THE EFFICIENCY OF PHYSICAL EDUCATION AND SPORT IN THE SOCIAL INTEGRATION OF PUPILS WITH CES

DUMITRU ANDREI*

padrefortete@yahoo.com

Abstract: For every child with special educational needs it is necessary an individual approach of the training and realization of the motor educational program.

The experiment had been realized on the basis of proper investigation methods (observation method, questionnaire method, experimental one) and processing, analysis and gathered data interpretation during the research (mathematical method, logical method, graphic method, statistic one). During the adapted physical education classes, the abilities (skills) development and education can be realized during its entire period using in this purpose free exercises or with objects, individual, in pairs or in group; also exercises can be made under the form of relay race or in more varied forms and in conditions always changed and with different difficulty levels.

The presentation of a content adapted to the age characteristics had reduced progressively the discrepancies between the subjects and had determined the knowledge of the skills that all the subjects use in the natural, domestic, vocational, communitarian, recreational context.

Our research confirms the inter-dependency of the motor abilities education with the manifestation level of the individual motor qualities, that contributes to facilitating the social integration of the pupils with CES.

Keywords: strategies, instruction, motor ability, pupils, integration, special educational requests, adapted physical education.

Introduction

Physical education and sport is constituted as a necessity for all the society's individuals and in special for those with special needs; from here appears also the term of *adapted physical education and sport* following the

^{*} University Lecturer PhD., Dumitru Andrei, State University of Pitești. Department of Kinetic Therapy and Medical Assistance.

recovery and social integration by promoting the adaptation programs for a child with different types of deficiencies. The adapted physical education content is connected to the motor behavior or to the ensemble of varied corporal techniques that influence in a complex way the subjects. Physical education from special schools puts the child in the position of a social being, apt to contribute to his own training and development, being at the same time an addition of the working program of the Kinetic therapist through which it is aimed the recovery of the deficiency functions and winning the functional independency. Adapted physical education for children with special education needs supposes the general objectives accomplishment: the realization of a as good as possible physical development; the use of certain adequate means that contribute to the obtaining of the will to practice physical activity; understanding the deficiency and winning self confidence necessary to the adaptation and social integration. General objectives can be realized by developing educational activities that hold certain characteristics: adapted physical education must include these children with special needs in the mass educational system; the main principle of the adapted physical education is the equal right to education for all children, making abstraction of the social, cultural, religion, ethnic environment, spoken language or the economic conditions where they come from. Social integration of the persons with special educational needs represent the common purpose of all educational systems and have at their basis the three principles: nominalization principle, consisting of the application of the curative and re-adaptation models; the acceptance of the other, principle that describes the physical and socio-cultural obstacles totality that hinder the individual's participation with special educational needs at the social life and the interaction principle that represent a combination of the actions of the two early mentioned principles. Having as main objective, social integration, adapted physical education respects the educational approaches that put in their center in-dividual problems, but also a preventive approach that suppose the identification of risk factors (sedentariness, social isolation, unhealthy nutrition habits) and making programs to fight them. The effects of physical exercises practice by the persons with mental deficiencies can be grouped on three levels: on the social interaction level, by the benefits brought by the peers interaction; on the self image level, by increasing the confidence in one's strengths; on the physical condition level, by improving the biological factors.

The classification and characteristics of the mental deficiency

Specialists from the domain consider that "in a certain way, the mentally deficient child is in an equal manner a motor deficiency" but such as the mental systematization is different from an organizational and functional point of the normal child, the same is the motor and psychomotor organization plan that is different due to the following aspects1: immaturity or morph-functional structures lesions responsible for the general and special motor activity; sub-cortical lesions that do not allow a integration coordination of synthesis of the motor behavior; pronounced autonomy of the somatic structures in comparison with the psychic ones; the lack of a hierarchy organization ascending - descending in the information transmission and processing; weak intellectual dominance. Domain specialists present the following classification and characteristics of the mental deficiency and can be met frequently in the special schools from the Arges district. Slightly mental deficiency characterizes the individuals that have difficulties in the analysis and synthesis processes, present problems of orientation in space, form, size, weight perception and the nature of the material from which there are made different objects and takes place in a higher period of time in comparison with the color perception, partial immobility in thinking, understanding difficulties of the new knowledge, delay in language development, voluntary memory is weakened, present difficulties in imitating movements, the affective sphere is poorly developed, psycho-motor disorders emphasized through the low level of the movements made with speed and precision, spatial orientation and weak temporal one, realizing with difficulty voluntary relaxation and passing from a motor activity to another. Children with moderate mental deficiency present the characteristics: they develop communication skills and personal autonomy during childhood; scholastic performances remain at the level of a 2nd grade pupil; in the family space they present a high level of autonomy being able, at an adult age, to make under supervision qualified or unqualified activities. In the severe mental deficiency we notice that motor activity is insufficient developed. Volunteer motor activity is marked by trembles, imprecise movements that lack fineness. We can see other general motor disorders - of walking, equilibrium. Psycho-motor disorders will reflect in diffi-culties that these subjects have in assimilating the spoken, written language also the auto-

¹ Bota, A, Teodorescu, S. and Stănescu, M., *Adapted Physical Activities*, Printech, Bucharest, 2007, p. 144.

serving abilities². Our experimental researches had contained pupils with slight mental deficiency, moderate mental deficiency and sever one. The Special School no.2 Piteşti has a pre-scholars group, 6 classes of primary education and 5 classes of gymnasium education.

Adapted physical education and sport – formative motor activities

The action area in the pupils field with special educational needs is situated between studying the normality state and the pathological one, going over a complex direction that includes prevention, finding out, diagnosis, therapy, recovery, education, scholar and professional orientation, social integration and ulterior evolution monitoring of the person in need. Adapted physical education and sport has imposed in the latest years a distinct philosophy, an institutional frame, and clearly stated competencies ensemble, trans-disciplinary original strategies that have as finality the creation of a values system with a signification for the individual and for the society, capable to put in a new light the person with deficiency. Properly motivated and without being made to feel inferior, the pupil with mental deficiency can learn the motor skills necessary in the physical and sport activities, these representing an important mean of obtaining the personal success, of improving the self image³. Motor learning raises problems that are due to the understanding level and that is why motor learning programs must contain: the ability to be made gradually, in successive steps, with precise tasks; selected means to be used must be in concordance with the needs and capacities of the person with deficiency; practicing the same physical exercises for a bigger period of time, patience being the key of assimilating certain motor skills; verbal communication helps to learning the concepts and problems solving; motivation level increase; selected activities must rouse the subject's interest; to take into account the deficiency level. The participation at competitions contributes at the self image improvement, at the consolidation of relationship modalities with the others, at the capacity of team cooperation development, the acquisition of certain motor abilities, at the knowledge and their acceptance by the others. The psychosocio-individual formation of the persons with special educational needs are materialized through: the psycho-motor function development; effort capacity improvement; team work improvement; the improvement of the

