better athletic training of junior handball players IV.

Methods. The research methods used in this study were: The bibliographical study method; The Observation method; The Testing method; The Statistical and mathematical method; The Graphic method.

Conclusion. At the final time of the study, the experimental group achieved better results than the control group in all tests carried out. In this study it was observed that by systematizing the means and methods of development of the motor qualities specific to athletics in the preparatory stage, the training programs, improved the preparation of junior handball players.

Keywords: motor training, motor quality, test, result

Introduction

The purpose of practicing sports games to children must be health education, so as to prevent long-term effects or short of the degeneration of the body.

Handball has a simple and easy to learn technique, the basis of which is the running, jumping and throwing movements (Neder F., 2003). Handball is accessible to everyone. It can be practiced by children and young people, men and women and even older people. Most technical procedures are executed by hand, and the ball being small can easily control (Mihăilă, I., Popescu C., 2006).

In the mastery of body action, play is above all the ideal activity. The child who plays must reflect before acting. He conceives an idea that he develops and executes afterwards. In this way, the child tests his / her own skills, seeks an alternative, sets an assessment through his teammates, and advances to a new form of motor action.

The following exercises will be repeated and then automatically automated until their technical details. The better they will be assimilated, the easier their global introduction to the activities devoted to the game.

The handball teacher will also be concerned with the development of motor skills, the formation and development of habits of behaviour, wills and character traits (Acsinte A., Alexandru E., 2000).

The activity of developing motor skills is the backbone of the entire training process, which is ensured in all lessons, in proportions and with different priorities, related to the age of the athletes, the possibility of developing certain qualities at different ages and in a certain stage, correlated with the material endowment and importance of the respective physical quality (Bompa T., 2001).

Developing motor skills is one of the main goals of the physical training of handball players. The development of motor skills is today a necessity of first order (Vaida M., 2013).

For the development of the motoring qualities, the methodical methods known at the level of the group (circuits, intervals, workshops, method of repeating) are used (Roşianu C.I., 2010).

In the handball lesson the main goals are (Baştüre E., 2002):

- Increasing the body's exercise capacity.
- Multilateral motor development and training, implies the need for sound and harmonious physical development, multilateral training, which means a great deal of knowledge, skills and motor skills, but especially motor skills.
- The applicability of knowledge and of the entire baggage in practical, everyday activities.

The handball game develops the following moral-volitional qualities (Hantau C., 2004): punctuality, discipline, and respect for opponents, teammates, referees, all these spiritually developing organization, and team dedication, physical and psychological resistance.

Practice handball will provide children with a harmonious physical development will increase the level of physical training, enrich the luggage of skills and motor skills and will improve health.

The modern game runs at full speed, at a sustained pace with great physical effort. Besides the speed of execution, movement, reaction, specific physical strength, skill in the execution of slopes and directional changes, besides general mobility and flexibility, throwing force, coordination and balance, it is still necessary to be cultivated the sense of ball that gives safety in grip, throwing, in the precision of steps and throws at the gate (Rizescu Ctin., 2011).

The main tendencies of modern handball development are (Mihăilă, I., 2004):

1. The highest level of game play;
2. Individual technique brought to perfection and maximum efficiency in conditions of high speed and pressure of the opponent.
3. Improve the specialization in the post, while increasing the mobility and efficiency on other two or three positions.
4. Variety and increased mobility of game systems.
5. Special athletic training, in conditions of high speed action and high force.

Athletics has a wide range of exercises and technical procedures; it can effectively influence students' ability to work, providing them with a multi-faceted motoring training. The utilitarian value of the procedures specific to athletics is explained both by its natural character and by the accessibility of its means (Gârleanu D., 1996).

Athletic exercises allow the achievement of essential goals and tasks of physical training and, in particular, motor skills such as endurance, speed and strength, being the most important aspects of basic physical training (Neder Paraschita F., 2015).

The aim of the study is to obtain data on improving the athletic training of junior IV handball players, to increase the performance of athletes and, implicitly, to increase their performance.

Study hypothesis. If there is a systematization of the means and methods of developing the motor skills specific to athletics in the preparatory stage, of the training programs, then we can contribute to a better athletic training of junior IV handball players.

Tasks of the study:

- Studying the methodology of development of specific motor skills through investigations and documentation on the specialized literature, as well as on the training programs used by junior handball players in the training process, in the preparatory stage;

- Data collection from the coach's practice on the basis of which, by processing, the characteristics of the methods of developing the specific motor skills will be determined;
- Comparison of all these collected data and the study of the existing concordances or discordances in junior handball training exercises. On the basis of these, the conclusions of the paper for the improvement of the methodology for the development of the motor skills in the preparatory stage will be elaborated.

Two teams of 16 sportsmen from 12 to 13 years took part in the study. The study was conducted in the sports hall of the Sports School Club no. 2 Bucharest, between November 2017 and April 2018.

The research methods used in this study were: The bibliographic study method; Observation method; Test method; Statistical and mathematical method (methods of data processing and interpretation); Graphic method.

At the start of the study, the experimental and control groups were established. The experimental group worked on the operational models under study, while the control group worked on the classic model. Structures of the introduced athletic exercise systems included exercises for the development of basic and age-specific handball skills and exercises to strengthen the skills and motivation skills.

Both groups were studied for the same period of time, benefiting from the same training conditions. At both the beginning and the end of the study, tests were carried out on the following events: 30 m running speed; long jump from standing; throwing the handball; dribbling among the jaws; triangle movement.

Following the study, the following results were obtained (table no. 1):

Table 1. <i>The Arithmetic mean of the two tests</i>				
Events		Initial Test	Final Test	Difference
30 m running speed (seconds)				
Experimental Group		5.33	5.15	-0.18
Control Group		5.3	5.24	-0.06
Long jump standing (cm)				
Experimental Group		169	180	+11
Control Group		167	174	+7
Throwing the handball (m)				
Experimental Group		20.4	25.0	+4.6
Control Group		20.10	23.5	+3.4
Dribbling through 7 milestones on a 30 m distance (seconds)				
Experimental Group		8.1	7.49	-0.61
Control Group		8.0	7.78	-0.22
Running in triangle (seconds)				
Experimental Group		24.08	23.21	-0.87
Control Group		23.92	23.57	-0.35

Analysis of the results obtained by the experimental group

- 30 M RUNNING SPEED (Figure 1)

At initial testing, values ranging from 5.61 seconds to 5.1 with an arithmetic mean $X = 5.33$ seconds, a standard deviation of $S = \pm 0.46$ and a coefficient of variation $Cv = 3.22\%$, which indicates very high homogeneity.

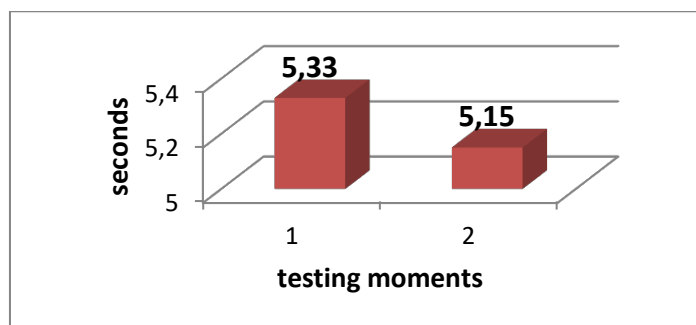


Fig. 1 - the rate of progress between the two tests at race speed on 30 m

In the final test, the results were between 5.2 and 4.75 seconds, with an arithmetic mean $X = 5.15$ s, a standard deviation $S = 0.34$ and a coefficient of variability $Cv = 3.78\%$ which shows a very high homogeneity. The rate of progress between the two tests was: $XF - XI = 5.33 - 5.15 = -0.18$ seconds

- **LONG JUMP STANDING** (Figure 2)

At initial testing, values ranging from 162 cm to 178 cm were recorded, with an arithmetic mean $X = 169$ cm, a standard deviation of $S = \pm 8.23$ cm and a coefficient of variation $Cv = 5.18\%$, which indicates a very high homogeneity.

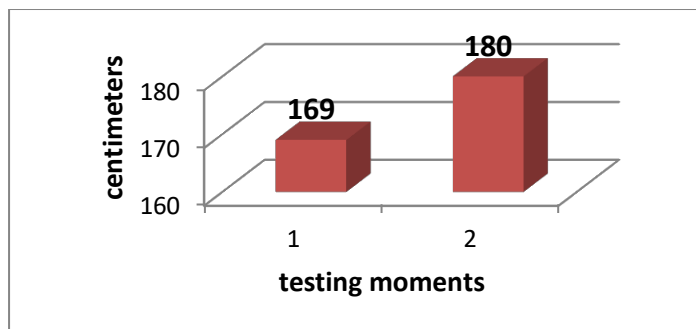


Fig. 2 The rate of progress between the two trials in the long jump standing

In the final test, the results were between 166 cm and 188 cm, with an arithmetic mean $X = 180$ cm, with a standard deviation $S = \pm 6.42$ and a coefficient of variability $Cv = 4.24\%$, which indicates a very high homogeneity. The rate of progress between the two tests was: $XF - XI = 180 - 169 = 11$ cm

- **THROWING THE HANDBALL** (Figure 3)

During initial testing, values ranging from 17.4 m to 27 m, with an arithmetic mean $X = 20.4$ m, a standard deviation of $S = \pm 3.81$ m and a coefficient of variation $Cv = 14.32\%$, indicating a moderate homogeneity.

In the final test, the results were between 20 m and 31 m with an arithmetic mean $X = 25$ m, with a standard deviation $S = \pm 4.62$ and a coefficient of variability $Cv = 12.73\%$, which indicates an average homogeneity. The rate of progress between the two tests was: $XF - XI = 25 - 20.4 = 4.6$ m

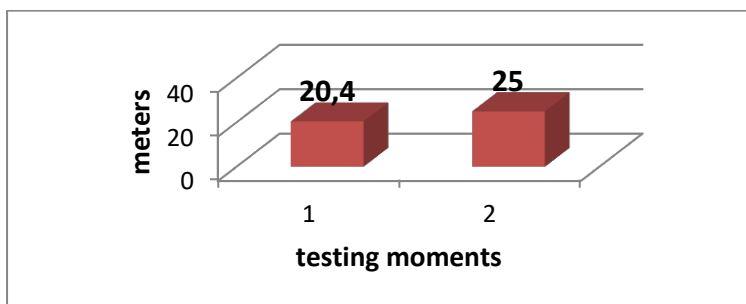


Fig. 3 The rate of progress between the two tests at throwing the handball

- DRIBBLING THROUGH 7 MILESTONES ON A 30 M DISTANCE (Figure 4)

In the initial test, values ranging from 8.5 seconds to 7.8 with an arithmetic mean $X = 8.1$ seconds, a standard deviation of $S = \pm 2.46$ and a coefficient of variation $Cv = 4.42\%$, which indicates very high homogeneity.

In the final test, the results were between 8.1 and 7.2 seconds with an arithmetic mean $X = 7.49$ s with a standard deviation $S = 0.94$ and a coefficient of variability $Cv = 3.42\%$ which shows a very high homogeneity.

The rate of progress between the two tests was: $XF - XI = 7,49 - 8,1 = - 0,61$ seconds

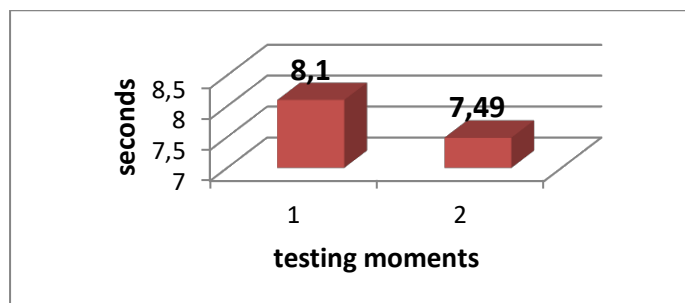


Fig. 4 Progress recorded between the two trials in a dribble between 7 milestones on 30 m

- RUNNING IN TRIANGLE (Figure 5)

At initial testing, values ranging from 24.5 seconds to 22.6 seconds with an arithmetic mean $X = 24.08$ seconds, a standard deviation of $S = \pm 2.74$ and a coefficient of variation $Cv = 5.21 \%$, which indicates very high homogeneity.

In the final test, the results were between 24.1 and 22 seconds with an arithmetic mean $X = 23.21$ s with a standard deviation $S = 1.46$ and a coefficient of variability $Cv = 3.78\%$, which indicates a very high homogeneity. The rate of progress between the two tests was: $XF - XI = 23.21 - 24.08 = - 0.87$ seconds

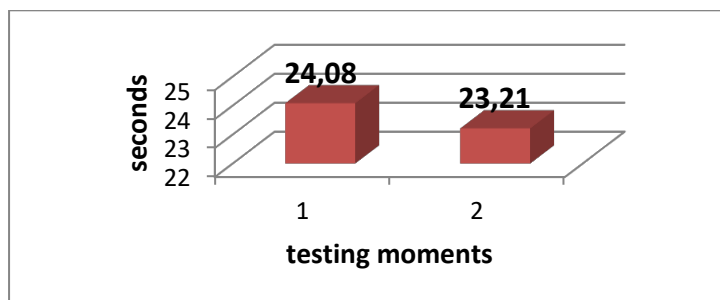


Fig. 5 The rate of progress between the two displacement tests in triangle

Analysis of the results obtained by the group control

- RUNNING SPEED 30 M (Figure 6)

At initial testing, values ranging from 5.6 seconds to 5.0, with an arithmetic mean $X = 5.3$ seconds, a standard deviation of $S = \pm 0.20$, and a coefficient of variation $Cv = 3.87 \%$, which indicates very high homogeneity.

In the final test, the results were between 5.5 and 4.9 seconds with an arithmetic mean $X = 5.24$ s with a standard deviation $S = 0.17$ and a coefficient of variability $Cv = 3.24\%$, which shows a very high homogeneity. The rate of progress between the two tests was: $XF - XI = 5.24 - 5.3 = - 0.06$ seconds

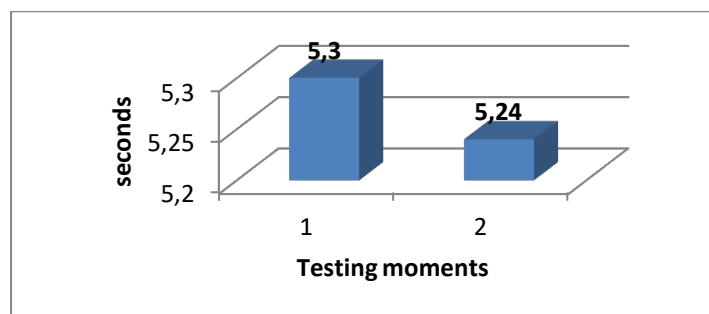


Fig. 6 The rate of progress between the two tests at race speed on 30 m

- LONG JUMP STANDING (Figure 7)

In initial testing, values between 160 cm and 180 cm were recorded, with an arithmetic mean $X = 167$ cm, a standard deviation $S = \pm 7.74$ cm and a coefficient of variation $Cv = 4.63\%$, which indicates a very high homogeneity.

In the final test, the results were between 165 cm and 185 cm with an arithmetic mean $X = 174$ cm, with a standard deviation $S = \pm 6.51$ and a coefficient of variability $Cv = 3.74\%$, which indicates a very high homogeneity. The rate of progress between the two tests was: $XF - XI = 174 - 167 = 7$ cm

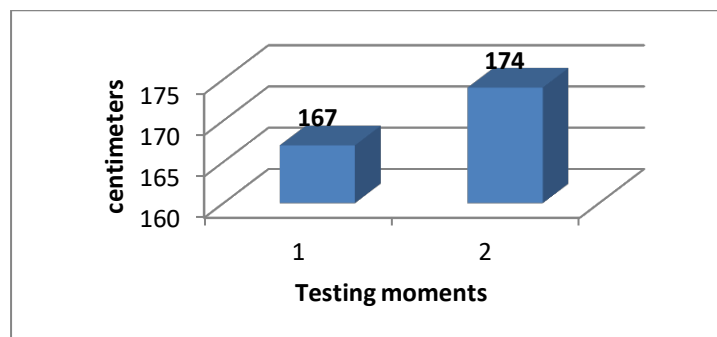


Fig. 7 The rate of progress between the two long jump tests

- THROWING THE HANDBALL (Figure 8)

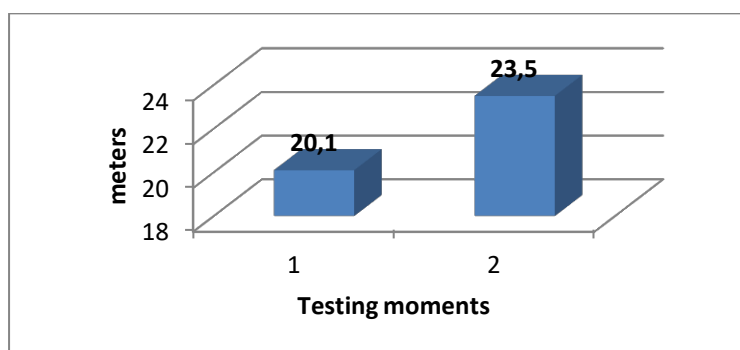


Fig. 8 The rate of progress between the two tests at throwing the handball with approach

In the initial testing, values ranging from 17.5 m to 26 m, with an arithmetic mean $X = 20.10$ m, a standard deviation $S = \pm 2.60$ m and a coefficient of variation $Cv = 12.93\%$, indicating a moderate homogeneity.

