

Abstract of the doctoral thesis:
**RECREATIONAL SPORTS AS A FACTOR OF SOCIAL AND ACTIVE
PROMOTION OF HEALTH**

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Sports and recreational activity is a necessity that conditions to a large extent the physical shape of the individual, irrespective of age and profession. Through the role it plays in society, recreational sports activities exceed the dimensions of leisure activities, following the extensive program of education and training the citizens for work and social life.

The whole range of sports and recreational activities organized for the purpose of strengthening, clearing, recreation and leisure, is getting an increasingly higher range. Integrated into the contemporary human life, they are constant concerns for all those in charge of sports training, creating the right framework to ensure and preserve a balance in human development.

The thesis is structured in three parts, each part making contributions to the objectives of the thesis. Measures aimed at solving these objectives will include a range of methods and means of physical activities.

Part I aims to present the theoretical framework on the topic researched.

Part II includes three preliminary studies, which highlight important issues concerning:

- University of Bucharest student motivation for recreational sport;
- Assessing the health and lifestyle of students of the University of Bucharest;
- The exercise capacity of students;

Part III deals with experimental research on recreational sport as a factor for social and active promotion of health.

The thesis also contains a section on "Conclusions", a bibliography comprising 235 titles of Romanian and foreign authors, and annexes. The paper also contains 82 tables, 126 graphics and 12 annexes that include surveys of students and formative project "self-employment program for health and recreation."

Chapter I deals with "The importance and topicality"

The problem of maintaining or improving health through sport is a permanent topical theme that continues to preoccupy specialists in youth education.

Physical exercises and recreational sports are of major importance and represent the basis of wellbeing that define the concept of health. Further more physical effort done in a group acts as a social integration tool.

For young people to want to practice systematic physical exercise outside physical education classes and sports offered by the college, it is appropriate to form a "Sports Activities", which involves the formation of positive attitudes and convictions on sport by its many forms.

In this chapter the motivation for choosing the theme was presented.

Deepening the subject, they have identified a wealth of information about the sport recreational leisure by students of the University of Bucharest, and programs that were applied hope that young people have understood the necessity of practicing sport, not just in physical education lessons, but throughout life.

For interested students concrete programs to practice physical exercises for maintenance of somatic, physiological and motor skills were made available.

We believe that more should be done to promote the need for practicing physical exercises under the scheme of rational life by young people.

Chapter 2 aims to present some "*Conceptual issues on sport and recreational features.*"

They are presented in detail:

- the concept of recreational sports;*
- evolution of physical activity over time;*
- the importance of practicing sports for leisure;*
- types of sports and recreational activities practiced in leisure;*
- marks on the design of leisure sports programs;*
- recommendations on leisure sport activities;*

In **Chapter 3** we presented "*Theoretical considerations on sport and recreation as a factor of social health*". In this chapter are treated:

- the effects of recreational sport for health*
- the role recreational sports have as a factor for socialization and social integration.*

Chapter 4 is dedicated to the presentation of research relevant to the field of recreational sports, and how it is reflected in the literature. This chapter includes:

- studies which highlight the effects of sports and recreational activities*
- theories and previous research on sports leisure*
- social and human sciences –the opinions of professionals on the topic of research*

In **chapter 5** we presented "*Theoretical conclusions*" on the first part:

a) Although there are studies on the effects of physical activity on health, there is still a lack of information that would more clearly define medium and long-term effects of physical movement to improve health in the process of socialization of young people.

b) The youth interest in sport and physical activity varies depending on several factors such as: education, career, social status, occupation, leisure.

c) Knowledge of simple ways to regularly assess the functional status of the body can be, for this age, an effective means of tracking the level of health and somatosensory functional capabilities transforming the students and making them "actors of their own."

d) On all levels of education, the main purpose is the motivating and cultivating the love for movement, forming the habit of systematic practice of different exercises, organization and usefully spending their free time creatively.

Chapter 6 is devoted to preliminary study 1, in which we highlighted issues as "*Knowing students' motivation and interest in the University of Bucharest for recreational sport.*"

The aim is knowledge of our students motivational profile. Informed on aspects of behavior and attitude of students to the movement, we can intervene through special programs in modifying their availability to sports and recreational activities;

The objectives of this preliminary study are:

- Determination of students' motivational level University of Bucharest about exercise
- Identifying the frequency of participation in sports and recreational activities;
- Identifying ways to stimulate students to engage consciously in physical education and sport;

- Knowledge of practicing physical exercises and sports impact on the process of socialization and personality development of its students.
- Knowledge of the ways of leisure and sport for the place these concerns;
- Establishing grounds for which students participate in sports and recreational activities;
- Identifying the causes of non-participation in sports and recreational activities;

The research methods used were:

- a) Method of bibliographical study;
- b) survey method through "questionnaire on students' motivation and interest for practicing recreational sports option"
- c) The method of harvest data and registration of responses obtained;
- d) method of processing and interpretation of results;
- e) method of graphic representation.

The preliminary study was conducted on a total of 250 subjects in the first year of the University of Bucharest, questionnaire, comprising 18 items was applied to female students entered in the physical education and sport, practicing aerobics, ballroom dancing, swimming.

Preliminary study findings, no. 1

Review questionnaire aimed to surprise those aspects that have helped to provide participating research groups and outlining contingency plan.

Sports and recreational activities that enjoy the biggest attraction among students are: aerobics, fitness, ballroom dancing, swimming, tennis, mountaineering, winter sports.