² Ghergut, A., Social Psycho-pedagogical Synthesis, Polirom, Iași, 2005, p. 131

³ Dragnea, A. şi Mate-Teodorescu, S., Sports Theory, Fest, Bucharest, 2002, p. 89.

affective motivational structures; the respiratory capacity increase; the development of cognitive structures in learning the game rules. The sport competition impact in the socio-professional competition of the persons with special educational needs: on the individual plan: morph-functional recovery; physical-emotionally equilibrium; active rest; on a social level: social integration; professional integration; on an economic level: scholar achievement; professional one. By knowing the complexity of the pupils with special educational needs, the physical education teacher can bring working methodological corrections so that the subjects' interaction with mental deficiencies is effective and efficient⁴.

Research premises

In realizing the present research we started from the following premises: optimum physical condition is obtained and maintained through the regular realization of certain physical efforts adequate and according to the individual's possibilities; optimum physical condition, realized by practicing the systematic physical exercise, has benefic effects by increasing the self confidence; improves the relationship with the other children, contributing to the socializing and pupils integration with the special education needs, it is realized through physical activities projected for the entire existence, having as result the formation of body hygiene skills and personal autonomy, of working space organization and respecting the imposed rules; strength improvement, endurance and muscular flexibility go to the increase of the abilities and equilibrium level, requested by the quotidian tasks, removing accidents appearance; by interacting and children co-operation, with and without disabilities, a reciprocal and non-conditioned acceptance is obtained; during the adapted physical education class, the physical education teacher must prove a good professional training, understanding, patience, calm, but especially love towards children; communication abilities of the physical education teacher in the relation with parents but especially with pupils increase the interest for practicing the physical exercise.

Research purpose and objectives

The purpose of out research has been: to prove that the adapted physical education through the functions that they exert and the effects

⁴ Ghergut, A., Psychopedagogy of the persons with special needs. Integrated education strategies, Polirom, Iaşi, 2001, p. 198.

that they produce must get a higher percentage in establishing the instructional strategies that foresee the improvement of the physical condition and the integration and socialization capacity of children with special educational needs; contributions in what concerns the clarification of certain major problems that condition the selection and the use of means specific to the adapted physical education. The research objectives can be resumed to: realizing an applicative study in connection with abilities' education (skills) during the instructive – educative process on the basis of means specific to the football game; analysis and synthesis of the most significant aspects of the instructive-educational process in what concerns the used action systems; discovering and establishing limitative and favorable factors in realizing the instruction programs; to take into account in the didactic planning of the reform in the education; the organization of the adapted physical education on the basis of certain adequate, modern, instructive instruction models.

Research hypotheses

- 1. Knowing the manifestation level of the pupils' abilities (skills) can direction the methods and used means during the adapted physical education.
- 2. Using during the physical education class means specific to the football game and adapted to the individual psycho-motor particularities contributes to their assimilation and practice both in sport competitions and in the free time.
- 3. The efficiency and productivity to the instructive-educational process are conditioned by the communication abilities and the manager qualities of the physical education teacher.

Research design

The research has been developed during the physical education classes (2 classes/week) of the Special School no.2 Piteşti in the period September 2008 – June 2009, at the level of the gymnasium cycle, 5th grade – 8th grades. There have been investigated a number of 30 pupils (10 pupils 5th grade, 5 pupils 6th grade, 10 pupils 7th grade and 5 pupils 8th grade) respecting for every pupil the medical diagnosis with which he is framed and the semester calendar plan planned at the beginning of the scholar year 2007-2008.

Used research methods

The observation method consists of the intentional following and the exact, systematic recording of the different behavior manifestations of the individual or group also of the situational context of the behavior. The conversation method is a discussion engaged between the researcher and the subject that allows the more direct survey of the subject's inferior life⁵. The statistic - mathematic method catches the quantitative relations between the recorded phenomena. The statistic processing was based on calculating the following indicators: the ponderate arithmetic mean (x), median (M), superior limit (Max), inferior limit (Min), amplitude (W), standard deviation (S), variability coefficient (Cv). The graphic method consists in the graphic allocation of data statistical process under the form of curves of probabilities, histograms, schemes, graphics and tables. The measurements method and recordings consists of applying the three tasks Special Olympics specially created for the pupils with special needs for the abilities development necessary to the participation to the football competition⁶.

Working programs for the physical education condition

In selecting these activities and exercises for these subjects we took into account the age, deficiency severity, their option, material equipment of the school unity, but firstly to point out the abilities, not the disabilities. The functional capacity and the mental age will condition the presentation way of the actions, activities that should be learnt. The presentation of a content adapted to the age characteristics have reduces progressively the discrepancies between the subjects and have determined the assimilation of skills that all the subjects use in a natural, domestic, vocational, communitarian, recreational context. The effects of practicing physical exercises by the persons with mental deficiency can be grouped on three levels: on the social interaction plan, by the brought benefits by the interaction with the peers; on the self image plan, by the increase of the own strengths confidence; on the physical condition plan, by the improvement of the biologic factors. The individual possibility to cope with the physical and functional requests from the quotidian and sport

⁵ Siedentop, D., *Introduction to Physical Education, Fitness and Sport*, McGraw-Hill, sixth edition, 2007, pp. 123-126

⁶ Foundation "Special Olympics", România, *Football game rules*, Bucharest, 2005, p. 155.