At the final test, the results were between 20 m and 28 m with an arithmetic mean $X = 23.5$ m, with a standard deviation $S = \pm 2.71$ and a coefficient of variation $Cv = 11.53\%$, which indicates an average homogeneity. The rate of progress between the two tests was: $XF - XI = 23.5 - 20.1 = 3.4$ m

- DRIBBLING THROUGH 7 MILESTONES ON A 30 M DISTANCE (Figure 9)

In the initial testing, values ranging from 8.4 seconds to 7.5 with an arithmetic mean $X = 8.0$ seconds, a standard deviation of $S = \pm 0.26$ and a coefficient of variation $Cv = 3.34\%$, which indicates very high homogeneity.

In final testing, the results were between 8.1 and 7.4 seconds, with an arithmetic mean $X = 7.78$ s with a standard deviation $S = 0.22$ and a coefficient of variability $Cv = 2.82\%$, which indicates very high homogeneity. The rate of progress between the two tests was: $XF - XI = 7.78 - 8 = -0.22$ seconds

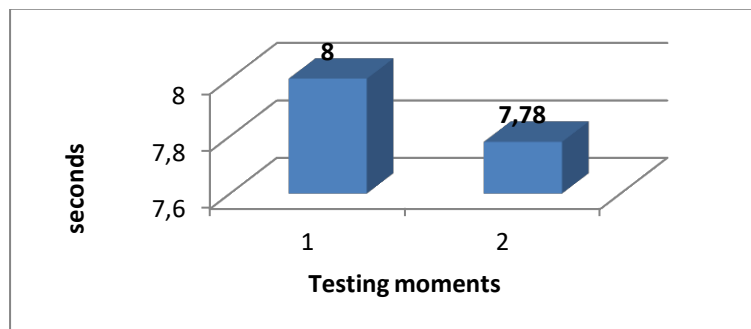


Fig. 9 The rate of progress between the two trials in dribble between 7 milestones on a distance of 30 m

- RUNNING IN TRIANGLE (Figure 10)

At initial testing, values ranging from 24.8 seconds to 22.3 seconds with an arithmetic mean $X = 23.92$ seconds, a standard deviation of $S = \pm 0.79$ and a coefficient of variation $Cv = 3.32\%$, which indicates very high homogeneity.

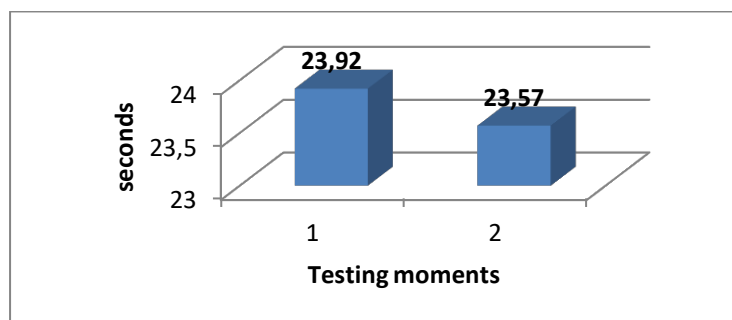


Fig. 10 The rate of progress between the two running in triangle trials

In the final test, the results were between 24.3 and 22 seconds with an arithmetic mean $X = 23.57$ s with a standard deviation $S = 0.72$ and a coefficient of variability $Cv = 3.08\%$, which indicates a very high homogeneity. The rate of progress between the two tests was: $XF - XI = 23.57 - 23.92 = -0.35$ seconds.

At 30 m running speed, the experimental group had a performance improvement of 0.18 seconds compared to just 0.06 seconds as the control group registered.

In the long jump, the average of the experimental group was 11 centimetres better at the end of the study than the control group that was only 7 centimetres in length.

The handball ball throw test showed the following situation at the end of the study: the experimental group had an increase in the arithmetic average of 4.6 meters from just 3.4 meters as the control group recorded.

Testing of the dribbling through 7 milestones on a 30 m distance has the following final results: the experimental group achieved an increase in the results by 0.61 seconds, while the control group achieved only 0.22 seconds.

The running triangle test gives us a significant improvement in the final results of the experimental group by 0.87 seconds compared to just 0.4 seconds as the control group succeeded.

Conclusions

1. Practice handball will provide children with a harmonious physical development will increase the level of physical training, enrich the luggage of skills and motor skills and will increase health.
2. At the end of the study, the experimental group obtained better results than the control group in all the tests performed.
3. In the 30 m speed test, the experimental group obtained an average of 3 times better than that of the control group (final experimental experiment was 0.18 seconds versus 0.06 seconds with the control group).
4. In the long jump, the experimental group average was 4 centimetres better at the end of the study than the control group (the final experimental group was 11 centimetres as opposed to 7 centimetres as the control group had).
5. The handball throw test shows the following situation at the end of the study: the experimental group had an increase in the arithmetic mean of 1.2 meters from the control group (4.6 m vs. 3.4 m).
6. Testing the dribbling movement between 7 milestones over the 30 m distance has the following final results: the experimental group achieved an increase in the results by 0.61 seconds, while the control group achieved only 0.22 seconds.
7. The running in triangle test gives us a significant improvement in the final results of the experimental group by 0.87 seconds compared to just 0.4 seconds as the control group succeeded.

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STUDY ABOUT THE IMPACT OF THE FREE THROW IN BASKETBALL GAMES ENDED AT THE DIFFERENCE NO GREATER THAN 2 POINTS DURING THE 2018-2019 ROMANIA'S MEN'S NATIONAL BASKETBALL LEAGUE SEASON

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Abstract

Background. Basketball is one of the most popular team sports in the world. It stands out through the finesse, accuracy, fantasy of the technical and tactical exercises, athletes' height and physical qualities, all of these merged into a competition, which requires team spirit, sacrifice, intelligence and nervous resistance. It is a team sport which demands a large array of technical skills, tactical actions from the simplest to the most complex. This research aims to highlight the importance of free-throws in the economy of basketball games played in the men's first division through the coefficient of the made free-throws by selecting all the games ended at a difference no greater than 2 points.

Objectives. The objectives of this research are: influencing the development of morpho-functional body types, the development of movement quality, the development of a wide tactical knowledge, the introduction of new technical methods, increasing the overall performance. One of the main goals of this paper is to provide a detailed analysis of games ended at a difference of no more than two points.

Methods. The methods used in the following research consist of video recording, match statistics and data analysis of official games played in the 2018-2019 Men's National Basketball League season.

Results. The results of this research show that the average made shot percentage of Men's National Basketball League is 67,9 %. Returning to the problem of developing a tactical cognitive process regarding the importance of the free-throw, we need to mention that the foundation of this process is knowing the basics of the game, on which we can build and perfect the skills acquired along the years.

Conclusion. The free-throw in the basketball game it's taken in various muscular effort conditions. Thus, the players can benefit of a free-throw after greater or lesser effort. The content of the training, its effectiveness and variability are important to achieve for this purpose. The free-throw is a test of finesse, high coordination, accuracy, in which the information received from the brain an essential role. The basketball game requires an equal development of the entire complex of motor qualities through its wide motor content and the variety of movement it requires. This is why the players need a continuous and perseverant preparation.

Keywords: free – throw, two points difference, made shot

Introduction

Basketball player makes 90% of her free throws, but when the time comes to make such a shot in the final moments of a game, she fails to do so. What has been a nearly automatic, high-percentage basketball shot throughout her career quickly turns into an enormous challenge. While this detrimental effect of pressure on performance can be seen in many domains (academia, business sectors, etc.), this phenomenon has plagued athletes of all sports for years (Orn A., 2017).

In basketball it is almost self-evident that championships are won or lost at the free-throw line. Coaches all over the United States are wondering how they are going to receive a higher percentage of successful free-throws from the entire squad next year and the year to follow. The free-throw is important in basketball games today in that it presents the opportunity to pick up from fifteen to thirty points. During a practice season, day after day, it is not uncommon for a player to make free-throw after free-throw. The accuracy this player demonstrates in practice is unmatched (Miller D., 1952).

Free-throw is a vital skill in basketball which requires high accuracy. A free-throw is an attempt to shoot the ball into the hoop with no interference, awarded after the opposing player commits a foul or other violation of the rules. It was found that teams would often emerge victorious when they had higher free-throw shooting percentages at the end of the game (Kozar B, Vaughn R.E, Whitfield K.E., 1994).

Free throwing ability is an important skill for basketball players. Basketball games typically include several free-throws and these account for 20 to 25 % of the points scored (Hamiltorn G.R, Reinschmidt C., 1987).

For example, Ibanez et al studied the same championship and found that the differences between winning and losing teams were mainly accounted for defensive rebounds, successful free-throws and successful 2 point field-goals. Successful free-throw are an important discriminator of team success (Ibanez S, Sampaio J, Saenz-Lopez P, Gimenez J, Janeira M.A., 2003).

The free throw should be the easiest basketball process, the player being alone, at 15 feet (4,577 meters) away from the ring, without defense and disruptive elements. (Okubo H., Hubbard M., 2006)

The free throw success relies on a great dose of focus, thus depending on the player's ability to relax and have a positive mindset. The players can use specific relaxing and motivation techniques, thinking he's a good thrower, visualizing at the same time the ball's trajectory entering through the basketball ring (Showalter D., 2012).

The throw is the most important element of basketball, by which the final purpose of the game is materializing scoring points. The finesse resulted from the skill is the main factor in executing basketball throws, and the fact that by throwing, the ball is sent by a moving action towards a fixed point, suspended and in a horizontal plane, rises the technical execution difficulty, which needs to have an address as accurate as possible (Popescu F., 2012).

Methods

The methods used in the following research consist of bibliography study, video recording, match statistics and data analysis of official games played in the 2018-2019 Men's National Basketball League season.

We have analysed 14 games ended at a difference of no more than two points, represented in tables 1 and 2 and diagrams 1 and 2. We picked data regarding the made free-throws from these particular games and the percentages recorded by both teams. In the end we calculated the average free-throw percentage registered in those games.

Table 1. *The games ended at the difference no greater than 2 points in the first part of the Men's National Basketball League*

No.	Games	Free throw attempts	Free throw made	Percentage %	Score
1.	BC CSU Sibiu CSM	13	4	31 %	87 - 89
	VS CSU Oradea	13	10	77 %	
2.	BC CSU Sibiu CSM	29	19	66 %	62 - 64
	VS CSU Oradea	24	10	42 %	
3.	CS Cluj	22	10	45 %	79 - 81
	VS ACS Târgu Jiu	23	18	78 %	
4.	SCMU Craiova BC	26	22	85 %	81 - 79
	VS CSU Sibiu	27	12	44 %	
5.	CSM CSU Oradea	18	15	83 %	74 - 73

6.	VS				
	BCMU FC	17	13	76 %	
	Arges Pitesti				
	CSM VSKC	20	15	75 %	82 – 80
	Miercurea				
	Ciuc				
	VS				
	CS Rapid	28	18	64 %	
	Bucuresti				

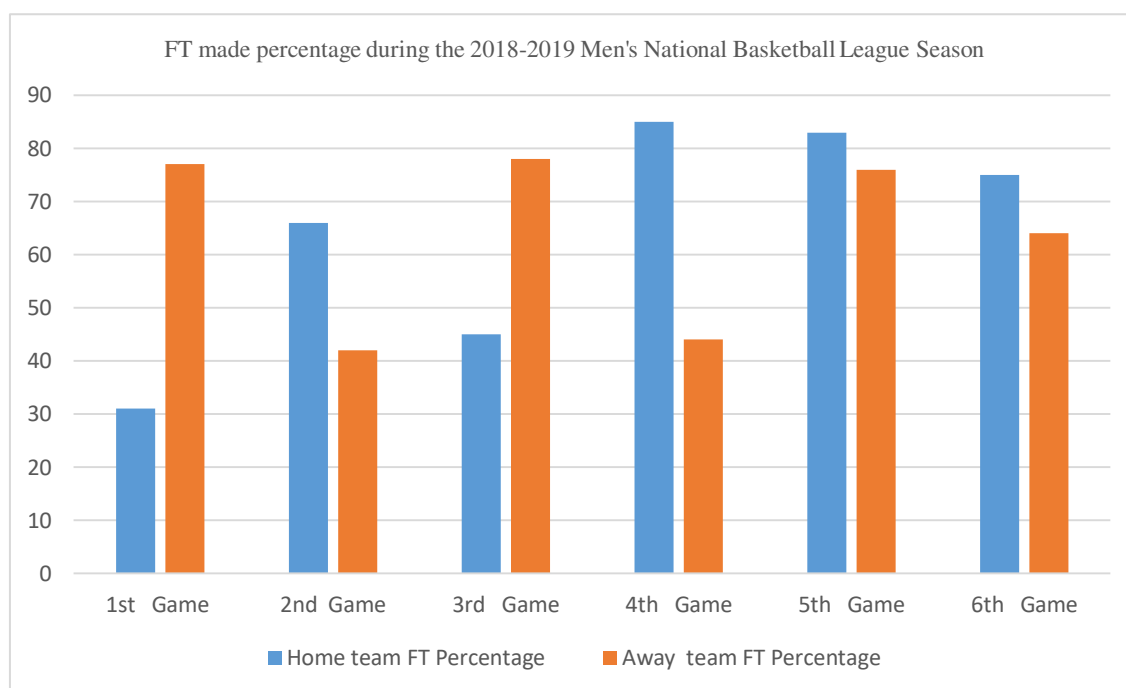


Fig. 1. Free-throws percentage in the first part of Men's National Basketball League Season

In the first games analysed in Table. 1, the lowest free-throw percentage of 31 % has been registered by BC CSU Sibiu, while at the opposite side the highest free-throw percentage has been registered by SCMU Craiova BC with a success rate of 85 %.

Table 2. *The games ended at the difference no greater than 2 points in the second part of the Men's National Basketball League*

7.	U-Banca				
	Transilvania	28	18	64 %	
	Cluj				88 – 89
	VS				
	BC CSU	36	23	64 %	
	Sibiu				
8.	SCMU				
	Craiova	14	11	79 %	78 - 80
	VS	15	13	87 %	

	CSM CSU Oradea				
	CSM 2007 Focsani	19	14	74 %	
9.	VS				83 - 81
	CSM VSKC Miercurea Ciuc	22	16	73 %	
	SCMU Craiova	12	11	92 %	
10.	VS				72 - 70
	U-Banca Transilvania Cluj	10	5	50 %	
	CS Rapid Bucuresti	24	18	75 %	
11.	VS				70 - 68
	CSM VSKC Miercurea Ciuc	19	11	58 %	
	CS SCM Timisoara	19	14	74 %	
12.	VS				73 - 74
	SCMU Craiova	13	10	77 %	
	BCMU FC Arges Pitesti	30	21	70 %	
13.	VS				80-79
	U-Banca Transilvania Cluj	10	7	70 %	
	SCMU Craiova	13	9	69 %	
14.	VS				69-71
	CS SCM Timisoara	15	13	87 %	
TOTAL	ALL TEAMS	559	380	67,9 %	

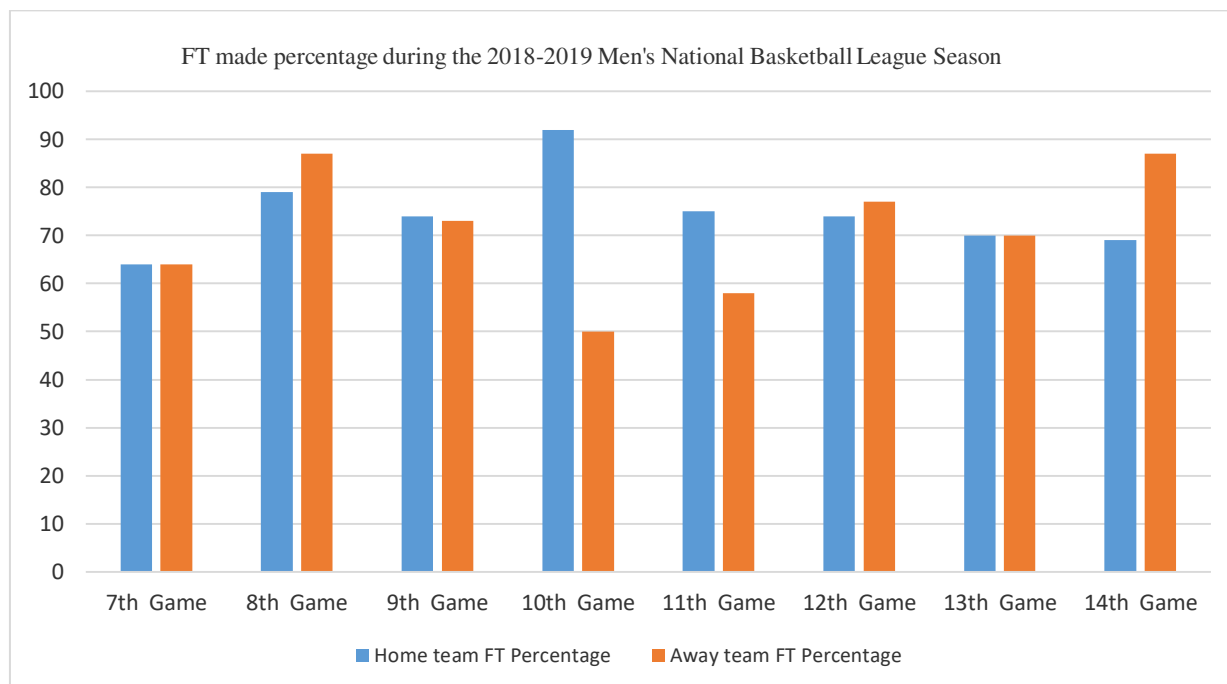


Fig. 2. Free-throws percentage in the second part of Men's National Basketball League Season

In the matches analysed in Table. 2, the lowest free-throw percentage of 50% has been registered by BC CSU Sibiu, while at the opposite side the highest success rate of 92% has been registered by SCMU Craiova BC.

Results

1. The average free-throw percentage registered in the matches ended with a difference no greater than 2 points is 67,9%.
2. The lowest free-throw percentage registered in the games ended with a difference of two points or less is 31%, consisting of 4.59% of the total points scored in that particular game.
3. The highest free-throw percentage registered in the games ended with a difference of two points or less is 92%, consisting of 15.2% of the total points scored in that particular game.

Conclusions

1. The growth of overall performance depends on monitoring each player.
2. The most important thing is to use the tools and methods that best fit the case and adapt them according to the player's needs.
3. The match statistics are an important factor in the player's determination to improve himself.
4. The free throw should be the easiest process in the economy of the basketball game.
5. In basketball it is almost self-evident that championships are won or lost at the free-throw line
6. The introduction of new technical methods increase the overall performance.

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CORRELATIONS BETWEEN THE INDICATORS OF MOTOR QUALITIES: SPEED AND EXPLOSIVE FORCE, WITH THE USE OF MICROGATE WITTY MANAGER SYSTEM TECHNOLOGY, IN FOOTBALL

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Abstract

Background. The nature of competition in sports games is inherently chaotic. Often, sports such as football, rugby and field hockey have a fast-paced style of play, consisting of quick turns and frequent changes of direction. Due to this intermittent style of competition effort, players in these sports rarely reach maximum sprint speed during the game. As a result, the ability to accelerate is a coveted skill in this segment of the sport

Objectives. The sports performance at this moment cannot be completed without an analysis of the entire preparation process, in accordance with the rigorous demands in the field. The updating of the training program is an important objective in sports training, the pedagogical tools have the role to improve the athletes' performance and their mental state, as well as the role of increasing the level of attraction of the training.

Hypothesis: it is assumed that implementing an intervention plan focused on increasing speed and co-ordination will result in the improvement of these qualities, and consequently the achievement of better competitive performance.

The purpose of this study is to verify the impact of a special training plan and the verification of the working tools, in order to present the quantifiable results regarding the initial level of motility and mental state of the athletes. Later, it is desired to develop an exercise program that aims to develop speed and coordination capabilities, but also to improve the mental state.

Methods. The method of longitudinal experiment was applied, 2 junior football teams between 14-16 years old participated in the study. Of these 2 teams, one benefited from the special intervention program, this one representing the experiment team, and the other team representing the control team. The experiment lasted 12 months, the athletes were tested at the beginning and at the end of the intervention program. The tests used were an agility test called the Arrowhead Agility Drill test, and a SPM (Motivational Persistence Scale) psychological questionnaire.

Results. The statistical analysis of the results obtained at the end of the experiment showed us that there were improvements in the aspects concerned, namely improvements were made in increasing the speed and coordination as well as the well-being of the athletes within the experimental team.

Conclusion. Our study showed that the level of speed, of the coordinating capacity, and of the stress, are variables that can be continuously improved by introducing alternative exercises and by the continuous renewal of the general plan of sports training. Common tactics used for speed development include general strength training, sprint resistance training, polymers and sprint techniques (Cronin and Hansen, 2006; Delecluse, 1997; Martinez-Valencia et al., 2015). Instead, how each of these exercises can be implemented varies from one athlete to another. An even clearer problem is the lack of integration with other training components, such as endurance training and sports practice. Developing an integrated approach is essential for organizing the training process, as each aspect of the training represents an important physiological stimulus applied to the athlete

Keywords: motor qualities, speed and explosive force, sport technology

Introduction

The development of *speed under its different forms and the development of the explosive strength*, manifested during the training sessions and in matches represents a continuous concern for football coaches, in order to improve sports performances. An increased level of speed and a good psychological and physiological condition, helps to learn, consolidate, perform motor acts and actions, helps to stabilize the known technical processes, influencing the success of the executions and at the same time the sports performance.

The sports performance at this moment cannot be completed without an analysis of the entire preparation process, in accordance with the rigorous demands of the field. The updating of the training program is an important objective in sports training, the pedagogical tools have the role to improve the athletes' performance and their mental state, as well as the role of increasing the level of attraction of the training.

Problem statement

Often, sports such as football, rugby and field hockey have a fast-paced style of play, consisting of quick turns and frequent changes of direction. (Duthie, Pyne, Marsh, & Hooper, 2006; Gregson, Drust, Atkinson, & Salvo, 2010; Jovanovic, Sporis, Omrcen, & Fiorentini, 2011; Murphy, Lockie, & Coutts, 2003). The speed of movement achieved has been shown to differentiate the individual performance of the athletes, as the players at a higher level seem to cover in a shorter time and at a faster pace the distances required than their counterparts of a lower level (Ferro, Villaciers, Floria and Graupera, 2014; Gabbett, Kelly, Ralph, & Driscoll, 2009; Gabbett, Kelly, & Sheppard, 2008; Gissis et al., 2006).

The speed achieved during sprint is perhaps the most coveted skill in the world of athletics. While sprinting has a clear value in the world of track and field, it is also a critical component in the variety of team sports. In particular, sprint speed has been shown to differentiate levels of ability to play in team sports such as American football (Black & Elmo, 1994; Fry & Kraemer, 1991), rugby (Gabbett, 2009; Gabbett et al., 2008), football (Bangsbo et al., 1991; Cometti et al., 2001; Eniseler, Camliyer, & Gode, 1996; Gissis et al., 2006; Reilly 2007), baseball (Hoffman, Vazquez, Pichardo, & Tenenbaum, 2009), basketball (Hoare, 2000; Hoffman, Tenenbaum, Maresh, and Kraemer, 1996; Shalfawi, Sabbah, Kailani, Tonnessen, & Enoksen, 2011), even ice hockey (Farlinger, Kruisselbrink, & Fowles, 2007; Krause et al. , 2012; Peyer, Pivarnik, Eisenmann, & Vorkapich, 2011)

Research Design

Purpose of study

The present research aims to contribute to the development of training methods, with a reduced physical and emotional effort consumption, so that the performance can be obtained faster and more efficiently. The aim is to develop an exercise program focused on the developing the playing speed for footballers aged 14-16.

Hypothesis and objective

It is assumed that the implementation of an intervention plan focused on increasing the speed under its different forms will result in achieving better competitive performance.

Subjects participating in the experiment and the organization of the research

The inclusion of the subjects in the study was made based on the informal consent regarding the work program and the purpose of the study. The confidentiality of the data and the results obtained in the applied tests were guaranteed. The preliminary research was attended by 20 subjects, males, born in 2004; 10 athletes belonging to the control group (from the Arieșul Turda Glass Club) and 10 subjects to the experimental group (from the University of Cluj-Luceafărul Football Academy Club).

The tests were performed both at the beginning of the study period and at the end of it. Our preliminary study was carried out over a period of three months (September 2018-November 2018) and consisted of completing an intervention plan and applying tests to evaluate the motor qualities speed and skilfulness.

To determine the speed level, we used two physical tests: standing long jump and sprinting 30m straight, both tests measured using **Microgate Witty Manager System technology**.

In regards of the issues listed above, we have tried to build the intervention plan so that the specific training elements are directly focused on developing these skills, especially on increasing speed. We must mention that the

different elements of our program have been inserted in the annual training plan of the U of Cluj-Luceafărul sports team with a weekly recurrence, and according to the professional and contextual considerations of the team coach.

Intervention program

Exercises to increase the speed under its different forms and relaxation

Plyometric exercises for increasing speed: box and box jumps (with vertical jump completion), combinations of plyometric jumps: box jumps from a crouching position, jumps on different boxes of different heights, knee flexions: with a high foot or with jumping, jumping up on the spot, jumping on one foot and to sides.

Sprint exercises for increasing speed in endurance: speed running at ramp speed (15 m, 10 repetitions with 1.5 minutes break between repetitions, sprint intensity 95%).

These exercises were performed alternately, on different training days.

Exercises for increasing speed can be done in different ways: as we could see in the theoretical foundation of our study, despite the numerous methods for increasing the acceleration, the typical methods most often used for increasing speed include resistance training, plyometrics, resistance sprinting and sprints with changes of direction (Cronin, Hansen, 2006; Delecluse, 1997; Martinez-Valencia et al., 2015).

Research Methods

The method of longitudinal experiment was applied, 2 junior football teams between 14-16 years of age participated in the study, one benefiting from the intervention program, mentioned above and the other conducting a classical training program, this being the control group.

For a better appreciation of the level of the motor qualities, the measurements of the athletes were recorded with the **Microgate Witty Manager System equipment**.

Straight speed running

Running in a straight line, at the highest speed 30 meters, the starting foot, with the tip of the front foot located behind the start line, the start is by choice, each athlete leaves when he feels ready. The measurements were made with the Microgate Witty Manager System equipment. (www.microgate.it/witty).

Long jump on the spot (EUROFIT evaluation)

Subjects with their feet at the same level, slightly apart, behind a line drawn on the ground, perform 2-3 movements of momentum, and when they feel ready, they push with their feet and perform the long jump on the spot.

We chose these two tests for the evaluation of the motor quality (30 m straight running, and long jump on the spot) as they are part of the EUROFIT standardized testing program. The EUROFIT Sports Research Institute (ESRI), based in Vienna, Austria, is mandated to play an important role in monitoring and improving children's health and physical condition. In 2017, the organization had a number of one million children who participated in standard sports measurements, this number increasing to 10 million children by 2018. EUROFIT (ESRI) is funded by private and public research grants, and partially by to member schools. (<http://eurofitresearch.org/>)

Material and methods

Statistical analysis - The Shapiro-Wilk test was used to test the normal distribution. The variance was tested with the F test. In the case of data with normal distribution, the t test was used (Student) and in the case of uneven distribution values or ranks, the nonparametric Mann-Whitney (U) tests were used for unpaired samples, or Wilcoxon for unpaired samples. pairs.

To detect the correlation between two continuous quantitative variables, with normal (uniform) distribution, the Bravais-Pearson correlation coefficient (r) was used. For variables with uneven distribution, the correlation coefficient of the Spearman ranks (ρ) was used. The correlation coefficients analysis was performed using Colton's empirical rules:

- poor / null correlation if - noted *

- acceptable correlation if - noted **
- good correlation if - noted ***
- very good correlation if - noted ****

The significance threshold for the tests used was $\alpha = 0.05$ (5%), $\alpha = 0.01$ (1%) or $\alpha = 0.001$, as follows:

- $0.01 < p < 0.05$ - statistically significant difference;
- $0.001 < p < 0.01$ - very statistically significant difference;
- $p < 0.001$ - high statistical difference;
- $p > 0.05$ - statistically insignificant difference.

Statistical processing was performed with the program StatsDirect v.2.7.2. The graphical representation of the results was done with the Excel application (from the Microsoft Office 2010 package).

Data recording and processing

1. 30m distance speed test - straight line sprint: two repetitions (T1 and T2)
2. Long jump on the spot (SLL): two repetitions (T1 and T2)

Table 1. *Initial and final testing of the control group - A.S. F.C. TURDA AREA*

No.	Initials of the subjects	30m speed run (sec.) Group		Long jump on the spot (m) Group	
		I	II	I	II
1	B.E.	4,75	4,74	2,10	2,40
2	B.L.	4,48	4,52	2,32	2,31
3	B.A.	4,60	4,57	2,04	2,19
4	B.AN.	4,62	4,69	1,95	1,92
5	P.C.	4,70	4,68	2,12	1,99
6	C.A.	4,40	4,47	2,23	2,29
7	H.A.	4,90	4,92	2,10	2,16
8	L.M.	5,15	4,92	1,80	1,71
9	S.A.	4,36	4,45	2,33	2,31
10	N.B.	4,25	4,26	2,30	2,31

Table 2. *Initial and final testing of the experiment group - A.S. F.C. "U" FOOTBALL ACADEMY CLUJ-LUCEAFĂRUL*

No.	Initials of the subjects	30m speed run (sec.) Group		Long jump on the spot (m) Group	
		I	II	I	II
1.	O.L.	4,57	4,35	2,07	2,10
2.	G.V.	4,05	4,17	2,01	2,01
3.	C.I.	4,36	4,38	2,03	2,06
4.	B.D.	4,81	4,56	1,88	1,88
5.	C.R.	4,47	4,63	1,98	1,90
6.	S.P.	4,90	4,40	2,27	2,30
7.	W.C.	4,17	4,30	2,11	2,10
8.	D.D.	3,99	3,96	2,37	2,39

9.	C.C.	4,36	4,45	2,10	2,00
10.	C.CL.	4,72	4,60	1,97	2,00

1. Speed testing on 30m distance - straight line sprinting

At the statistical analysis of the values for **speed testing on 30m distance - straight line sprinting** for *unpaired samples*, no statistically significant differences were observed between the two groups at the first repetition (T1) ($p > 0.05$) but statistically significant differences were observed between the two lots at the second repeat (T2) ($p < 0.05$). These figures show that the subjects of the experimental group, following the submission of the intervention plan, significantly increased their speed compared to the control group, the maximum speed at the initial testing being 4.90 (marked in red in Table 9.), and at the testing final 4.63, value marked with green.

At the statistical analysis of the speed values for **speed testing on 30m distance - straight line sprinting** for *paired samples*, no statistically significant differences were observed between the two repetitions (T1 and T2) in either group ($p > 0.05$), see table 3.