⁷ Epuran, M., Methodology of Body Activities Research, Fest, Bucharest, 2005, p. 139

activities, dependent of his anatomic, physiologic and psychological condition, takes a certain signification in the case of the persons with special needs, at which the risk due to the movement lack is increased; the majority of deficiencies have predispositions to develop hypo kinetics affections that can be added to the clinic frame of the deficiency that hey already have. For the physical condition improvement we will center our attention on its components development and that is: the cardio-vascular resistance; articular mobility; local muscular resistance; local muscular strength; corporal composition (by its maintaining in the normal limit). The programs for the physical condition development are strictly individualized and recommend the establishment of: priority objective for every subject; physical condition components over which the practice influence will be exercised; corporal segments that will be trained; used tests for the manifestation level of the physical condition. In the table 1 we will present the general methodic lines for the elaboration of a exercises program in what concerns the physical condition improvement for the mental deficiencies, adapted de-pending on the subjects and particularities of their instruction8. The main means that can be used for the development of physical condition components are: For the local muscular strength development - in the conditions in which the muscular innervations is intact and there are no pathologies, the work for strength can be made mainly without restrictions; we will try to work in a balance manner both for the agonist muscles and for the antagonist ones, with accent on the development of the extensors, abductor and supinatory muscles. Examples of exercises: for facial prostrate or from the palms or knees, bending and arm stretching; from spread standing position; flexions of the forearm on the arm with slight loads, clenching a ball of small dimensions and different consistencies; torso lifting from dorsal standing position or lifting up the feet from hanging at a fix ladder; the crab walking, arm tractions on the gym bench, seal walk; hitting the medicinal ball with the median or lateral side of the foot; ball-like-jumps, jumps from a foot to another, lateral jumps over the gym bench, jumps on the bench and from the bench, chord jumps.

⁸ Radu, Gh., School Pedagogy of Mentally Disabled Children, Pro Humanitate, Bucharest, 2000, pp. 211-214.

Table 1. The general methodic lines for the elaboration of a physical exercises program

| COMPONENT | INTENSITY | DURATION | FREQUENCY | | |
|-------------------------------|---|--|-----------------|--|--|
| Corporal composition | Moderate | 20 – 30 minutes/class | 3 – 5 days/week | | |
| Local muscular strength | 4 -10 repetitions with high charge | Maximum 10 seconds 3 series/class | 3 – 5 days/week | | |
| Local resistance strength | 20 repetitions with slightly charge | 30 seconds or more 2 – 3 series/class | 3 – 5 days/week | | |
| Speed | Maximal Sub-maximal | 1 - 30 seconds 30 - 180 seconds 1 - 3 series/class | 3 – 5 days/week | | |
| Strength | 10 – 20 repetitions with moderate or high charge | Maxim 30 seconds 2 - 3 series/class | 3 – 5 days/week | | |
| Articular mobility | 5 – 10 repetitions | 6 - 12 seconds/repetition 3 series/class | 3 – 5 days/week | | |
| Cardio-vascular resistance | 75% from the maximum cardiac frequency | 20 – 40 minutes | 3 – 5 days/week | | |

For the development of the cardio-vascular development and body structure, the objectives can be accomplished if there is used a continuous aerobe program, of running, swimming, riding the bike, in general activities that engage in movement the entire body, fact that favors the superior calories consumption and lead to the adjustment and the cardio-respiratory function improvement. The activities through which this

objective can be realized are: mountains hiking, riding the stationary or non-stationary bike, jogging, walk on stepper or rolling carpet, aerobic gymnastics with low impact, races with obstacles, fond and alpine sky, aerobic dance etc. examples of exercises: slight run of duration; run on varied field in uniform tempo; rounds from different games or sport games; applicative

– utilitarian direction. For the articular mobility (the main objective aims at the functional improvement of the movements); physical exercises are being made from different positions (sitting, standing, on the knees, lie down) and will prepare the subject for sustained efforts that will engage both the inferior train and the superior. Examples of exercises: head rotations, exercises for the face musculature, arms rotations, lateral bending, torso spinning; the elephant walk, walk with lifted pace, rising the left/right knee at the chest and maintaining, walk on heels; ventral lying down, rising the head and torso; from standing with the feet close to each other, knee pressing; from costal lying down, balance of the inferior limbs; from lying down, dorsal and plantar flexion.

The evaluation tasks of the instructive-educational process of the research

Task 1. Dribbling - the graphic presentation (annexes - figure 1). Task description: The pupil starts in dribbling from the start line towards the finish, remaining in the interior of the marked lane. The finish line must be marked both with poles and chalk. When the pupil with the ball has stopped in the interior of the finishing zone the chronometer will be stopped. If the pupil drops the ball from the finishing zone he will have to bring it back in the finishing zone. Requested materials: 4 or 5 balls, the traced mark on the ground, 4 poles to mark the finishing zone, 1 chronometer. Assessment: the recorded time during the dribbling is transformed in points according to the transformation scale of time in points; if the balls passes the border line of the lane or the pupil touches the ball with the hand a penalty of 5 points is being applied (note: if the ball passes the lane, the teacher will place immediately another ball in the center of the opposite lane where the ball has passed). The transformation scale of time in points: 5-10 seconds = 60 points; 11 - 15 seconds = 55 points; 16-20 seconds = 50 points; 21-25 seconds = 45 points; 26-30 seconds = 40 points; 31-35 seconds = 40 points; 36-40 seconds = 30 points; 41-45 seconds = 25 points; 46-50 seconds = 20 points; 51-55 seconds = 15 points; 55 or more seconds = 10 points.

Task 2. Kick at the goal - the graphic presentation (annexes - figure 2).

Task description: the pupil starts from the start line, running; picks a ball that he lays at the kick line, after which he shoots at the goal. The pupil is allowed to touch the ball only one time. Then he runs towards the ball placer, picks up another ball and shoots another ball. The chronometer will be stopped when the pupil shoots the last ball or at the maximum of 2 minutes since the start. Requested materials: 4 or 5 balls, the traced mark on the ground, 1 goal football game 4 x 2 m, 1 chronometer. Assessment: for every achievement (goal) 10 points are given.

Task 3. Running and kick at the goal - the graphic presentation (annexes - figure 3). Task description: the pupil starts from the start line. He runs towards any of the balls so that positioned and he kicks it towards the goal correspondent to the place of the ball position. The pupil is allowed only one touch of the ball. The chronometer stops when the pupil kicks the last ball. Required materials: 4 or 5 balls, the mark on the ground, a goal (marks of cubes or cones) of 2 x 2 m positioned at 2 m in front of every ball, 1 chronometer. Assessment: the time since when the pupil start is recorded until he kicks the last ball and it transforms in points according to the transformation scale of time into points. A bonus of 5 points is offered for every ball kicked through the 2 poles that form the goal. The transformation scale of time into points:11 - 15 seconds = 50points; 16-20 seconds = 45 points; 21-25 seconds = 40 points; 26-30 seconds = 35 points; 31-35 seconds = 30 points; 36-40 seconds = 25 points; 41-45 seconds = 20 points; 46-50 seconds = 15 points; 51-55 seconds = 10 points; 55 or more seconds = 5 points. The big advantage of these methods consists in the fact that they allow the gathering of certain numerous, various and precious information in a relatively short time.