Table 3. *Speed testing on 30m distance - straight line sprinting at the studied lots and statistical significance*

Ind	Group	Average	ES	Mean	SD	Min	Max	Statistical significance (p)	T1 - T2
30m T1	I	4,62	0,0853	4,61	0,2699	4,25	5,15	0,1834	Lot I
	II	4,44	0,0992	4,42	0,3136	3,99	4,90		0,973
30m T2	I	4,62	0,0664	4,63	0,2099	4,26	4,92	0,0177	Lot II
	II	4,38	0,0647	4,39	0,2045	3,96	4,63		0,3947

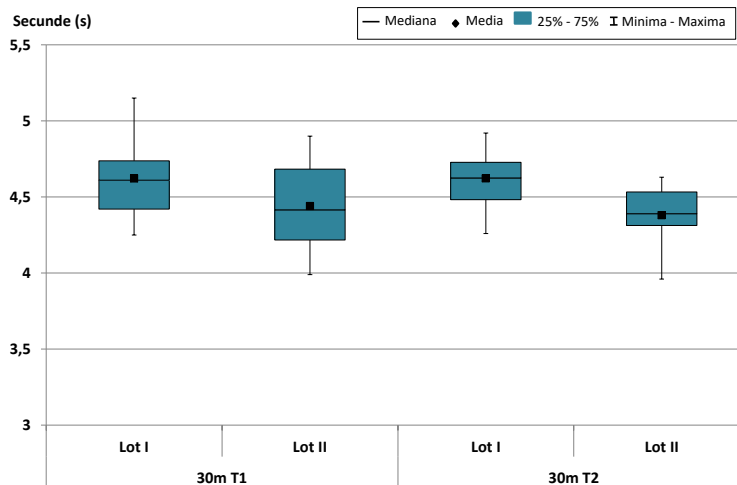


Fig. 1. *Speed testing on 30m distance - straight line sprinting*

Figure 1. shows the significant changes between the two batches at the two times (initial testing and final testing), the differences being registered in favour of the experimental batch.

2. Long jump on the spot

At the statistical analysis of the **long jump on the spot** values (SLL) for *unpaired samples*, no statistically significant differences were observed between the two groups neither at the first repetition (T1) nor at the second repetition (T2) ($p > 0.05$), see table 4.

At the statistical analysis of **long jump on the spot** values (SLL) for *paired samples*, no statistically significant differences were observed between the two repetitions (T1 and T2) in either group ($p > 0.05$), see fig. 2.

Table 4. Long jump on the spot at the studied groups and the statistical significance

Ind	Group	Average	ES	Mean	SD	Min	Max	Statistical significance (p)	T1 - T2
SLL T1	I	2,13	0,0544	2,11	0,1720	1,80	2,33	0,492	Lot I
	II	2,08	0,0461	2,05	0,1457	1,88	2,37		
SLL T2	I	2,16	0,0693	2,24	0,2191	1,71	2,40	0,3367	Lot II
	II	2,07	0,0511	2,04	0,1617	1,88	2,39		

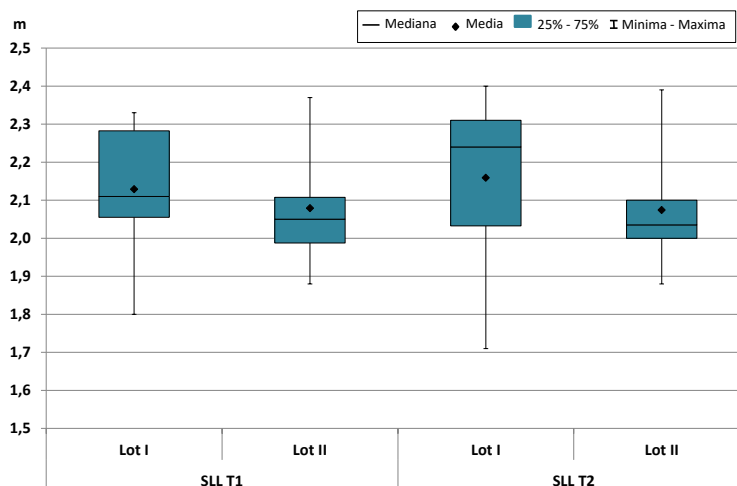


Fig. 2. Long jump on the spot at the studied groups

Findings and discussions

The figures show that in terms of long jumps, the intervention plan did not have a significant impact on their development. We consider that this aspect is due either to the fact that the exercises performed were not specifically focused on this, or the duration of the study was too short for these elements of intervention in the sports training program to achieve the desired effect. We will get more details on this aspect in experimental research.

Correlations between physical test indicators, see table 5.

Statistical correlation analysis between the values of the physical test indicators showed:

- for **30m at T1**

- at Group I

- a very good and similar correlation with 30m T2,
- a very good correlation but in the opposite direction with SLL T1 ($p < 0.01$)
- a good but opposite correlation with SLL T2 ($p < 0.05$)

- at Group II

- a good correlation with the same meaning with 30m T2 ($p < 0.05$)
- an acceptable but opposite correlation with the SLL T1

- for **30m at T2**

- at Group I

- a very good correlation but in the opposite direction with SLL T1 ($p < 0.01$)
- a good but opposite correlation with SLL T2

- at Group II

- a good but opposite correlation between SLL T1 and SLL T2 ($p < 0.05$)

Table 5. Statistical correlation analysis between the values of the physical tests

Items	Group I			Group II		
	r / rho	Colton	p	r / rho	Colton	p
30m T2	0,9589	****	0,0001	0,7414	***	0,0141
SLL T1	-0,8370	****	0,0025	-0,3176	**	0,3712
SLL T2	-0,6871	***	0,0281	-0,2357	*	0,5121
SLL T1	-0,7679	****	0,0095	-0,7055	***	0,0227
30m T1 - SLL T2	-0,6010	***	0,0661	-0,7306	***	0,0164
SLL T1	-0,8450	****	0,0029	-0,8424	****	0,0029
SLL T2	-0,6319	***	0,049	-0,8415	****	0,0029
SLL T1	-0,7759	****	0,0083	-0,5471	***	0,0963
SLL T2	-0,5666	***	0,0877	-0,2569	**	0,4483
SLL T1 - SLL T2	0,8271	****	0,0032	0,9577	****	0,0001

The statistical analysis of the results obtained at the end of the experiment showed us that there were improvements in the aspects concerned, namely improvements were made in increasing the speed and coordination as well as the well-being of the athletes within the experimental team.

Conclusions and discussions

The study showed that the level of speed, of the coordinating capacity, of the force in speed regime – the explosive strength, are variables that can be continuously improved by introducing alternative exercises and by the continuous renewal of the general sports training plan.

This study revealed the level of speed, the coordinating capacity and the explosive strength of 20 athletes (football players) from junior groups of the Football Clubs Academy "U" Cluj - "Luceafărul and Glass Arieșul" Turda.

There were statistically significant improvements for most of the studied items:

The only exception was represented by the **long jump from the spot** test (SLL), in which, although improvements were made, the values did not reach the significant statistical threshold. However, very good overall results are more than enough in our motivation to continue our study with experimental research.

In the intervention plan of the experimental research we will include several exercises focused on the development of the explosive strength (to increase speed) and we will include again in the physical tests the **long jump from the spot** (SLL), in order to see if there will be differences from the preliminary study.

Training based on plyometric exercises and resistance sprinting, supplemented with resistance training could improve sports performance, despite reducing the training period (Ford et al., 1983). If such an assumption is corroborated, the combined workout could provide a less stressful alternative program than the plyometric and sprint based training thus reducing the risk of injury that could be largely associated with performing plyometric exercises. (Wang and Zhang, 2016).

Common tactics used for speed development include general strength training, sprint resistance training, plyometrics and sprint techniques (Cronin and Hansen, 2006; Delecluse, 1997; Martinez-Valencia et al., 2015). Instead, the way each of these exercises can be implemented varies from one athlete to another. The explosive strength that is combined with speed, which is the basic motor quality in football has been evaluated in football academies, at different age categories, thus highlighting its importance.

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KINETOTHERAPY SECTION

APPLICATION OF KINETOPROPHYLAXIS BY PARENTS AT THE CHILDREN WITH SCOLIOSIS IN SPECIAL EDUCATION

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Abstract

Background: Scoliosis has become one of the most common disorders in school-age children, becoming a serious concern for doctors, kinesiotherapy teachers and parents.

The objective of the research is to make a personal contribution to the parents' help who are concerned with their children's health and the application of physiotherapy outside the physiotherapy hours in the special school.

The parents' involvement in the recovery of children with scoliosis is important for both the child and the therapist. For this purpose I have developed a small guide, *Practical guide of prevention - addressed to parents for working with children at home* (Smart Publishing, 2019) subsequently published, with practical recommendations for parents of children diagnosed with scoliosis to prevent the aggravation of this condition.

In the study I seek to highlight that the involvement of parents in the treatment of kinetotherapy which brings a significant value in the recovery of children with intellectual disabilities.

Material and method. The study includes a group of 20 children from the Special School no.3 in Bucharest, and their parents. There were two groups of students: students with mild/moderate mental deficiency and students with severe / profound / associated mental deficiency.

Another criteria for the formation of the working groups was the pupils' level of schooling: primary and secondary. The methods used are: method of bibliographic study, method of conversation, questionnaire method and recording of data and graphical presentation.

Results. There are significant differences between the two categories of primary and secondary school children in applying kinetoprofilaxia to the child's dwelling place. The results showed that 85% of parents who were receptive and applied kinetoprophyllaxis to the child at home were female.

Conclusion. Following the comparisons made between the groups of students constituted, it was found that there are significant differences regarding the application of secondary kinetoprophyllaxis at home and the level of schooling, as well as the degree of disability.

Keywords: scoliosis, parents, special education system; primary and secondary education.

Introduction

From one year to the next, the number of children and adolescents diagnosed with scoliosis is increasing, and an important role in detecting them as early as possible, is played by parents, who must monitor the child's position, and take him to checkups and periodic medical examinations. Idiopathic scoliosis represents 70% of the structural deformities that affect the spine in children and adolescents (Dayer, et al, 2013).

Application of kinetotherapy for scoliotic child is a long-term one that requires perseverance from the patient, family, and the physiotherapist who must motivate and permanent encourage the child. Parents should be involved in observing the occurrence of scoliosis in their children, after how states Victor Ungureanu, vertebrologist „The first who must observe the deformation of the spine in children are parents. Neither the nurse nor the doctor at school” Many parents consider that: „Scoliosis is not a deadly disease, there is nothing wrong with that” and they are in no hurry to take action, meanwhile the complications of scoliosis are an imminent danger to the child's health.

The success of kinetic treatment at a child diagnosed with scoliosis depends very much on the collaboration between the members of the multidisciplinary team.

The therapist must work in a therapeutic team, including a psychologist, a specialist in orthopedic and medical rehabilitation and especially parents and who spend the most time with the child diagnosed with scoliosis. Specific physical therapy exercises should be tailored to the child's individual pattern of curvature and treatment phase. (Kotwicki, et al. 2013). For the treatment of spinal deformities, the goal is to maintain the function of the spine and the short-term and long prevention (Weiss, 2010). The objectives of physical therapy are correlated with pathological changes of the musculoskeletal system and have as final goal the improvement of children's quality life (Negrini et al. 2011).

Considering the fact that scoliosis deforms the spine more than any deviation, it is necessary to take primary prophylactic measures in case of unstructured scoliosis or secondary in structured scoliosis. Scoliosis affects posture, chest shape, gait, sleep quality, but also the respiratory process, but this tends to become more than a medical problem. From my experience working with scoliosis children, I have noticed that these children have an incorrect posture during classes, and those with advanced scoliosis curvature also affect their image and self-esteem. They feel embarrassed by their posture and the reactions of those around them, they feel uncomfortable wearing a corset at school or in a group of friends and over time they end up limiting their social relationships. Therefore, I encourage parents to be more attentive and involved their in scoliotic child's activities; developing this guide came to help them.

Secondary kinetoprophylaxy has the purpose of preventing the aggravation and the evolutionary potential. In this respect will follow or preventing a worsening deficits arising or stopping of further deficit (Balint, 2010).

Objectives of kinetoprophylaxy are: educating children with scoliosis for stopping/reducing disease progression; training in appropriate motor behavior (correct postures during and outside school); relented single posture and aesthetic appearance; facilitating the correction of asymmetrical posture; improving mental state and self-image.

Aim of the research

In order to inform the parents about the importance of applying kinetoprophylaxy in child's life, diagnosed with scoliosis, I made a personal contribution in order to help these parties and by drawing up a guide with practical recommendations for children and diagnosed with scoliosis (Bughircă, 2019).

Objectives of the research are:

1. Going through a bibliographic material on general information about scoliosis and kinetoprophylaxis of scoliosis in children.
2. Selection of children and parents for research.
3. Informing about the importance of applying kinetoprophylaxy in school activities and child resides with scoliosis, in order to prevent a worsening of the deficit.
4. Centralization of data on parental involvement and application of prophylaxis rules for children with intellectual disabilities.
5. Comparing application of kinetoprophylaxy to the children and with intellectual disabilities based on the degree of impairment (mild mental deficiency/moderate on the one hand and severe mental deficiency severe/profound on the other).
6. Highlighting the percentage regarding parental involvement and apply area rules kinetoprophylaxy children with scoliosis.
7. Data analysis, processing and interpretation.
8. Formulation of conclusions.

Hypothesis of the research

I started from the assumption that the children and parents will be informed about the positive effects of the application of secondary kinetoprophylaxy during the program at home/school will lead to improve quality life of children diagnosed with scoliosis.

Methods of the research:

1. Studying the literature on kinetoprophyllaxis of scoliosis.
2. Method of observation required to obtain information about children.
3. Method of questionnaire survey. Application questionnaire for parents about activities children with scoliosis, being an important instrument helpful on kinesiology to a better understanding the living habits of children (Table 3).
4. Methods of processing and interpretation: Statistical-mathematical procedures. The data obtained from the application of the questionnaires were processed, calculated for each item of the questionnaire the percentage.

Research sample

A number of 20 children with a diagnosis of scoliosis from Special School no. 3 in Bucharest and their parents were involved in conducting the research. The group consisted of 12 girls and eight boys with age between 10 to 15 years with an average age of 13 years. The average age of the parents was 38 years (17 females and 3 males) according to table 2. Of the 20 children in the research program, 16 were from secondary education and 4 children from primary education. The number of children with mental disabilities was 14 with mild / moderate mental disabilities and 6 with severe / severe / profound mental disability. (Table 1).

Table 1. *The number of children involved in the program allocated on degrees of deficiency and levels of education.*

Scoliosis	MD		TOTAL MD	SD		TOTAL SD
	P-4	5-10		P-4	5-10	
Subjects	3	11	14	1	5	6

Abbreviations:

MD - children with moderate mental deficiency

MS - children with severe mental deficiency

P-4 - children enrolled in preparatory class-4th grade

5-10 - children enrolled in 5th grade-10th grade

Table 2. *Age and gender distribution of children and parents*

Table 2: Age and gender distribution of children and parents													
Parents							Children						
Age	No.	%	gender				Age	No.	%	gender			
			Male		Female					Male		Female	
			No.	%	No.	%				No.	%	No.	%
30-35 years	3	15 %	0	%	3	17,64%	10-11 years	4	20 %	2	25 %	2	16,66%
35-40 years	12	60 %	1	33 %	11	64,70%	12-13 years	11	55 %	3	37,5 %	8	66,66 %
40-45 years	5	25 %	2	67 %	3	17,64%	14-15 years	5	25 %	3	37,5 %	2	16,66 %

45							15							6,66
years							years							%
Total	20	100%	3	15%	17	85%	Total	20	100%	8	40%	12	60%	

Table 3 . *Questionnaire*

No. crt.	Questions	Answer options			
1	Does your child play any sport?	yes	no (100%)		
2	Does your child regularly exercise?	Yes (75 %)	no (25 %)		
3	Does periodical mean?	daily	2 / week (20%)	1 / week (55 %)	do not practice (25 %)
4	Where do you practice the physical program?	in physical education classes (75 %)	home	do not practice (25%)	
5	Do you consider sport / exercise to be a positive factor in your child's life?	yes (70 %)	not	I don't know (30 %)	
6	Does your child practice physical therapy?	yes (100 %)	not		
7	Where does your child practice physical therapy?	only at school (80 %)	home	in other places (20 %)	
8	Do you think that physical therapy classes have a beneficial effect on the recovery of your child diagnosed with scoliosis?	yes (80 %)	not	I don't know (20 %)	
9	Do you consider it necessary to introduce daily prophylactic measures in the child's schedule for a recovery from scoliosis?	yes (75 %)	not	I don't know (25 %)	
10	Is your child wearing the backpack correctly?	yes (20%)	not (10%)	I don't know (70%)	
11	Does the backpack have the appropriate weight (respectively 10% of the child's weight)?	yes	not (10 %)	I don't know (90 %)	
12	Is your child wearing a corset?	yes (20%)	not (80%)	I don't know	
13	Does the desk / desk have the right height for your child's waist?	yes (20%)	not (10%)	I don't know (70%)	
14	Do you think your child has the correct position in the bank in during classes?	y es	n ot (35 %)	I don't know (65 %)	

15	Do you think that your child has a correct position during sleep?	yes (5%)	not	I don't know (95%)
16	Would you like the child to learn to work in the household activities in such a way as to help him recover from scoliosis?	yes (65 %)	not	I don't know (35%)
17	Would you be willing to help your child recover from scoliosis?	yes (85 %)	not (5%)	I don't know (10 %)
18	If you were to learn part of the kinetic program, would you guide / assist your child to practice it outside of physical therapy classes at school?	yes (65 %)	not	I don't know (35 %)
19	Do you think this guide is useful to you?	yes (95 %)	n ot	I don't know (5 %)
20	Will you implement the prophylactic recommendations in the guide?	yes (85 %)	n ot	I don't know (15 %)

Results

Among the parents of children with severe disabilities 33% wanted to apply the recommendations found in the guide, and 67% don't know if they will succeed to apply the practical recommendations taking into account the associated diseases of children. Among the parents of children with mild/moderate disability, 86% want to apply the guide and 14% didn't know. From the questionnaire we found the following:

1. None of the children included in the research do not practice any sport.
2. 75% of the children practice physical exercises only within the physical education lessons included in the school curriculum (1-2 hours / week); 5 children being medically exempt.
3. 20% of children wear a corset and do additional kinetic treatment (even outside of kinetic therapy classes at school.
4. 70% of the parents believe that sport and physical exercises are a positive factor in the child's life, and with all these children don't do more sport or physical activity.
5. 80% of parents believe that physical therapy has a beneficial effect on the child's recovery.
6. 75% of parents consider the introduction of secondary kinetoprophylaxis in the child's daily activity auspicious.
7. 65% of parents are willing to learn part of the physical therapy program to supervise the child if he executes it correctly at home.
8. 95% think it is helpful to guide and 85 % believe that their it will make and implement.

Discussions and conclusions

1. We can observe that 85% of the parents who were receptive to the application of secondary kinetoprophylaxis to the child with scoliosis were female.
2. From the point of view of motor activity, children practice a physical training program only during physical education classes.

3. Most parents do not know that: children wearing backpack correctly considering the curvature deficiency; if the weight of the backpack is appropriate; if the child adopts a correct posture in school activities/home; if the furniture is appropriate.
4. Out of the 20 children, only 4 children practice physiotherapy outside of school, although most parents consider that physical therapy classes have a beneficial effect on the recovery of the child diagnosed with scoliosis, but do not have enough time and financial situation to provide more physiotherapy sessions.
5. Average low for the parents, the children's enthusiasm their mental deficiency due to severe associated conditions facing copied and (neurological disease, impaired hearing, impaired ability to orient in space, the low capacity of understanding of concepts/instructions).
6. In order to avoid the accentuation of the scoliotic curvature and of the unpleasant problems for the child's health, which are neither few nor easy, it is important that his lifestyle must be very well controlled.

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THE RATIO BETWEEN HEIGHT AND BODY MASS FOR 8TH GRADE SPECIAL NEED EDUCATION PUPILS

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Abstract

The aim of this research was to compare the Body Mass Index of pupils with mental disabilities enrolled in special educational institutions with the Body Mass Index of students in public educational institutions, in the purpose of adapting/perfecting the learning process in the subject of Physical Education and Sport, in special educational institutions.

During this project we decided to verify if there were significant height, weight or BMI differences between the two types of students (students enrolled in special educational institutions and students in the public schools of Bucharest).

The poll of the research had been composed of 60 students separated in 4 groups of 15 students each: 2 groups of girls in 8th grade (special education and the correspondent group enrolled in public schools) and 2 groups of boys in 8th grade. Therefore, comparisons have been realized between these two types of students, corresponding with their age and sex.

From the point of view regarding the statistical methods used, the mathematical SPSS program had been used, applying the Man-Whitney test as a nonparametric test. The results of the comparisons stated that there were differences in height and weight between the students enrolled in special and public educational institutions. However, when judging by the Body Mass Index of the students there were no significant differences.

Keywords: special education, secondary school, Body Mass Index.

1. Introduction

Rising and development of disabled children has been approached both in national and international studies, a special interest being given to the weight growth adjacent to some illnesses such as diabetes, obesity, etc. Authors such as G.C. Frey (2006), L. Steward (2009), or M. Lloid (2012) addressed the theme of the Body Mass Index in children with intellectual disabilities. In Romanian literature, for example, a comprehensive study made by the National University of Physical Education and Sport in 2015 shows in the "Report on the assessment of the somatic, functional and motor potential of the Romanian school population" the implications of the Body Mass Index on the health of the children. (Cojocaru et al, 2015)

The purpose of the following study is to accomplish a straight research in which to compare the values of the anthropometric of height and the body weight of intellectual mental disabilities pupils with the values of 8th grade mainstream pupils.

After comparing the values recorded by mental disabled pupils with the mainstream pupils, we aim to report the data obtained to percentile graphics.

1.1 Purpose of the research

The comparison of the values of 8th grade intellectually disabled pupils with that of the 8th grade mainstream pupils, will lead to differently diagnose about the somatic and the body weight indexes between the two categories of subjects.

Determining the existence of such differences will lead to improvement the teaching process in Physical Education (P.E.) and support activities for special teaching.

Therefore, if needed, that idea will ask to elaborate a specific working methodology for intellectual disabled pupils.

1.2 Objectives of the research

The set objectives for the research are the following:

1. Establishing the level of knowledge through the means of synthetizing general information regarding the anthropometric indexes and Body Mass Index of children with intellectual disabilities.
2. The evaluation of the anthropometric indexes and the determination of the Body Mass Index for children enrolled in both educational systems, in 8th grade.
3. The centralization of the collected information and the creation of a data-base.
4. Comparing the values scored by students with disabilities to the ones attending mainstream school.
5. Reaching a conclusion for the research.

1.3 Hypothesis of the research

Comparing the values of Body Mass Indexes obtained by the mentally disabled 8th grade pupils from the special needs education with those obtained by the 8th grades mass education pupils will not reveal major statistical differences.

2. Research methods

2.1 Tasks of the research

In order to elaborate this study, the following tasks have been claimed:

1. Acquiring information from specialty literature regarding the ratio between height and weight for both intellectual disabled and mainstream pupils.
2. Measuring of the height and weight of 30 intellectual disabled 8th grade pupils and 30 8th grade mainstream pupils.
3. Finding out the body weight index for the 60 pupils involved in the study.
4. Achieving a data base with information on height, weight and the Body Mass Index.
5. Determining the statistic-mathematical tests through which significant differences between the two types of students would be diagnosed.
6. Data analysis, processing and interpretation.
7. Final conclusions of the study.

2.2 Research sample. Experimental groups

A number of 60 8th grade pupils have been involved in the study. Among the 60 pupils, 30 of them were included in three special needs education schools from Bucharest and the rest of 30 in three mainstream schools.

Therefore, four different 15 pupils groups have been created. The criteria which have been taken into account when creating those groups were the gender of the subjects and the level of education. A group of 15 boys from special schools, a group of 15 boys from mainstream schools, a group of 15 girls from special schools and a group of 15 girls from mainstream schools have been implemented, all being in the 8th grade.

We wanted to make the comparisons found between groups of the same gender but from different educational systems (special needs and mass education). The subjects have been selected through „statistic step method”.

2.3 Evaluation methods

The anthropometric measurements have considered the height and the body mass of the student (Cordun, 1999, p. 75). With the resulting data, the Body Mass Index had been calculated, utilizing the formula (Figure 1.):

$$\boxed{\text{Body Mass Index}} = \frac{\text{Body Mass (Kg)}}{\text{Height}^2 \text{ (m)}}$$

Fig. 1. The formula for calculating the Body Mass Index

2.3 Statistical methods

Creating the design of the research imposed the utilization of non-parametrical methods which intervene as data processing techniques. In our case, we have used the technique of the U test, for the comparison of the data scored by the student groups. Statistical method had been predicted by Mann Whitney.

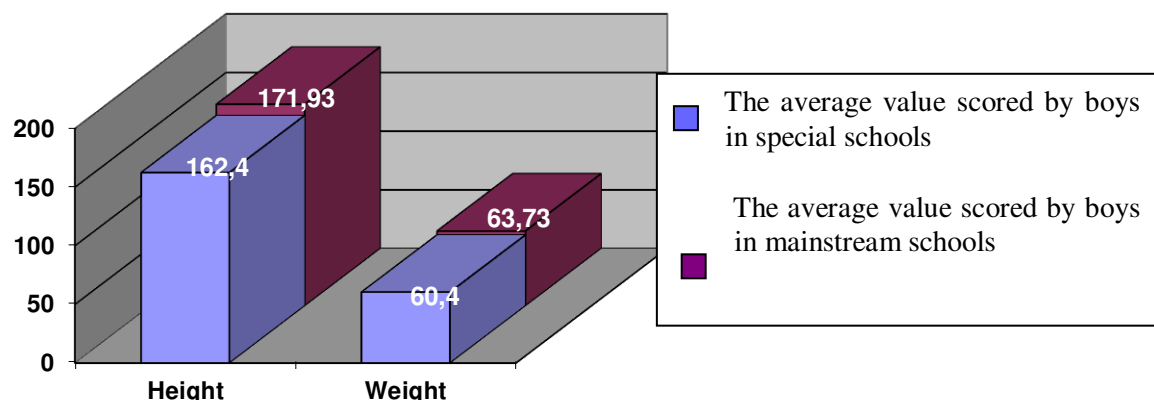
The U test is one of the most powerful non-parametrical methods. It makes use of each result's level in the general classification and serves as a way of testing the null hypothesis H_0 , according to which the two independent samples are randomly chosen from the representative populations (Labăr, 2008, p. 128).

For the utilization of the acquired data the statistical mathematical program S.P.S S 24 for Windows has been used (Popa, 2008, p. 196-201). The mathematical statistics program had ranked the average result for every variable of the students from the four groups, the value of the U Mann-Whitney test for two independent samples and the significance entry level. In our case, we report to a significance level of $p < 0,05$.

3. Research results

A. After the analyzing and comparison of the obtained data through the tests performed by the subjects in the two groups (group 1 - special education, subjects with severe mental deficiencies corresponding in age with students in 8th grade from mainstream schools, boys; group 2 - mainstream schools, 8th grade, boys) the following results have been obtained:

- Height: the average rankings obtained by the students of the two groups were 11,47 for students with severe mental deficiencies and 19,53 for students enrolled in mainstream schools. After applying the Mann Whitney test, the obtained U values was 52,000. The difference between the two groups proved to be statistically significant ($p=0,012$) (Graph 1);
- Weight: the average rankings obtained by the students of the two groups were 14,33 for students with severe mental deficiencies and 16,67 for students enrolled in mainstream schools. After applying the Mann Whitney test, the obtained U values was 95,000. The difference between the two groups is not statistically significant ($p=0,467$) (Graph 1);



Graph 1: The comparison between the height and weight values of boys in 8th grade, enrolled in public schools, and their correspondents with mental deficiencies.

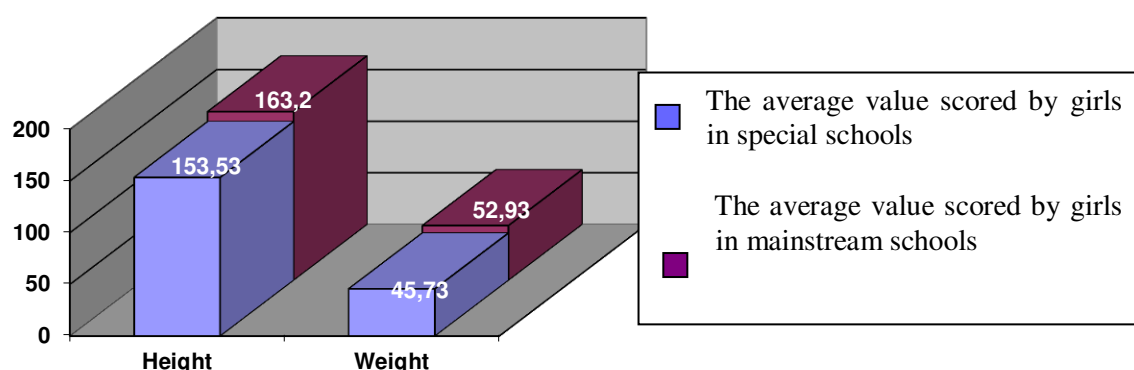
- Body Mass Index: the average rankings obtained by the students of the two groups were 16,73 for students with severe mental deficiencies and 14,27 for students enrolled in mainstream schools. After applying the Mann Whitney test, the obtained U values was 94,000. The difference between the two groups is not statistically significant ($p=0,443$) (Table 1.)

Table 1. The average BMI scored by boys enrolled in 8th grade in mainstream schools and boys enrolled in 8th grade in special educational system

	Average values of the BMI
Special Education System	22,75
Mainstream Schools	21,5

B. After the analyzing and comparison of the obtained data through the tests performed by the subjects in the two groups (group 3 - special education, subjects with severe mental deficiencies corresponding in age with students in 8th grade from mainstream schools, girls; group 4 - mainstream schools, 8th grade, girls) the following results have been obtained:

- Height: the average rankings obtained by the students of the two groups were 9,73 for students with severe mental deficiencies and 21,27 for students enrolled in mainstream schools. After applying the Mann Whitney test, the obtained U values was 26,000. The difference between the two groups proved to be statistically significant ($p=0,001$) (Graph 2);
- Weight: the average rankings obtained by the students of the two groups were 11,57 for students with severe mental deficiencies and 19,43 for students enrolled in mainstream schools. After applying the Mann Whitney test, the obtained U values was 53,500. The difference between the two groups proved to be statistically significant ($p=0,014$) (Graph 2);



Graph 2: The comparison between the height and weight values of girls in 8th grade, enrolled in mainstream schools, and their correspondents with mental deficiencies.