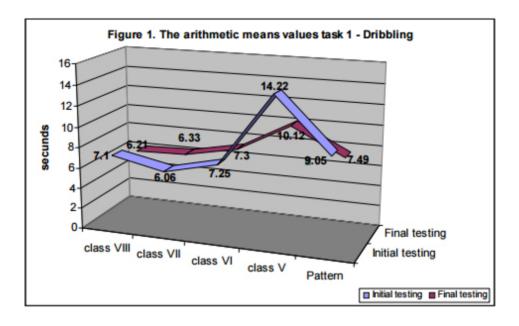
Research results and their interpretation

Applying the research project concerning the motor ability education specific to the football game was preceded by the evaluation of the level of motor abilities manifestation through an initial testing on the basis of the 3 tasks established, after which the following primary data have been recorded table 2 – annexes, at the level of each individual undertaken to measurements. The initial testing allowed us to draw the following conclusions: 1. Task 1 – Dribbling (figure 1). a. The 8th grade: the pupils of this class have made an arithmetic mean of 7"10. From the table 4 – annexes we can notice that the arithmetic mean of the class is higher than the one of the research pattern (9"05). b. the 7th grade: the pupils of this class have recorded an arithmetic mean of 6"06. From table 4 – annexes we can notice

that the arithmetic mean of the class is higher than the one of the research pattern (9"05). c. 6th grade: the pupils of this class have registered an arithmetic mean of 7"25. From the table 4 - annexes we can notice that the arithmetic mean of the class is higher than the researched pattern (9"05). d. 5th grade: the pupils of this class have registered an arithmetic mean of 14"22. From the table 4 – annexes we can notice that the arithmetic mean of the class is lower than the researched pattern (8"65). 2. Task 2 - Kick at the goal (figure 2). a. 8th grade: the pupils of this class have recorded an arithmetic mean of 16.20 goals. From the table 4 - annexes we can notice that the arithmetic mean of the class is higher than the one of the researched pattern (16.25 goals). b. 7th grade: the pupils of this class have recorded an arithmetic mean of 18.90 goals. From the table 4 - annexes we can notice that the arithmetic mean of the class is higher than the one of the researched pattern (16.25 goals). c. 6th grade: the pupils of this class have registered an arithmetic mean of 18.60 goals. From the table 4 - annexes we can notice that the arithmetic mean of the class is higher than the one of the researched pattern (16.25 goals). d. 5th grade: the pupils of this class have registered an arithmetic mean of 11.30 goals. From the table 4 - annexes we can notice that the arithmetic mean of the class is lower than the one of the researched pattern (16.25 goals). 3. Task 3.

- Running and kick at the goal (figure 3). a. 8th grade: the pupils of this class have registered an arithmetic mean of 12"04. From the table 4 annexes we can notice that the arithmetic mean of the class is lower than the one of the researched pattern (11"28). b. 7th grade: the pupils of this class have registered an arithmetic mean of 9"02. From the table 4 annexes we can notice that the arithmetic mean of the class is higher than the one of the researched pattern (11"28). c. 6th grade: the pupils of this class have registered an arithmetic mean of 10"06. From the table 4 annexes we can notice that the arithmetic mean of the class is higher than the one of the researched pattern (11"28). d. 5th grade: the pupils of this class have registered an arithmetic mean of 14". From the table 4 annexes we can notice that the arithmetic mean of the class is lower than the one of the researched pattern (11"28). The variability coefficient calculated presents us, at the level of three evaluation tasks, a group with weak homogeneity (between 20 - 35%); the standard deviation and amplitude shows us that the recorded results by the re-searched pattern have a high level of spreading. After applying the research project and

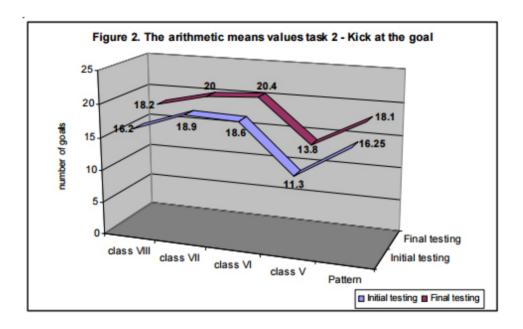
making the final tests the primary data have been recorded presented in the table 3 – annexes.



Final measurements allowed us to make the following findings: Task 1 – Dribbling (figure 1). a. Calculated arithmetic mean (6"21) for the representatives of the 8th class shows us that this is higher than the arithmetic mean of the researched pattern (7"49, table 4 - annexes) but also comparative with the initial testing (7"10). b. The calculated arithmetic mean (6"33) for the class representatives of the 7th grade shows us that this is higher than the arithmetic mean of the researched pattern (7"49, table 4 - annexes) but weaker in comparison with the initial testing (6"06). c. The calculated arithmetic mean (7"30) for the class representatives of the 6th grade shows us that this is higher than the arithmetic mean of the researched pattern (7"49, table 4 - annexes) but in comparison with the initial testing (7"25). d. The calculated arithmetic mean (10"12) for the class representatives of the 5th grade shows us that this is weaker than the arithmetic mean of the researched pattern (7"49, table 4 - annexes) but higher in comparison with the initial testing (14"22).

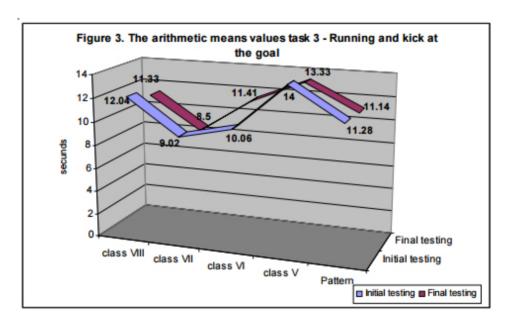
2. Task 2 – Kick at the goal (figure 2). a. The calculated arithmetic mean (table 4 - annexes) for the pupils from the 8th has been of 18.20 goals higher than the one of the researched pattern (18.10 goals) and than the one of the initial testing (16.20 goals). b. The calculated arithmetic mean

(table 4 - annexes) for the pupils in the 7th grade has been of 20 goals higher than the researched pattern (18.10 goals) and than the initial testing (18.90 goals). c. The calculated arithmetic mean (table 4 - annexes) for the pupils from the 6th grade has been of 20.40 goals higher than the one of the researched pattern (18.10 goals) and than the one of the initial testing (18.60 goals). d. The calculated arithmetic mean (table 4 - annexes) for the pupils from the 5th grade has been of 13.80 goals lower than the one of the researched pattern (18.10 goals) and than the one of the initial testing (11.30 goals).