- Body Mass Index: the average rankings obtained by the students of the two groups were 14,90 for students with severe mental deficiencies and 16,10 for students enrolled in mainstream schools. After applying the Mann Whitney test, the obtained U values was 103,500. The difference between the two groups is not statistically significant ($p=0,709$) (Table 2.);

Table 2. The average BMI scored by girls enrolled in 8th grade in mainstream schools and girls enrolled in 8th grade in special educational system

		Average values of the BMI
Special	Education	20,53
System		
Mainstream	Schools	18,7

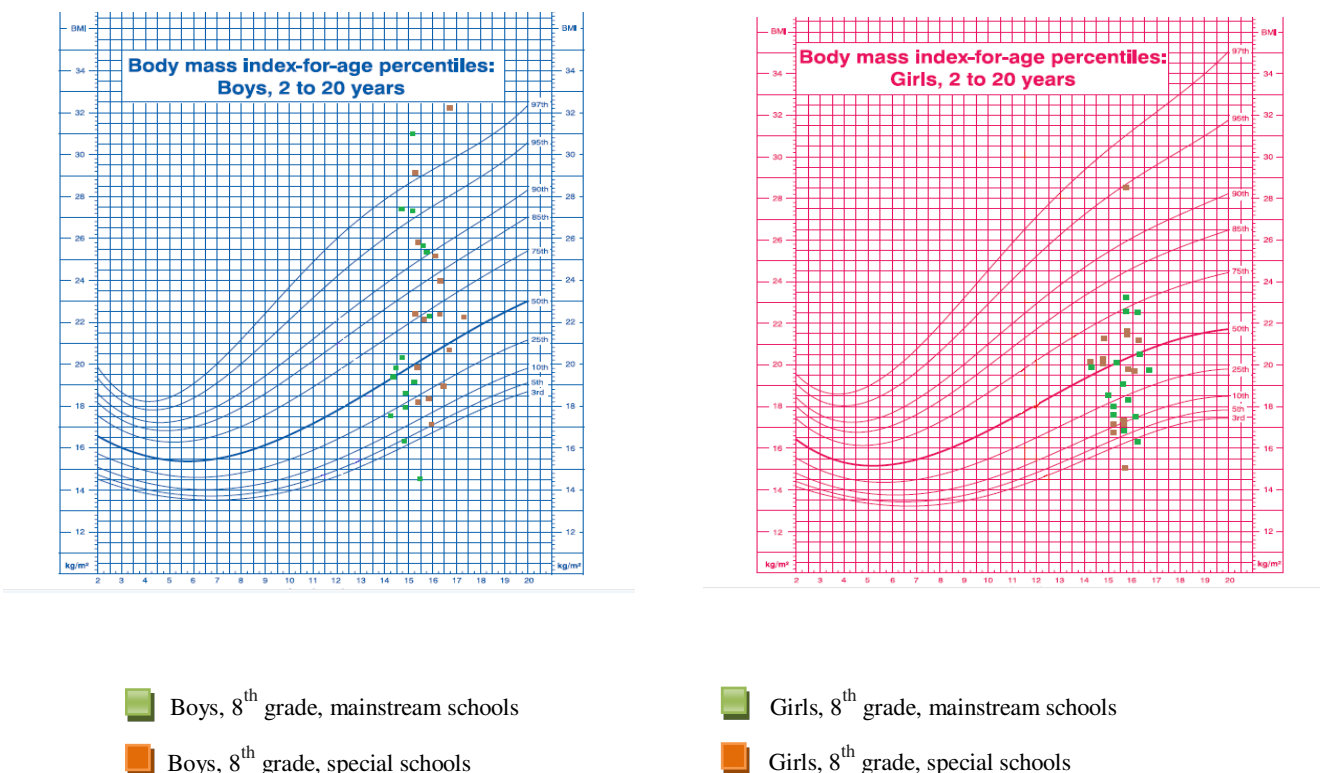
4. Discussions

Following the analysis and comparison of the data obtained in the tests conducted with the mentally disabled subjects, enrolled in the special education and the students enrolled in mainstream school at gymnasium level, we can formulate the following conclusions:

- following static-mathematical calculation, significant height differences were diagnosed at the level of the groups compared: girls and boys of 8th grades;
- in terms of weight, significant differences between the two categories of subjects were recorded in the 8th grade girls. The 8th grade boys did not have significant differences;

- although in terms of weight and weight there were significant differences for almost all groups, in the case of body mass index no differences were recorded in any of the groups compared.

In order to certify the obtained conclusions, we propose a comparison of the Body Mass Index by referring to the percentile growth graphs (Kuczmarski et al., 2002, p. 31-32).



Graph. 3. Comparison of the Body Mass Index by referring to the percentile growth graphs

Table 3. The distribution of students according to the value of the Body Mass Index

Percentile BMI	Boys, 8 th grade, Special Schools	Boys, 8 th grade, Mainstream Schools	Girls, 8 th grade, Special Schools	Girls, 8 th grade, Mainstream Schools
BMI \geq percentile 95	2	3	0	1
85 \leq BMI < percentile 95	3	2	0	0
5 \leq BMI < percentile 85	10	9	14	13
BMI < percentile 5	0	1	1	1

Conclusions

It can be noticed that the distribution of students according to the Body Mass Index is close to all 4 groups, the values of most of the students being between the percentile 5 and the 85th percentile, which is in the category of children with no problems from the point of view of the state of nutrition.

We conclude by saying that the ratio of body mass to waist has values close to pupils with intellectual disabilities compared to students enrolled in mainstream schools.

In this regard, we propose that the annual design of learning units that target the harmonious physical development content for students with intellectual disabilities (8th grade) in Physical Education and Sports should be achieved by respecting the same rules as for schoolchildren in mainstream.

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VARIA SECTION

DANCE THERAPY – THE PSYCHOTHERAPEUTIC USE OF MOVEMENT TO PROMOTE THE EMOTIONAL, SOCIAL, COGNITIVE AND PHYSICAL INTEGRATION OF THE ELDERLY

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Abstract

Background. Elder adults often require adaptive activities to maintain or regain their physical fitness. Dancing is one of the most complex activity for people. Dance is an activity which develops social, emotional, cognitive and physical skills that can improve the life quality of elder. The old age is a problematic, so the therapists have to work more with this segment. Every activity or therapy is welcome to prevent the needs of elder people. Dancing is one of this therapies and I will show the benefits of this activity.

Method. The purpose of this case study is to describe the process of developing, pilot testing and implementing a dance-based exercise class at the Seniors Club of Bucharest City Hall. This participant observation-based case study makes use of holistic observations during the process of developing and offering the class in cooperation with the Director of the Seniors Organization. Participants will complete a "Course and Instructor Evaluation", reporting their experience with the class, including any perceived benefits, concerns and willingness to pay and participate in future dance offerings. The weekly class format includes 10-minute warm-up/introduction, 40 minutes of cardiovascular oriented dance instruction with pre-recorded accompanying music, and a 10-minute cool down/review.

Results: In consultation with the program, a dance-based exercise class for seniors was approved, designed, advertised, and implemented. Participants displayed signs of enjoyment during the class meetings and the small class size allowed all to engage in a dynamic, powerful, and rewarding experience of dance regardless of level of ability. Through repetition and reinforcement of movements participants learned dance steps often working beyond their conceived limitations. Dance has shown promise in improved fitness, social connections and overall physical and cognitive benefits.

Conclusion: Our study is meant to show that a professional trainer, a good program, implicated people takes to good results. For elders is very important to take good activities. The study will show that the dance therapy is an instrument that is proper to improve the elders life, make they feel good and in the end the quality of life of elder people.

Keywords: dance, elder people, therapy, quality of life

Introduction

Dance therapy or, as it is also known, movement therapy, is the use of movement for psychotherapeutic purposes, to promote the emotional, social, mental and behavioral integration of the individual. The natural therapeutic goal is to achieve a healthy and harmonious balance and the feeling of fullness, personal fulfilment, ego reformation and especially the increase of self-esteem.

Although dance has ancient origins, being in prehistory an integral part of some cults, even essential in cultic manifestations, indeed dance therapy really came into being in 1940. The pioneer of this therapy was Marian Chance, who with the help of other psychiatrists in Washington D.C. they found that their patients showed remarkable and welcome physical and mental improvement after attending Chance's dance class. As a result of these results, Chance was asked to work with a multidisciplinary team at St. Paul's Hospital. Elizabeth, with patients with mental illness, is considered too agitated to be integrated into a normal therapy session. Chance was able to lay the groundwork for the concepts of treatment therapy, working with schizophrenic and psychotic patients before the advent of psychotropic drugs (Sandel et al., 1993, p. 113).

Dance therapy is of two types: individual and group. However, we approach this therapy, it involves four stages that the patient must go through in order to obtain expected effects as a result of dance therapy.

1. Preparation - initially any new student must be prepared to perform specific exercises and movements, to be able to perform a sustained activity and at the same time the therapist must create a comfortable and safe environment, which gives the patient the necessary comfort and feeling of security. carrying out the activity in the best conditions;

2. Incubation, that stage of the creative process consisting in the spontaneous return to the problem and the appearance of tension as a state of research - consists in a phase of relaxation, in which the patient can give up conscious control and freely express their feelings and emotions. Through the creative act of dance. At this stage it is considered that the movement becomes symbolic for what the patient is experiencing and can externalize unique feelings, which otherwise could not be discovered.

3. Revelation - is the stage in which the patient can make the connection between the symbolic movements sustained by the dance, performed in the previous stage with all their possible meanings that they could have or the performer wants to give him, being helped in this process. Awareness by the therapist.

4. Evaluation - takes place at the end of the therapy session, as well as at the end of therapy and consists in evaluating the patient's progress and improving his physical and mental condition.

Dance is the essence and origin from which dance / movement therapy has evolved, so that those who participate in such therapies know significant improvements in both physical and mental tone. Both students and dance teachers were positively influenced by this therapy. "Dance" is and remains an important part of professional and therapeutic identity after many direct and alternative discussions and suggestions. It has many different meanings for people, and unfortunately some of them suggest only partial connotations such as performance or technical ability, evading the socialization and improvement of the mental and even soul spectrum of each person. The role of the dance / movement therapist is to learn skills, disinhibit and explain the fundamental meaning of dance and how it is related to life, growth and change.

The dance is used in the broadest sense of body movement, which may contain a short gesture or total self-involvement. It takes time, can only be short and can use rhythms or not. It can expand into space or use only what is occupied in one's body. However, in all cases, it is a motor action that emanates from an individual in response to internal sensations or perceived by external stimuli. Even motor actions used for practical purposes such as eating or washing have a particular quality that manifests the psychosocial aspects of a person.

Human beings experience the urge to move even before they are born. From a developmental point of view, we call for movement to communicate before we need to use verbal language. A basic assumption on which all therapy is based is that human beings have both psychosocial and biological needs. To be able to share one's thoughts and feelings with others and be understood by them seems to be what defines humanity. Difficulty in relationships, feeling uncomfortable with oneself and in the world, or experiencing serious trauma are the sources in many of the therapeutic interventions made in any type of therapy situation.

It has been more than 40 years since TD was organized as a profession in the United States. It is developing rapidly in many countries. Therefore, it is our hope that this collection of original articles will serve as an important source of information for TD students and professionals, as well as other mental health and care disciplines. It covers a wide range of information created by experienced therapists who have written about their specialties. Those who have contributed to this book come from many countries with different cultures, such as: Spain, North and South America, Israel and Australia. Recognizing cultural differences, the basic theories of TD are the essence of each of them, just as the defined concepts are the basis of all human experiences. To highlight:

1. The human being is a body-mind unit and dance / movement is its manifestation.
2. Gesture, posture and movement express the person and allow self-knowledge and psychotherapeutic change.
3. Recognition of the therapeutic effects of the creative process.
4. Dance and movement are used as a way to the unconscious and as a facilitator of different aspects of health and well-being.
5. There is a difference between working with an artist or a dance teacher and working with a therapist. For us, dance is in the service of promoting health and change.
6. Dance therapists establish contacts, plan treatment and evaluate it in terms of integrated knowledge of movement, dance and psychotherapy.

There are many problems that human beings face and many possibilities in their theoretical understanding and ways of responding to them. It is hoped that some of these alternatives will be enlightening to the reader through the experience and knowledge learned and shared by several authors who have contributed generously

with their expertise. The common theme that unites them is the deep love of dance and all its meanings and the understanding of how deeply it affects our lives.

Movement and breathing signify the beginning of life. They precede language and thinking. Gestures appear immediately as a means of expressing the need for communication. This has been true throughout human history. Havelock Ellis writes, "if we remain indifferent to the art of dance, we have failed to understand not only the supreme manifestation of physical life, but also the supreme symbol of spiritual life" (Ellis, 1923, p. 36).

Art and creativity have been the subjects of study in psychoanalysis. Some of the analysed aspects are: the artist's person, the source of his / her talent or motivation, the meaning expressed in the work of art, the unconscious psychological processes validated by the artistic activity, the creativity of geniuses, daily creativity and the types of mental activity involved. Psychoanalysts from different schools have examined these topics in relation to their theories, using examples from different fields of art: literature, visual art, and music (Arieti 1976; Fiorini, 1995; Freud, 1908, 1914, and others; Klein, 1929; Kris, 1952; Storr, 1993). No one has associated dance with a theory, nor has it exemplified what undermines Anzieu's statement: "During or around the period between 1950 and 1975, the great absentee, the unknown, the demoted from teaching, the daily life, the expansion of Structuralism, the psychologies of many therapists (...) was (and in a to a large extent it is still) the body as a vital dimension of human reality, as a pre-sexual and irreducible global given (point of origin), as the one in which the structures of the psyche find their support." (Anzieu, 1989/1998: 33).

Kinesthetic empathy is a basic concept much mentioned in the literature on TD and implemented in the practice of TD. Empathy is a person's ability to understand another person. It seeks to experience the inner life of another person and involves knowing what others are feeling, obtaining information about their situation, and taking action accordingly. It arises from elements that are common to the experiences of both individuals who are involved in the process of empathy. This construct, considered one of the major contributions to psychotherapy (Levy, 1992), summarizes an approach to the dynamics of the therapeutic relationship, which includes nonverbal communication, body movement, dance, and verbal expression.

Through kinesthetic empathy, the dance therapist facilitates the client's self-development when the process is blocked or interrupted. This requires each therapist to be open to their inner sensations and feelings and to be aware of what is familiar in their own movement. Understanding, knowledge and interpretation are functions inherent in the processes whose purpose is to alleviate human suffering. The ways in which these operations are defined determine different practices in psychotherapy. TD focuses on the experience of feeling the movement and how the movement acquires a meaning. Dance therapists empathetically engage in an intersubjective experience that has its origins in the body.

Dance therapists invite patients to experience new combinations of muscle and respiratory activities. They provide an opportunity to experience changes in bodily emotional expression in a supportive environment that helps regulate and modulate emotions. The effectiveness of TD is related to working with the awareness of bodily experiences, which occurs when they are born, recreated or repeated. TD acts when sensation and meaning meet. Freud (1916) believes that one aspect of the therapeutic process is to reconnect the affections and meaning when they have been separated. Concentration and work with the body and movement intensify the integration of the mind-body functional unit (psychosome).

In her book, *The Thinking Body*, Mabel Elsworth Todd (1937) writes about body language or nonverbal communication, saying that "often the body speaks clearly what the language refuses to pronounce" (p. 295). In TD we connect to nonverbal mode by creating movement dialogs. Over the years, dm therapists have categorized their experiences in using the dynamics of the nonverbal approach. By working with patients who may have adapted to the outside world by establishing an effective verbal protection system, dm therapists can effectively assess and understand the individual's symbolic gestures, postures, quality of movement, rhythms, and patterns. Verbal language is a complex process. As in all complex things, multisystemic procedures, the truth, the clear meaning can be distorted and often completely lost.

In addition to "activating" the individual to understand the body and self, allowing the communication of ideas and emotions and managing group dynamics, TD is a socializing experience. Even before the session begins, the act of being invited to join, making a decision regarding participation and expressing that choice, are all opportunities to practice social skills. When the group starts the activity, each person introduces himself or

makes his presence known in a way and is aware of the presence of the others. It has often been observed that patients come to a TD session (especially outpatients) and do not know their names.

Often these patients sat next to each other for days or weeks as "anonymous" beings. The time spent in the session, learning and memorizing the names of others, is an important process of socialization and builds relationships and camaraderie. At the level of movement, social interaction is practiced by rotation - learning to wait and postponing the reward; anticipating the arrival of his turn and preparing an answer (as in conversations); and participating in the movements of others using visual, auditory, and kinesthetic allusions.

As social beings we learn to accept limits and principles that are necessary to maintain a reasonable order. There are also limits and structures in the TD meeting. First of all, it is the structure of the session itself, from the warm-up to the end of it. Although fantasy material can be developed and imagination can be used, the moving body can only be experienced within the boundaries of reality here and now - in the specific facility, room, hour, day, etc. Other limitations, such as a ban on talking on the phone or drinking during the session, are restrictions that the patient comes to accept and tolerate as part of the social sphere. Time limit contracts, expectations and acceptable behavior characterize the TD session as a socializing event.

Because human beings communicate through the body long before they learn to speak, body language is essentially our native language (Kleinman & Hall, 2006, p. 2). DM therapists work directly with feelings using their entire bodies as empathic receptors and transmitters of patients (Harris, 2008). Translating their native language into therapeutic skills allows the dm therapist to spontaneously develop the body language of those with whom they work, in meaningful interactions. Essentially, they are devoted to confidence in their inner abilities to "participate" empathetically, to respond authentically, and to decipher nonverbal experiences in cognitive insights. Responding to patients' nonverbal signals, through tone of voice, facial expressions, meaningful gaze, and body movement, can reveal various hidden transformations in the states of mind and body. According to Siegel (1999), "Resonating with these expressions of primary emotions requires the therapist to feel the feelings and not just understand them conceptually" (p. 290).

The therapist's personal experience, ability to access unconscious material, and ways of being in their bodies is part of their sense of self and plays an important role in the healing process (Kleinman, 2004). Supporting this premise, Virginia Satir (1987) says eloquently:

"When I am in contact with myself, with my feelings, with my thoughts, with what I see and hear, I develop into a much more integrated self. I am much more appropriate, I am much more "whole" and I am able to have better contact with other people." (P.27).