4. Task 3 – Running and kick at the goal (figure 3). a. The calculated arithmetic mean (table 4 - annexes) for the pupils from the 8th grade has been of 11"33 weaker than the arithmetic mean of the researched pattern (11"14) but higher than the initial testing 12"04. b. The calculated arithmetic mean (table 4 - annexes) for the pupils from the 7th grade has been of 8"50 higher than the arithmetic mean of the research pattern (11"14) but also than the arithmetic mean of the initial testing 12"04. c. The calculated arithmetic mean (table 4 - annexes) for the pupils from the 6th grade has been of 11"41 weaker than the arithmetic mean of the researched pattern (11"14) but higher than the initial testing 12"04. d. The calculated arithmetic mean (table 4 - annexes) for the pupils from the 5th grade has been of 13"33 weaker than the arithmetic mean of the researched pattern

(11"14) but higher than the initial testing 14". The calculated variability coefficient presents us, at the level of the three evaluation tasks, a group with weak homogeneity (between 20 – 35%); the standard deviation and the amplitude shows us that the recorded results by the researched pattern have a high level of spreading.



General conclusions

From the research made by us the following conclusions and recommendations have been drawn concerning the management of the motor abilities education specific to the football game at pupils form the $5^{\rm th}$ – $8^{\rm th}$ grades with special educational needs during the physical education class.

Theoretical conclusions of the research

The complexity of the physical education domain, the high number of connected connections, impose continuously the selection and choosing the most adequate and efficient methods and means used during the adapted physical education class for the increase of the manifestation level of the individual motor abilities specific to the football game.

The coherent approach of the educational process make easier the achievement of the educational objectives by completing and modifying, for how many times it is needed, the analytical program specific to the physical education domain.

The necessity of making a physical activity at least an hour/day, in special, by the pupils with special educational needs; the general benefit of the physical activity is represented by the improvement of the health state, relaxation and the possibility to realize certain activities from the afternoon schedule, with an acceptable productivity, for a longer period of time.

Methodical conclusions of the research

The physical education activity planning is realized both at the teacher, methodic board and through he specific plans of every teaching staff, on a medium and long term, constituted form the annual plan (annual pattern of the educational unities), the calendar semester plan and the project of the educational unities.

The means and methods specific to the adapted physical education can assure an adequate muscular and articular processing but also the formation and development of certain psycho-motor capacities necessary to pupils in their socio-professional integration.

Through the physical educational lesson it is assured the training continuity, establishing an optimum report between the individual physical condition and achieving motor skills specific to the different sport branches adapted but also to a gradual effort's graduation.

Practical conclusions of the research

The usage during the physical education at pupils with special educational needs, of a relatively low number of means specific to the football game but simple and practiced more time, contributes to the increase of the manifestation level of the motor capacities, so that it is shown also by the evolution of the calculated arithmetic means, from the first to the second testing, confirming the research hypotheses.

The education level of the motor abilities specific to the football game is confirmed by the increase of the interest for the participation in sport competitions, in self affirmation, in the competition desire with other pupils.

Our research confirms the interdependence of the education of the motor abilities of the manifestation level of the individual motor qualities.

Physical exercise specific to the football game, as mean of the adapted physical education, realized under different forms, assures the socializing and integration of pupils with special educational needs.

The psycho pedagogical training of the physical education teacher, the organization spirit, initiative, collaboration relations with parents, training and leading the pupils in order to obtain performances and successes confirms the research hypothesis.

REFERENCES

Bota, A, Teodorescu, S. şi Stănescu, M., (2007), *Adapted Physical Activities*, Printech, Bucharest, p. 144.

Ghergut, A., (2005), Social Psycho-pedagogical Synthesis Polirom, Iași, p. 131.

Dragnea, A. şi Mate-Teodorescu, S., (2002), *Sports Theory*, Fest, Bucharest, p. 89.

Gherguț, A., (2001), Psychopedagogy of the Persons with Special needs. Integrated education strategies, Polirom, Iași, p. 198.

Siedentop, D., (2007), *Introduction to Physical Education, Fitness and Sport*, McGraw-Hill, sixth edition, pp. 123-126.

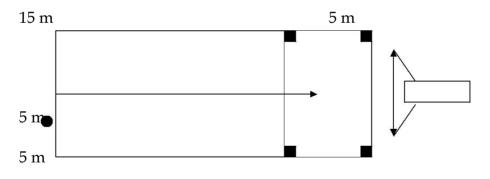
Fundația "Special Olympics", România, (2005), Football game rules, Bucharest, p. 155.

Epuran, M., (2005), *Methodology of body activities research*, Fest, Bucharest, p. 139.

Radu, Gh., (2000), School Pedagogy of mentally disabled children, Pro Humanitate, Bucharest, pp. 211-214.

Annexes

Figure 1 - task 1. Dribbling - the graphic presentation



Starting line

Finish zone

Figure 2 - task 2. Kick at the goal - the graphic presentation

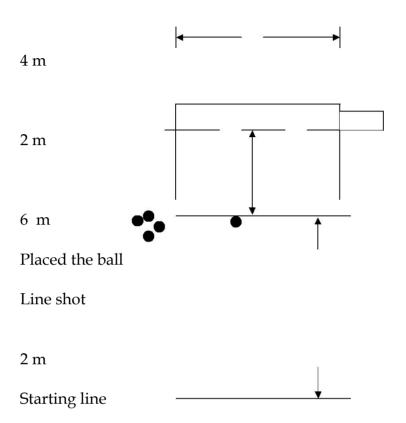


Figure 3 - task 3. Running and kick at the goal - the graphic presentation

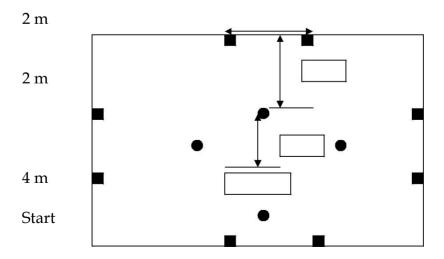


Table 4. The arithmetic means values

| | Х | | S | 5 | Cv% | | N | M | V | V | Min | | Max | |
|-----------|----------------|------------------|--------------------|------------------|--------------------|------------------|----------------|------------------|-----------|------------------|--------------------|------------------|--------------------|------------------|
| | nunanesu ng | Finaltesti ng | Initialtesti ng | rinaitesti ng | Initialtesti ng | Finaltesti ng | nimanesu ng | Finaltesti ng | gu | Finaltesti ng | ınıtıaıtesti ng | Finaitesti ng | Initialtesti ng | Finaltesti ng |
| Task 1 | 9.05 | 7.49 | 2.49 | 2.33 | 34.39 | | 10.1 3 | 10.29 | 12.0 3 | 12.52 | 4.12 | 4.03 | 16.15 | 16.55 |
| Task 2 | 16.2 5 | 18.10 | 4.74 | 4.67 | 29.91 | 26.43 | 14.5 | 14 | 17 | 18 | 6 | 5 | 23 | 23 |
| | 11.2 8 | 11.14 | 3.25 | 2.66 | 28.96 | | 15.2 0 | 14.72 | 15.8 1 | 15.26 | 7.25 | 7.09 | 23.16 | 22.35 |