The therapist facilitates expression by inviting patients to begin to observe various disconnections, or excessively controlled sensations, impulses, and natural movements, and to consciously represent these movements. This can take place as part of a group, individual, family or couple experience. Often frightened to connect to these feelings as well as move in their bodies more expressively than through stylized exercises or movements, they are more easily engaged when they understand cognitively why therapy is important for their recovery, which expect from them, and why input is important to the process. Therefore, the therapist provides a brief orientation or in a group or family session may invite patients to share their personal experiences.

Research method

The research method chosen is the case study. The case study reflects the way in which the theoretical-methodological aspects of scientific management interact with the concrete, pragmatic aspects of a concrete case.

DB Bromley states that the case study can be used in various fields such as: central and local public administration, anatomy, anthropology, social activities, biochemistry, managerial, legal or financial consulting, criminology, artificial intelligence, history, jurisprudence, management, politics, psychiatry, personality study, military studies, sociology. However, he also warns of the danger of overuse, when not needed, the term case study (D. B. Bromley, 1986, pp. 177-178).

O. Nicolescu defines the case study as an “active method of education, based on an intense involvement of participants in the training process in the approach and usually in solving a problem-solution in order to creatively apply the acquired knowledge and training and developing effective management skills and behaviors.” (O. Nicolescu, 1994, p. 7)

The case study is a strategy, an approach, rather a method, such as observation or interview. It involves conducting research, which includes elements of final evaluation. The research carried out needs to be empirical in the sense of trusting interviews, questionnaires, testimonies, evidence, documents studied in connection with the researched phenomenon. The case study is particular, deeply specific; it depends directly on the results of the research and how the conclusions can be generalized.

The case study focuses on the study of a phenomenon in the context in which it occurs, especially when the boundary between the phenomenon and the context is not clearly defined. The case study requires the use of multiple methods of gathering information. In the private practice of dance / movement therapy, we had under observation the members of the Center for Seniors of Bucharest, which consists of several hundred members, but the dance therapy circle was attended by 60 members, and this therapy session through dance it ended with a dance contest that took place at Elisabeta Restaurant in Bucharest.

The research included 60 participants, 30 women and 30 men, members of the Center for Seniors of Bucharest, who during 2019 (from January 1 to December 31) participated in dance therapy classes held within the Bucharest club. They are active members of the Center for Seniors of Bucharest and participated in 4 monthly sessions, and the finality of this approach was represented by the dance competition on March 5, 2020.

As research methods we used: direct and indirect observation, analysis of statistical data, managerial plan. We also used content analysis in the online environment and the photovoice and at the beginning of the therapy, as well as at the end of it we used the interview.

Methodology

During the research we did not encounter any particular difficulties, as all those who participated in the study are adults, in full mental faculties and agreed to participate in the research.

Results

Its results are significantly psychological and healing for the person involved in them. Carol Press considered that psychoanalysis and creativity are not interchangeable, that work in a process cannot be replaced by artistic actions (2005, p. 119). We integrate them into dance / movement therapy. This is possible when we know the psychodynamic theories on the aspects of artistic activity. With the belief that TD is both a therapeutic and a creative event, the benefits of creativity must be considered. Maslow (1971) wrote that creative people feel comfortable with change, change brings them joy, and they can handle a new situation with confidence, strength, and courage. Transposed into a life situation, the creative person can adapt and function appropriately in the face of change (including economic, social, environmental and role changes).

In a TD session there is the opportunity to face the change (change of levels, various rhythms, negotiation of personal space) and to react to it. In the secure atmosphere of the session, connected with a strong therapeutic alliance of mutual trust and respect, patients may be inclined to be more flexible in their choices and decisions and to seek alternatives to the situation presented. The feeling that accompanies self-perception is defined as self-esteem. The "normal" person has a healthy love for himself and depends on others only partially for attention, affection and appreciation (Buss, 1966). Individuals with mental illness have a considerable loss of self-esteem and often seek someone else's affection to maintain their sense of self-worth.

Feelings of low self-esteem include inadequacy, inferiority and lack of self-confidence.

From a developmental point of view, when the ego begins to form, the child's self-esteem is completely dependent on parental affection (Buss, 1966). Psychoanalytic theory holds that loss of self-esteem occurs in schizophrenia because patients regress to an early oral stage in which they cannot adequately test reality and,

unlike children, reject it. In his field here and now of a TD session, with clearly defined physical boundaries (the room) and the structure of the session itself (from warm-up to closing), there is the potential for the patient to "test" his identity in contrast to others. In reflecting the movements of others, by allowing and accepting physical contact and by integrating the quality of activation of muscles and joints, patients can move towards an acceptance of both reality and their presence in that reality.

Because dm therapists accept individuals' movement and "experimentation" on their own bodies, and because they provide a consensual environment, open to movement opportunities, untrained "dancers" can feel a new confidence in themselves as valuable, esteemed individuals. A sense of pride and accomplishment is added to the good feelings of the "self" because the patient, in a TD session, offers the group a personal movement, which is received, duplicated and extended. Specific dance activities, which strengthen positive self-esteem, may include rotational positioning in the center of the circle ("dancing in the center of attention") and shifting places between two members, dancing along and to the opposite side ("changing partners of dance"). The increase in self-esteem is illustrated by bright effects and smiles, sustained eye contact, as well as spontaneous applause from group members.

Conclusions

All the above leads to the justified conclusion that Dance Therapy has remarkable effects in terms of improving the quality of life of the elderly, by obtaining a good physical tone, by disinhibiting and physically and mentally relaxing the participants. Also, the participants had pleasant experiences, they managed to socialize much easier, to meet new people, to revive the spirit of the competition, considering the contest at the end of the therapy. Physical and intellectual performance also improved significantly.

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THE ESSENCE AND BASIC CONCEPTS OF THE RECREATION PROCESS IN THE DAILY LIFE OF CITIZENS

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Abstract

The significance of the **recreation** phenomenon has increased greatly in today's fast and competitive world, in the conglomerate of society and situations as a whole, people devote many hours to academic learning, being they theoretical or practical ones, and the activity of improving knowledge. To this is added the current way of daily life in which people work between 10 and 12 hours daily, even on weekends, office work, sedentary life as well as diminishing direct human-to-human communication and isolation in the online environment - internet, the result being the diminished time and the desire to practice the sport for recreation.

Recreation occupies an important place in the structure of physical culture, as recreational elements are used in sports, physical education and physical rehabilitation.

In the current situation, the prevention of diseases and the consolidation of the population's health goes from medical to social. There is a constant tendency to increase the social role of the **recreational** phenomenon through sport in order to strengthen and maintain health as well as a more physically active life of people. This is an integral part of the development strategy of the modern society, which aims to humanize and democratize its potential.

Keywords: recreation, physical culture, population, health.

Introduction

Following the analysis of the specialized literature (Vendien, C.L., Nixon, J.E., 1968; Ruth V. Russell, 2001; Bălan, V., Bota, A. 2019) it was found that a large part of the authors claim that the socio-medical process of the recreation of the human being by different means, has an important contribution from the psychic, physical, intellectual, aesthetic, moral point of view, but also the formation of consciousness regarding the development of one's personality, character and self-esteem. Regarding the medical aspect, it is also aimed at improving and / or maintaining the general state of health, increasing muscle strength, flexibility, as well as a better quality of life and why not longevity.

The **recreational** process, in the social context, acquires an interactive action of communication, individual and team development and, respectively, the personal way of receiving and interpreting the social indices and of the variable dynamics induced by the intensity and the social importance.

According to the World Health Organization (W.H.O.), a person's lifestyle can have an influence of up to 51% on the general state of health, while the environment and the hereditary factor can have a mean of about 25% for the person's health respectively, and about 15% of the contribution of the medicine can have an impact on the health of the person. The person himself must be responsible for his health and "well-being". Only it is the man who can maintain his body in perfect functioning state at optimal parameters or can accept to live with a potential disease state, which can affect the happiness and joy of life.

Research methodology: study of working documentation, conversation, pedagogical observation, analysis and generalization of literature.

Discussions. The factors of a healthy lifestyle, as opposed to the importance of implementing the recreation phenomenon in daily life, according to Gustaitienė L. (2003) are considered as positive or negative effects as follows:

a) Habits and attitudes - can actively promote the healthy lifestyle or the contrary;

b) Skills - helps to form a healthy lifestyle by organizing activities to promote improvement and / or maintaining health, but also the danger of forming a wrong lifestyle with negative effects on health and social status;

c) Example - a positive example of a healthy lifestyle offered by parents, mentors and other relatives or negative examples offered by parents, mentors and relatives;

d) Perception about the disease - awareness of the threat to his health or insufficient awareness of the importance of the disease on his health;

e) Motivation - understanding the benefits of a healthy lifestyle, positive social norms and individual motivation, or the negative side, when knowledge is insufficient, negative social norms and fear of change;

f) Knowledge - sufficient or insufficient information.

The multilarity of the **recreational** process implemented in the daily activity of the citizens, the innovative methods and actions, highlight not only the value, as a harmonious physical development and the beneficial effects on the health, but also moral, aesthetic, intellectual and volitional values that accompany the motor skills and abilities, all of which contribute to a new formation of the awareness of the citizen's behavior in society.

Thus, we can say that the **recreation** process, as an integral part of the general education, can contribute, in an optimal method through its specific content, to the fulfilment of the socio-medical ideal and the objectives of the W.H.O. - by forming and creating a multicultural, healthy personality and longevity.

It can be stated, as can be seen from Figure 1, that the role and importance of the process of recreation in people can be very important, because it concerns not only the health of the human body, the psychic and the well-being, but also opens new horizons, sharpening skills and socialization.

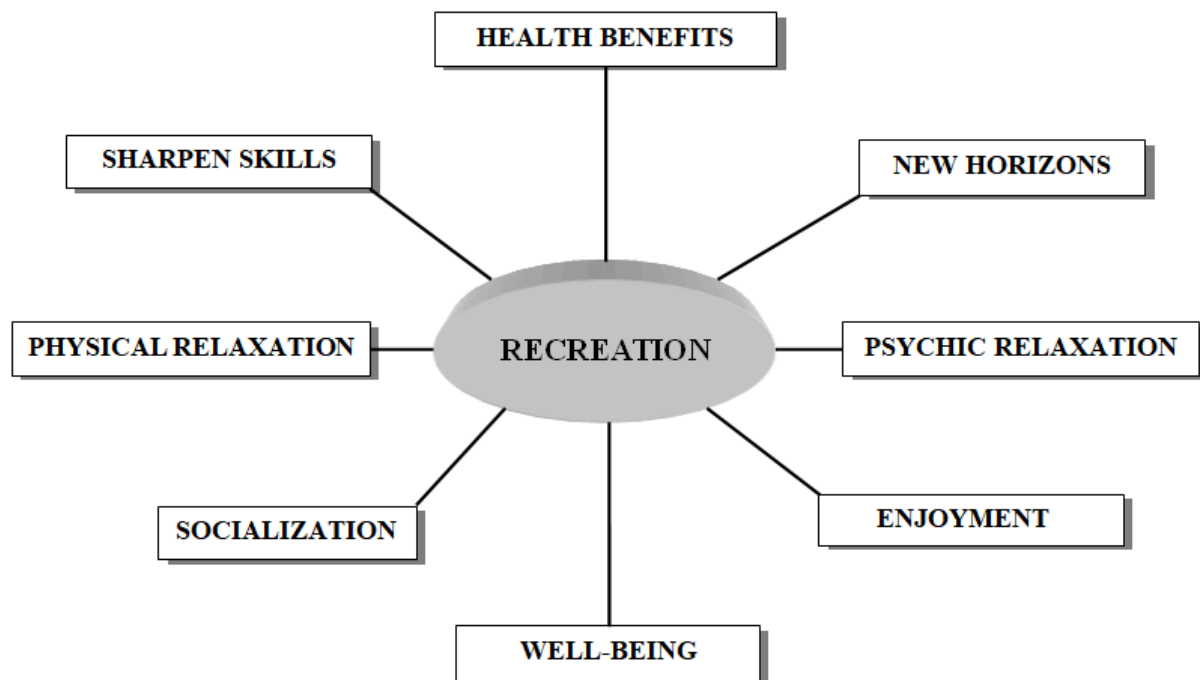


Fig. 1. Recreation benefits

According to Ruth V. Russell (2015), the **recreation** process has often been defined as a quality of experience or activity in leisure time. As the author of the study reports, free time is spent away from business, work, homework and education, as well as necessary activities such as eating and sleeping. Such as the "Situationist International" proposal that **recreational** time should not evolve from leisure, and that **recreational**

process should become an illusory concept that is rarely completely "free"; the economic and social forces fit the individual's free time and sell them back as goods known as "free time".

In the context of the "new education" and the conditions of development of the information society, based on knowledge, the value of free time, implicitly and of free time education "is related to the result of a historical process associated with the phenomenon of modern civilization, of gaining a greater freedom by the modern worker, of special allocation of a time for restoration and recreation", mentions C. Cucos (2002, p. 93).

Free time is a global problem of the 21st century, and this requires a high level of culture and awareness of the value of time and freedom for the whole human society. M. Pârlog identifies the dichotomy "free time - non-free time", which is equivalent to the phrase "degree of freedom of socio-human activities" (1989, p. 214).

Free time studies - **recreation** and the sociology of free time are the academic disciplines targeted by the study and analysis of free time. Research has shown that practicing creative **recreation** is interrelated with emotional creativity. Recreation differs from leisure, in that it is a purposeful activity that includes leisure experience in the contexts of activity. Economists believe that leisure hours are as valuable to a person as the salaries they could earn for the same time spent for the activity. If it hadn't been, people would have worked instead of taking their free time.

However, the distinction between leisure and unavoidable activities is not rigidly defined, for example, people sometimes do work-oriented tasks for both pleasure and long-term utility. A related concept is free time, which involves activities such as the recreational process, free time in social media, such as extracurricular activities, for example, sports, clubs, recreation centers and spas. Another related concept is that of leisure in the family. Relationships with others are usually a major factor in both satisfaction and choice.

The concept of free time and recreation, as a human right was realized in article 24 of the "Universal Declaration of Human Rights".

The importance of recreational satisfaction and participation in adult life satisfaction activities, according to the same author Ruth V. Russell (2001) and the research carried out by the specialists in the field, were contradictory regarding the importance of participating in recreational activities and recreational satisfaction for adult life satisfaction. The purpose of this study was to distinguish the relative role of these two variables using canonical correlation analysis.

There are different ways of recreation that can have a positive impact on a person and community. From health to economic benefits, the list is expanded as follows:

- **Health and environmental benefits:** parks and recreational facilities are the places where people go to recreate, be healthy and stay fit. According to studies conducted by the Centers for Disease Control and Prevention U.S.A., creating, improving and promoting places to be physically active can improve individual and community health and lead to a 25 percent increase in residents exercising at least three times a week.

Many studies show significant correlations between participating in recreation and reducing stress, lowering blood pressure, and perceived physical health.

Leisure centers offer a place for children and families to connect together. Along with an increase in physical activity, recreation offers the opportunity to socialize, an important benefit in itself. Recreational activities can lead to increased confidence, increased creativity and better self-esteem.

Recreation allows some to rejuvenate, reassure the mind, improve their outlook on life and increase positive affect.

- **Social importance:** parks can be ideal places for recreation and are a tangible reflection of the quality of life in a community. They provide identity to citizens and are a major factor in the perception of quality of life in a given community.

- **Physical benefits:** The physical benefits of participating in a recreational sport are probably the most obvious. Recreational sports training helps to strengthen the body, develops coordination and promotes physical fitness. Through sports, practitioners learn exercise in a fun way that encourages healthy living habits. Once practitioners develop these habits, they are more likely to continue them throughout their lives. This is important because physical fitness helps to combat major health problems such as obesity, heart disease and diabetes.

Conclusions

The whole set of sports-recreational activities, organized for the purpose of strength, compensation, relaxation and recreation, is currently experiencing an increasing expansion. Organically integrated into contemporary human life, they are constant and major concerns for all the factors involved in sports training, about creating the appropriate framework for ensuring and maintaining a rational balance in the development of the human being.

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ANIMAL ASSISTED THERAPY FOR INMATES

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Abstract.

From the perspective of the psychosocial intervention models, programs focused mainly on aspects such as increasing self-esteem, promoting positive feelings towards oneself and others, stress management and effective communication strategies.

Animal Assisted Therapy (TAA) promotes positive human-animal interaction by incorporating the psychological, behavioral and physical traits of an animal into a therapeutic environment, in order to facilitate the recovery process of a patient in need of physical and / or mental care (Chandler, 2005).

Since 1990, the results of animal-assisted therapy in treating attention deficiencies or anxiety states have been made known in the specialized literature, in solving the problems related to social relations and integration, but also in improving the quality of life.

The categories of people and the environments in which the TAA programs were applied are extremely varied, including penitentiary systems.

The animal-assisted therapy program can provide the ethical and moral framework that emphasizes the positive examples that can produce a change of perception and attitude regarding drug use, strengthening the inmates motivation in their own recovery process.

The therapy is based on the fact that the animals love unconditionally and accept the others as they are, without judging them. In animal-assisted therapy, the dog is frequently used because of its docile nature, the ease with which it can be trained and because, in general, people show sympathy for this animal. The results of the activities carried out in this field have shown that following the TAA, the inmates have registered an improvement of the positive behaviors, as well as a reduction of the disciplinary sanctions. Also, there were no more aggressive manifestations from the animals, they benefiting from decent accommodation and care conditions. Following the analysis of the needs for the year 2019, at the level of the Bucharest-Jilava Penitentiary, it was found that 13.41% of the custodial convicts used drugs. This aspect, as well as the research in the field, justify the addressability of the general intervention program "Assisted Animal Therapy" (TAA) to inmates with a history of narcotic use.

Keywords: animal assisted therapy, inmates, social relations, prison.

Introduction

In the last three decades, people's interest in keeping pets has placed human-animal interaction in the realm of scientific research, in order to identify the mechanisms underlying the benefits that pets will have on humans physiologically and psychologically. The range of activities in which animal therapy is used, can be involved is much larger than I initially thought it would be. It can be used to achieve physical, cognitive, emotional and social goals (Fontaine, K., 2000, p. 447). This means that animals could be used for animal-assisted therapy in physical rehabilitation centers, psychiatric rehabilitation institutions, penitentiaries, schools, asylums, hospitals, etc. When a situation arises in which a client may not feel able to talk comfortably with their human therapist, animal therapy can help initiate a sense of security and comfort. This would allow the human therapist to work more easily through the client's emotional goals (Chandler et al., 2010, p.358).

With the introduction of animal companions in these institutions, the prospects of residents improve and are more inclined to reach a state of mind in which they feel as if the institution is the house in which they live, instead of where they are deposited. In turn, residents showed improvements in participation in community activities (Fontaine, K. L., 2000, p. 449).

At the end of therapy they learn to interact with a dog in a calm and gentle manner, when and how it is appropriate to approach a dog, they learn how to behave correctly and how they should act if they are afraid of the dog. In addition, it offers indirect benefits, for example, in strengthening health by maintaining exercise.

Walking a dog or having a casual conversation about pets also catalyzes social interactions, reducing isolation and loneliness" (Walsh, F, 2009, p.467)

Animal Assisted Therapy (TAA) has a multitude of practical applications with four main areas of therapy. These areas include physical therapy goals, cognitive therapy goals, emotional therapy goals, and social therapy goals. Research has been documented by a variety of health professionals in many countries and has made animal-assisted therapy a credible health practice. I also believe that the continuing education of the general public would accelerate this effort. Given the documentation of goal-oriented success that specialists have achieved through animal-assisted therapy applications, I believe that there is significant evidence that animal-assisted therapy is undoubtedly beneficial.

TAA begins in 1919, USA, when the Minister of the Interior allows the use of trained dogs in the treatment processes of patients in a psychiatric hospital. A zootechnical farm in New York was later transformed, in 1970, into the first treatment center of its kind for children and adolescents with social integration problems.

The countries where TAA is spread are Canada, Austria, Hungary, Germany, Spain, France, Italy, Sweden, Norway, Switzerland. The most common form of TAA in the world is the dog-assisted therapy, followed by horse-assisted therapy. In Romania, the first animal-assisted activities have been publicized since 2000, but dog-assisted therapy (according to internationally recognized standard methods) has been taken over since 2006. Also in 2006, the first program to offer skills in the field of TAA was initiated, in the form a postgraduate course, initiated at Babeş-Bolyai University.

In Romania, the first national project of assisted animal therapy with detainees begins in February 2013. Through the project "An educated dog, a wonderful friend", the National Administration of Penitentiaries, Angel Dog Association (Satu Mare), Dogtown (Bucharest) and Ringstar Club Dresaj (Bucharest), with scientific validation provided by the Faculty of Psychology and Educational Sciences within Babeş Bolyai University (Cluj-Napoca) supported the balancing and personal development of persons deprived of liberty with the help of animal assisted therapy. The first group of 6 people deprived of liberty benefited from the therapy program. Of these, 3 came from the Bucharest Jilava Penitentiary and benefited from training at the RINGSTAR Canine Training Club, while another 3 people came from the Satu Mare Penitentiary and supported the trainings at local level, with the help of the ANGEL DOG Association (*).

Within the Bucharest-Jilava Penitentiary, starting with 2016, a series of actions was started for the organization of animal-assisted activities. Thus, an activity project was initiated following which the penitentiary concluded a collaboration protocol with an association specialized in canine training (Utility Dog Club) and veterinary medical assistance (Pet Stuff clinic) and the spaces within the dog paddock were rearranged. of the unit. With the support of the collaborators, sterilization, vaccination, microchipping activities for stray animals (dogs, cats and birds) and canine training sessions were carried out, the participating detainees also taking care of the animals. All these activities were an integral part of the Prison Dogs Program project. During the meetings, the aim was to develop communication and empathy skills among the detainees (**).

Starting with 2018, the manual of the general intervention program "Animal Assisted Therapy" (TAA) for detainees with a history of narcotics use was implemented in penitentiaries throughout the penitentiary system. This manual was designed by a team of specialists (psychologists and social workers) from the Bucharest Jilava Penitentiary.

Research methods

The chosen research method is the ethnographic one. In this sense, Harvey Russell Bernard, professor of anthropology at the University of Florida, defines it as "the decision to collect data by participatory observation or from archives, by direct observation or by interview; the decision to make quantitative measurements or to collect written, oral or visual information" (Bernard, H.R, 1998, p.9).

Another view is that of Professor Peter Metcalf of Harvard University, who argues that ethnographic field research requires that the specialist who performs it meet three main requirements: to integrate into the society studied for a long time, to have language skills enough to be able to have a direct dialogue with its members and

to realize what is called participatory observation (Metcalf, P., 2005, p.9-11). I chose to use unstructured interviews and observation, as well as analysis of documents and recordings, to discover the beliefs and group processes that underlie local culture. I considered this approach appropriate, as it allowed me to analyze the behavior of detainees during animal-assisted therapy and to understand more emotionally sensitive issues.

The study included a number of 106 detainees (male) who participated during 2019 (from January to December) in psychological activities organized on the basis of the activity project (50) and in the general psychological assistance program entitled "Therapy animal-assisted persons deprived of their liberty" (56). They served custodial sentences in the open and semi-open regimes and were between 21 and 57 years old. As a specialist in the Bucharest Jilava Penitentiary, I had unlimited access to observe the activities with the dogs in the unit's paddock and I was able to observe and interview the participants in the activities, staff members (program coordinators) and volunteers involved in therapy. We allocated about 120 hours in which the participants were observed while interacting with the staff, playing with the dogs, practicing the dogs' training, walking them, cleaning the paddock, caring for and feeding the dogs. Informal comments were also made on the interactions between participants and between participants and staff members. 49 interviews were recorded (with detainees, program coordinators, management of the veterinary medical unit, volunteers from the Pet Stuff clinic, public figures). Given the different perspectives and experiences, both staff members and participants were interviewed to provide a wide range of exploratory work.

Staff members were treated as key informants who had an interest in understanding the therapeutic impact on detainees. They are psychologists and have the necessary training to make relevant observations about the program, about the dynamics and experiences of the participants. The interviews were unstructured and open, making it possible to survey respondents' perspectives. This allowed me to explore opinions about this kind of activity more precisely, how and why they thought that animal-assisted therapy is useful in the process of social rehabilitation of prisoners. The records of the activities were analyzed, background information about the participants was identified, the training manual, the news provided to the media, the communications from the written press, the documents (social and psychological evaluation sheets from the education and psychosocial assistance file) and the computerized application in the penitentiary. All data collected through observations, interviews, and secondary sources were transcribed and analyzed for grounded theory (Glaser and Strauss, 1967), a technique that inductively reviews data to identify general group beliefs and experiences. The results discussed below represent the major relational themes that resulted from this analysis.

There are two apparent limitations of the present study that have proven useful from the perspective of the exploratory purpose. One limitation would be that the prison staff had an interest in seeing that the activities carried out by them "work". And the second limit would be that the participants in the activities were not selected at random, they must meet the following requirements: to have a final sentence, to be assigned for the execution of the sentence in open or semi-open regime; over 21 years of age; not to have major mental illness or major cognitive deficit; not to have phobias in relation to animals or not to show allergic reactions to contact with animals - zoophobia, especially cynophobia; to have a recommendation to participate in the program in the Individualized Plan for evaluation and educational and therapeutic intervention. (Teoroc and Cană, 2018, p.9)

Research results

I. Close relationships with animals

The programs provided participants with opportunities to experience close relationships with animals (Sanders, 2003, pp. 405-426), whether it involved their creation, support, or release. Before entering the programs, many participants had pets, but these were previous, and the connections were weak compared to those established with them in therapy. Most who reported owning dogs treated the animals more as objects or as conventional pets. Their new relationships with animals, unlike those with former pets, were of a clearly superior quality. Many participants touch or are touched by animals very quickly and very often, compared to their experiences with humans, where touching is uncomfortable, rare or unwanted. One of the coordinators of the program mentioned: "the fact that I touch the dogs is really a remarkable achievement in a short time. Until the

second week of therapy we see detainees touching dogs". Participants allow dogs to touch them (eg. licking, jumping or leaning). Participants also "get something right back" from most dogs that they define and consider to be positive in terms of attention or affection. Dogs at least respond in some way to the inmate's presence. This does not happen with the rest of the household (eg a sleeping pig, an indifferent horse).

Having close relationships with dogs in therapy, some participants identify with their situation. Unlike service dog programs, where animals have no problems, medical or social history, activities with dogs gathered from the streets, abandoned, abused or abused make inmates empathize with them, identify with them even "These dogs have stories," said a psychologist who coordinates therapy. Dog stories are important, with participants being able to ask where they come from, why they are injured or how they are learning such bad behavior. In this sense, the therapy coordinators posted in visible places in the penitentiary the story of each dog in the paddock.

Thus, their stories are known, their existence is visible, which leads to facilitating their adoption both by the staff of the unit and by the detainees.

By connecting these dog stories with their own stories, staff members expect therapy participants to enjoy comfort in their own situations and hope for the future. Participants note that staff members do not give up dogs. We are looking for loving and responsible masters. This is a lesson for detainees: do not give up on those in trouble!

Many participants connect their background from disadvantaged social backgrounds with that of the animals in the program. One therapy participant stated, "The thing I liked most was that I identified with the dog. I come from the orphanage where I was abandoned, just as he was abandoned on the street." Participants also observe similarities between the dog's behavior and his own behavior. For example, it is known that the animal needs to be "calmed down". One inmate made this connection with a dog he was training: "Molly loves to spoil; she likes to run and jump. So she has a behavior problem because I can't get her to calm down right away. I need her to focus. This is a challenge, but it will be fine. When I started, I understood what trouble I had given to others."

The result is that very close, even intense, relationships often develop between participants in their dog therapy, an intensity revealed especially when participants break up with the dog when they complete therapy, or when they are placed with adopters.

II. Close relationships with people

Most participants have a history of relationships with friends or family members, which often or almost always lacks education, support, trust, care and open communication. Although animal-assisted therapy obviously refers to human-animal interaction, much of it refers to human-to-human interaction. Close relationships were created with colleagues in the therapy, with the penitentiary staff who coordinate the activity, with the volunteers who support the therapy. Participants usually develop relationships with colleagues. The team's psychologist encourages participants to help each other train animals, also indicating the correction of mistakes. Teamwork and common problem-solving behavior often work. As part of a team, participants also learn to sanction colleagues who he doesn't work seriously on training dogs. Moreover, they understood the sanctioning of colleagues as a sign of mutual respect and respect for therapeutic activity.

Participants are allowed to socialize with each other, talk to dogs, play, tease them. Whatever their impetus, these programs were based on equal relationships that lead to strong friendships between two or more participants. Participants also have a relationship of trust and mutual respect with those who coordinate therapy. The latter believe that they relate better to the participants than to the other detainees in the unit. One participant in the therapy stated: "Personally, relationships are really important. There is a level of confidence here. We are like a family. The frames are based on us, and I like that. The therapy gives me a lot of confidence and I have never had this feeling before". Once a relationship of trust is established, it allows participants to feel that the staff understands them. This report allows participants to reveal their staff members' concerns. Close relationships with staff members are often created indirectly. They initially receive information about training and end up being informed, educated, responsible, with clearly improved communication and relationship skills.

Participants have the opportunity to observe that the therapist psychologist feeds the dogs, caresses them, an aspect that increases the feeling of confidence in him, they understand that he is "a human being, not just a psychologist". As a result, many participants feel that they can open up, ask questions or simply feel more comfortable, because there is usually a lot of anger in detention about respecting the authority of staff. It is not surprising when therapists become families, they act as parents' substitutes for participants. In this role, the staff is seen as a "family", the participants sometimes staying in touch with them long after they have completed their therapy.

III. Attenuation of the hierarchy

There is usually a strong gap between participants (due to age, training, education) and the authority of therapists and those in charge of the penitentiary. Animal-assisted therapy provides participants with a less hierarchical and formal experience, so that detainees can have the opportunity to be assertive, to take responsibility and to have self-esteem.

A way to attenuate hierarchies is created by acquiring the skills of participants at a level close to or equal to that of therapists in dog training. When participants start therapy, they know nothing about the behavior, care and training of the animals, while staff members know. This knowledge gap closes rapidly as staff members freely share information and skills with participants, and some gain enough expertise to compete and even challenge authority and staff decision-making regarding dog training. For example, an experienced inmate does not agree with the therapist on how to train. The therapist considers that such an approach allows detainees to make some independent decisions, decisions that in other situations are not allowed.

Another way in which hierarchies are attenuated is that the animals are below the level of the participants. For the first time, participants face someone inferior to them. In addition, sometimes participants seem to develop stronger bonds with the dog animal than they have with staff members. When this happens, the animals show a greater interest or reaction towards the participants than the staff. These emotional connections can create an informal hierarchical alliance. Dogs facilitate informal conversation if it does not exist, especially when dogs are walking in public (Robins et al., 1991, p.20). Animals also attenuate the hierarchy, as staff members often walk the dog. Being connected to animals in this way, staff members are perceived by participants not as individuals, but as part of a whole.

For example, a prisoner who had a "great struggle" with patience learned to "stop himself" from getting upset by realizing that "he is just a dog. Join him." Other detainees said that if they are upset when they try to train their dogs, the dogs will feel it. Participants also learn to manage frustration based on relationships with dogs. One detainee stated that, simply looking at his dog's face, he said to himself: "What the hell should I get mad at him?" Every time I get upset, he looks at me with a smile. Then I start hugging and kissing him and I calm down automatically." Graduation encourages participants to express feelings, as one staff member noted: „Each inmate can talk about how he or she is feeling. They don't close anymore, they express how they feel, hey say "I feel sad, it hurts, I'm upset that I spent eight months with Ana and now I have to give it to another person and I can say: "I know that's Ana's job and I know that's why I trained - Oh, but it's still hard for me to follow her to another person." Most detainees say that "graduation is much harder than I thought it would be, but I would do it again. Even if it hurts, I feel good and I feel useful."

Conclusions

The mission of the penitentiary is well defined and bilateral: social reintegration and custody of persons deprived of their liberty. The main objectives of the penitentiary institution are to contribute to the reduction of criminal behavior and to participate in the social reintegration of persons deprived of liberty by collaborating with other institutions to ensure visible and effective occupational therapies. At the end of TAA, participants learn much more than how to care for and train animals. They discover and try new ways of thinking, feeling and acting, transferring or generalizing their future relationships after completing therapy. The next step is for researchers to check the extent to which behavioral changes in detention are reflected in their lives after release,

in their daily lives, in their families and in society. Of course, researchers will need to consider that some participants may try new experiences, making them candidates for personal change.

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