Table 2. The primary data recorded for the 3 tests - Initial testing

| | | | sis | Task | 1 | Task | 2 | Task | 3 | | | |
|-----|------------------------|----------------------------|------------------------|-------|--------|-----------------|--------|-----------|--------|-----------------|-----|------|
| No. | Name and surname | Class, date of birth | Diagnosis | Perf. | Points | Perf. | Points | Perf. | Points | rotarp oints | , | Rank |
| 1. | B. L. | 24.08.19 | Moderate deficiency | 4″12 | | 21 goal s | 210 | 7″30 | 50 | 320 | III | |
| 2. | G. A. | 05.12.19 | Moderate deficiency | 4″53 | | 20 goal s | 200 | 10″9 | 50 | 310 | IV | |
| 3. | S. B. | 15.09.19 | Moderate deficiency | 9″30 | | 13 goal s | | 13″3 7 | 50 | 240 | XI | |

| ı | I | L 37111 | k | ı | ı | ı | ı | I | ı | ı | ı |
|------------|---------|----------|------------------|-------|------------|-----------|-----|--------|----------|-----|-------|
| | | | Severe | | | 10 | | 1.6//0 | | | |
| | | a, | mental | | | 12 | | 16"2 | l | | |
| 4. | R. R. | 25.08.19 | | 7"32 | 60 | goal | 120 | 9 | 45 | 225 | XIII |
| | | 92 | disability | | | S | | | | | |
| | | a VIII- | | | | | | | | | |
| | | a, | Moderate | | | 15 | | 10"3 | | | |
| 5. | S. S. | 15.05.19 | | 8"24 | 60 | goal | 150 | 8 | 50 | 260 | ΙX |
| | | 93 | deficiency | | | s | | | | | |
| | | a VII-a, | Moderate | | | 21 | | | | | |
| 6. | P. M. | 19.10.19 | | 4"43 | 60 | goal | 210 | 9″14 | 50 | 320 | III |
| | | 90 | deficiency | | | S . | | | | | |
| | | | Moderate | | | 17 | | | | | |
| 7. | P. C. | 04.06.19 | | 4″16 | 60 | goal | 170 | 8″27 | 50 | 280 | VII |
| <i>'</i> . | 1 . C. | 92 | deficiency | 10 | 00 | goar | 170 | 0 27 | 50 | 200 | V 11 |
| | | | | | | 19 | | 10"1 | | | |
| 0 | СТ | | Moderate | E#20 | (0 | | 100 | | Ε0 | 200 | V |
| 8. | S. I. | 20.11.19 | | 5"28 | 6 U | goal | 190 | 2 | 50 | 300 | V |
| | | 94 | deficiency | | | S | | | | | |
| _ | | | Moderate | | | 22 | | | | | |
| 9. | A. C. | 22.10.19 | | 4"28 | 60 | goal | 220 | 9"22 | 50 | 330 | II |
| | | 93 | deficiency | | | s | | | | | |
| | | | Moderate | | | 23 | | | | | |
| 10. | S. M. | 22.03.19 | | 4"15 | 60 | goal | 230 | 7"25 | 50 | 340 | I |
| | | 92 | deficiency | | | s | | | | | |
| | | | Mental | | | | | | | | |
| | | a VII-a, | deficiency | | | 20 | | | | | |
| 11. | D. D. | 06.09.19 | | 4"19 | 60 | goal | 200 | 7"28 | 50 | 310 | IV |
| | | 94 | associated | | | s | | | | | |
| | | | Severe | | | | | | | | |
| | | a VII-a, | | | | 12 | | 11"3 | | | |
| 12. | Z. M. | 25.11.19 | | 8"04 | 60 | goal | 120 | | 50 | 230 | XII |
| | _, _,_, | 89 | disability | | | S | | | | | |
| | | | Moderate | | | 19 | | | | | |
| 13. | P. A. | 13.07.19 | | 6"45 | 60 | goal | 190 | 8"02 | 50 | 300 | V |
| 10. | 1 . 71. | 93 | deficiency | 0 40 | 00 | gour c | 170 | 0 02 | | 500 | |
| | | | Moderate | | | 16 | | | | | |
| 14. | MC | | Moderate | 7"45 | (0 | goal | 160 | 9″12 | ΕO | 070 | VIII |
| 14. | М. С. | 01.05.19 | d o C: =: ====== | 7 43 | θU | goai | 100 | 9 12 | 50 | 270 | V 111 |
| | | 94 | deficiency | | | 5 | 1 | | | - | |
| 4- | | | Moderate | 01100 | | 20 | 200 | 0// 44 | | 240 | ** 7 |
| 15. | M. D. | 11.08.19 | | 8"23 | 60 | goal | 200 | 8"41 | 50 | 310 | IV |
| | | 93 | deficiency | | ļ | S | | | <u> </u> | | |
| | | | Mental | | | | | | | | |
| | | a VI-a, | deficiency, | | | 17 | | | 1 | | |
| 16. | !. I. | 18.12.19 | | 5"19 | 60 | goal | 170 | 9"43 | 50 | 280 | VII |
| | | 94 | failure | | | s | | | | | |
| 17. | V. M. | VI, | Moderate | 9"09 | 60 | 18 | 180 | 11"0 | 50 | 290 | VI |

| | | 12.11.19 | | I | l | goal | | 9 | Ī | ĺ | |
|-----|-------|-----------------|-------------|------|----|------|-----|------|----------|----------|-------|
| | | 94 | deficiency | | | s | | | | | |
| | | a VI-a, | Moderate | | | 19 | | 10"2 | | | |
| 18. | V.R. | 09.06.19 | | 6"13 | 60 | goal | 190 | 4 | 50 | 300 | V |
| | | 95 | deficiency | | | s | | | | | |
| | | a VI-a, | Moderate | | | 20 | | | | | |
| 19. | !. A. | 05.07.19 | | 5"43 | 60 | goal | 200 | 9"22 | 50 | 310 | IV |
| | | 94 | deficiency | | | s | | | | | |
| | | a VI-a, | Moderate | | | 19 | | 10"3 | | | |
| 20. | O. L. | 11.03.19 | | 8"45 | 60 | goal | 190 | 4 | 50 | 300 | V |
| | | 95 | deficiency | | | s | | | | | |
| | | a V-a, | Moderate | | | 14 | | | | | |
| 21. | A. M. | 12.04.19 | | 5"00 | 60 | goal | 140 | 8"29 | 50 | 250 | X |
| | | 96 | deficiency | | | s | | | | | |
| | | a V-a, | Moderate | | | 11 | | | | | |
| 22. | P. I. | 17.06.19 | | 5"10 | 60 | goal | 110 | 9″19 | 50 | 220 | XIV |
| | | 95 | deficiency | | | S | | | | | |
| | | a V-a, | Moderate | | | 11 | | | | | |
| 23. | C. P. | 21.04.19 | | 5"54 | 60 | goal | 110 | 9"24 | 50 | 220 | XIV |
| | | 95 | deficiency | | | s | | | | | |
| | | | Mental | | | | | | | | |
| | | | deficiency, | | | 18 | | | | | |
| 24. | O. C. | 16.01.19 | | 5"03 | 60 | goal | 180 | 8"08 | 50 | 290 | VI |
| | | 96 | failure | | | s | | | | | |
| | | | Mental | | | | | | | | |
| | | a V-a, | deficiency | 11"2 | | 8 | | 12″1 | | | |
| 25. | O. N. | 13.06.19 | | 0 | 55 | goal | 80 | 5 | 50 | 185 | XVI |
| | | 97 | associated | | | S | | | | | |
| | | | Mental | | | | | | | | |
| | | a V - a, | deficiency | | | 19 | | 11″1 | | | |
| 26. | F. C. | 17.05.19 | | 5"05 | 60 | goal | 190 | 9 | 50 | 300 | V |
| | | | associated | | | s | | | | | |
| | | a V-a, | Moderate | | | 7 | | 18"4 | | | |
| 27. | R. D. | 11.08.19 | | 9"18 | 60 | goal | 70 | 5 | 45 | 175 | XVII |
| | | _ | deficiency | | | s | | | | | |
| | | a V-a, | Moderate | | | 10 | | 23″1 | | | |
| 28. | E. D. | 15.1.199 | | 16" | 50 | goal | 100 | 6 | 40 | 190 | XV |
| | | 5 | deficiency | | | S | | | | | |
| | | a V-a, | Moderate | 16"1 | | 6 | | | l | | |
| 29. | R. T. | 17.11.19 | | 5 | 50 | goal | 60 | 20" | 45 | 155 | XVIII |
| - | | 94 | deficiency | | | S | | 0.00 | <u> </u> | | |
| | | a V-a, | Moderate | 14"5 | | 9 | | 20″3 | l | | |
| 30. | S. V. | 22.09.19 | 1 (| 4 | 55 | goal | 90 | 4 | 45 | 190 | XV |
| | | 94 | deficiency | | | s | | | | | |

Table 3. The primary data recorded for the 3 tests - Final testing

| | | | S | Task | 1 | Task | 2 | Task 3 | | | | |
|-----|------------------|------------|-----------------------|-------|--------|-------|--------|---------|------------|------------------|-------|----------|
| | | | Diagnosis | Perf. | Points | Perf. | Points | Perf. | Points | ı otaıpoı nts | - | Kank |
| | Name | Class, | | | | | | | | | | |
| No. | and | date | | | | | | | | | | |
| | surname | of birth | | | | | | | | | | |
| | | a VIII-a, | Moderate | | | 22 | | | | | | |
| 1. | B. L. | 04 00 1002 | 4 o C: a: a a a a a a | 4″03 | 60 | 1- | 220 | 7″20 | 50 | 330 | II | |
| | | 24.08.1993 | deficiency | | | goals | | | | | | - |
| 2. | G. A. | a VIII-a, | Moderate | 4″33 | 60 | 21 | 210 | 9″49 | 50 | 320 | III | |
| ∠. | G. A. | 05.12.1992 | deficiency | 4 33 | вυ | goals | 210 | 9 49 | 50 | 520 | 111 | |
| | | a VIII-a, | Moderate | | | 15 | | | | | | \neg |
| 3. | S. B. | , | | 8"03 | 60 | | 150 | 13″44 | 50 | 260 | X | |
| | | 15.09.1992 | deficiency | | | goals | | | | | | |
| | | a VIII-a, | Severe mental | | | 16 | | | | | | |
| 4. | R. R. | | | 7″12 | 60 | | 160 | 15″44 | 45 | 265 | ΙX | |
| | | 25.08.1992 | disability | | | goals | | | | | | |
| | | a VIII-a, | Moderate | | | 17 | | | | | | |
| 5. | S. S. | | | 7"54 | 60 | | 170 | 9"38 | 50 | 280 | VII | |
| | | 15.05.1993 | deficiency | | | goals | | | | | | |
| (| D 14 | a VII-a, | Moderate | 4//00 | 60 | 20 | 200 | 0// 0.4 | - 0 | 210 | T | |
| 6. | P. M. | 19.10.1990 | deficiency | 4"33 | 60 | goals | 200 | 8″34 | 50 | 310 | IV | |
| | | a VII-a, | Moderate | | | 19 | | | | | | _ |
| 7. | P. C. | a v 11-a, | | 4″46 | 60 | 19 | 190 | 8″50 | 50 | 300 | V | |
| , · | 1 . C. | 04.06.1992 | deficiency | 1 10 | | goals | 170 | 0 00 | | 500 | • | |
| | | a VII-a, | Moderate | | | 21 | | | | | | |
| 8. | S. I. | , | | 5″55 | 60 | | 210 | 10″12 | 50 | 320 | III | |
| | | 20.11.1994 | deficiency | | | goals | | | | | | |
| | | a VII-a, | Moderate | | | 23 | | | | | | |
| 9. | A. C. | | | 4″56 | 60 | | 230 | 8"48 | 50 | 340 | I | |
| | | 22.10.1993 | deficiency | | | goals | | | | | | |
| | | a VII-a, | Moderate | l | | 23 | | | | | | |
| 10. | S. M. | | | 5″25 | 60 | _ | 230 | 7"48 | 50 | 340 | I | |
| | | 22.03.1992 | deficiency | | | goals | | | | | | _ |
| | | X 777 | Mental | | | 20 | | | | | | |
| 11 | D D | a VII-a, | deficiency | E#20 | (0 | 22 | 200 | 7//00 | EO | 220 | 11 | |
| 11. | D. D. | 06.09.1994 | associated | 5″39 | bυ | goals | 220 | 7"09 | 50 | 330 | II | |
| | | a VII-a, | Severe mental | | | 10 | | | | | | \dashv |
| 12. | Z. M. | 25.11.1989 | | 8"24 | 60 | goals | 100 | 11″55 | 50 | 210 | XII | |
| 14. | k ⁻. ₁v₁. | FJ.11.1707 | Misability | P 24 | υŪ | Buais | 100 | μ1 55 | Ρυ | K10 | l/III | ļ |

| | | 1 | | ĺ | Ī | | Ī | | Ī | Ī | I |
|-----|----------|------------|----------------|----------------|-----------|-------------|-----|-------|----|-----|-------|
| 13. | P. A. | a VII-a, | Moderate | 6″35 | 60 | 21 | 210 | 7″47 | 50 | 320 | III |
| | | 13.07.1993 | deficiency | | | goals | | | | | |
| | | a VII-a, | Moderate | | | 20 | | | | | |
| 14. | M. C. | | | 7"41 | 60 | | 200 | 8"43 | 50 | 310 | IV |
| | | 01.05.1994 | deficiency | | | goals | | | | | |
| | | a VII-a, | Moderate | | | 21 | | | | | |
| 15. | M. D. | | | 8"44 | 60 | | 210 | 7"58 | 50 | 320 | III |
| | | 11.08.1993 | deficiency | | | goals | | | | | |
| | | | Mental | | | 20 | | | | | |
| 1.6 | | a VI-a, | deficiency, | <i>(</i> // 00 | CO | 20 | 200 | 0//00 | -0 | 210 | TX 7 |
| 16. | !. I. | 18.12.1994 | school failure | 6"09 | 60 | | 200 | 9″22 | 50 | 310 | IV |
| | | VI, | Moderate | | | goals 19 | | | | | |
| 17. | V. M. | V 1, | Moderate | 8"41 | 60 | | 190 | 10″39 | 50 | 300 | V |
| 17. | V . 1V1. | 12.11.1994 | deficiency | 0 41 | 00 | goals | 190 | 10 39 | 00 | 500 | ľ |
| | | a VI-a, | Moderate | | | 20 | | | | | |
| 18. | V. R. | u v1 u, | | 6″53 | 60 | | 200 | 9"44 | 50 | 310 | IV |
| | 1.7.2. | 09.06.1995 | deficiency | | | goals | | | | | |
| | | a VI-a, | Moderate | | | 22 | | | | | |
| 19. | !. A. | Í | | 5″23 | 60 | | 220 | 9"09 | 50 | 330 | II |
| | | 05.07.1994 | deficiency | | | goals | | | | | |
| | | a VI-a, | Moderate | | | 21 | | | | | |
| 20. | O. L. | | | 8"25 | 60 | | 210 | 9"54 | 50 | 320 | III |
| | | 11.03.1995 | deficiency | | | goals | | | | | |
| | | a V-a, | Moderate | | | 17 | | | | | |
| 21. | A. M. | | | 5″33 | 60 | | 170 | 8″56 | 50 | 280 | VII |
| | | 12.04.1996 | deficiency | | ļ | goals | | | | | |
| 20 | D. I | a V-a, | Moderate | -//20 | 60 | 19 | 100 | 0#00 | -0 | 200 | T 7 |
| 22. | P. I. | 17.06.1995 | deficiency | 5″30 | 60 | | 190 | 9"08 | 50 | 300 | V |
| | | a V-a, | Moderate | | 1 | goals 16 | | | | | |
| 23. | C. P. | a v-a, | | 6"24 | 60 | | 160 | 8"44 | 50 | 270 | VIII |
| 23. | C. 1 . | 21.04.1995 | deficiency | 0 24 | 00 | goals | | 0 44 | 00 | 270 | V 111 |
| | | 21.01.1770 | Mental | | | 50a15 | | | | | |
| | | a V-a, | deficiency, | | | 20 | | | | | |
| 24. | O. C. | | , | 5″49 | 60 | | 200 | 7"37 | 50 | 310 | IV |
| | | 16.01.1996 | school failure | | | goals | | | | | |
| | | | Mental | | | | | | | | |
| | | a V-a, | deficiency | 11″5 | | 9 | | | | | |
| 25. | O. N. | | | 4 | 55 | | 90 | 12"45 | 50 | 195 | XIV |
| | | 13.06.1997 | associated | | | goals | | | | | |
| | | | Mental | | | | | | | | |
| 26. | F. C. | a V-a, | deficiency | 5″45 | 60 | 18 | 180 | 10"08 | 50 | 290 | VI |

| | | | | | Ī | | | | Ī | | |
|-----|-------|------------|------------|------|----|-------|-----|-------|----|-----|------|
| | | 17.05.1997 | associated | | | goals | | | | | |
| | | a V-a, | Moderate | | | 10 | | | | | |
| 27. | R. D. | | | 8"58 | 60 | | 100 | 18"55 | 45 | 205 | XIII |
| | | 11.08.1994 | deficiency | | | goals | | | | | |
| | | a V-a, | Moderate | 16"2 | | 12 | | | | | |
| 28. | E. D. | | | 3 | 50 | | 120 | 19"26 | 45 | 215 | ΧI |
| | | 15.1.1995 | deficiency | | | goals | | | | | |
| | | a V-a, | Moderate | 16"5 | | 5 | | | | | |
| 29. | R. T. | | | 5 | 50 | | 60 | 22″35 | 40 | 150 | XV |
| | | 17.11.1994 | deficiency | | | goals | | | | | |
| | | a V-a, | Moderate | 16"5 | | 12 | | | | | |
| 30. | S. V. | | | 4 | 50 | | 120 | 18"04 | 45 | 215 | ΧI |
| | | 22.09.1994 | deficiency | | | goals | | | | | |

Copyright of Euromentor is the property of Dimitrie Cantemir Christian University and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.