The survey carried out shows that the younger generation show an obvious interest to improve health for bodily appearance for mental relaxation. Health needs to be found first in the ranking of reasons why students practice sports.

Motivation to practice motor activities during student years has a close relationship with the desire to improve social relations, to have friends.

Among the causes that prevent young people to practice physical activities during leisure, lack of free time is in the first place, and almost 50% of responses and convenience ranked II, with a significant percentage,

Knowledge of motivational profile of our students is clear parameters for efficient organization of the process of physical education in the University of Bucharest.

Chapter 7 examines Preliminary Study Nr. 2 on *"Evaluation of health risk factors and lifestyle of students of the University of Bucharest"*

The preliminary study. 2 is subordinate to the overall aim of the thesis and consists of complex analysis of health risk factors and lifestyle of students of the University of Bucharest in order to establish and implement programs to optimize health.

The research methods used were:

Survey method through "health assessment questionnaire" with 27 items

The study was conducted in sporting University of Bucharest. The survey was conducted in the first semester October, the academic year 2014-2015, is included in our study students from different faculties,

The conclusions of the preliminary study. 2 were:

From the data collected by questionnaire, we learned what represents personal characteristics and behavioral factors leading to diseases of various kinds.

Some risk factors are equal, regardless of the preventive measures: age, sex, heredity. Others may be susceptible to prevention: obesity, smoking, inactivity, diabetes, hypertension, stress.

Responses to the questionnaire items, offers a wealth of clues as to how we can stay healthy.

Knowing the risk factors for the health of students, we can use the activities to promote behavioral change and lifestyles to improve their health.

Our staff study, the content and approach, revealed useful information on the precarious health of students with particular reference to the low level of physical activity index.

Given the results of this study, we consider imperative to develop and implement concrete programs tailored to peculiarities of age, morpho-functional and psychological traits, to improve the health of students by incorporating and forming a balanced lifestyle in which they do not miss bodily activities practiced regularly.

Chapter 8 focuses preliminary studies Nr. 3 on *"Evaluation of the University of Bucharest student effort."*

The study aimed in sports and recreational activities highlights the efficiency by identifying beneficial effects achieved by the training programs, relative to the quantity and quality effects of changes in functional order.

The preliminary study starts from the assumption that "the implementation of sports programs aerobics, ballroom dancing, swimming and jogging, conducted in his spare time as recreational sports, will lead to improvements in functional parameters (aerobic exercise capacity), subjects "

No.3 preliminary study methods and techniques were:

- a) Method of bibliographical study;
- b) The method of the experiment; In order to evaluate the exercise capacity the Ruffier test was used
- c) The method of processing and interpretation of results;
- d) Method of graphic representation.

The study involved on a voluntary basis, 60 students, freshmen, from different faculties of the University of Bucharest, in the first semester of academic year 2014/2015 as follows: the experimental group participated in a lesson a week, physical education course 3-5 workouts in clear pool. To determine the effectiveness of the experimental work carried out we used a control group of 30 subjects who preferred activity within the basic course, participating only one lesson per week.

The intervention program included: programs aerobics, ballroom dancing, swimming and jogging, which were developed over 4 months of 3-5 sessions per week.

No. 3 preliminary study findings were:

-The Individualized training, applied the experimental group produced substantially greater effects on exercise capacity.

-Conclusions on the previous parameters are strengthened by exercise capacity both groups achieved improvements in exercise capacity, but the experimental group with a higher percentage than the control group.

-For both groups rejecting the null hypothesis, but the difference between the means is more significant for the experimental group. It can be appreciated therefore that if the spirit of research that was conducted was confirmed

-in which the plan of intervention respecting methodical guidelines on how to combine exercises and progressive increase in their complexity, we can highlight:

-Recreational sport benefits the body system of regulating vital body functions and optimizing their operating capacity.

-Development and correct implementation of training programs based on individual characteristics and age, leading to a significant increase in the indices studied.

-In experiment could cause a system drive means effective in improving exercise capacity, which represented one of the objectives of this work.

-the results of preliminary research have enabled us to establish the main action and guidance to streamline the training process.

We consider that the developed programs and subject to experimentation, through specific exercises aimed at improving the effort capacity, have been effective.

Part III refers to *"Experimental research on recreational sport as a factor for social and active promotion of health"*

Chapter 9 shows the *"Experimental research methodology framework Operational"*

The research purpose the title of our work; consists in emphasizing efficiency of practicing recreational sports in actively promoting health and improving social integration by designing sports programs, free time, so that they lead to positive effect in terms of parameters somatic functional and motive.

In order to achieve the research they were issued following assumptions:

1) regular program of sports and recreational activities, aerobic type, over 40 minutes, 3-5 times a week will result in substantial positive morphological, functional and motor and will improve the health of the subjects involved in research .

2) Going through individualized programs of aerobics, dance and swimming depending on the particular morpho-functional and their driving will lead to skills training practice independent recreational sports.

Experimental research methods and techniques used were:

- Pedagogical documentation;
- The method records;
- The method of measurement and testing;
- Survey method;
- Method psycho-pedagogical experiment;
- Statistical and mathematical method;
- Method for plotting;

In **chapter 10** we presented the *"Organizing and conducting experimental research"*

Experimental research began in October 2014 and was completed in May 2015 so it was developed during an academic year.

The research was conducted in the University of Bucharest sports facilities and swimming pool "Steaua".

The sample under investigation included a total of 240 students, aged 18 to 20 years of Bucharest University freshmen, contained in an organized system of participation in physical education course.

Precise working arrangements were made for each group:

- The experimental group, 120 subjects participated both in the two hours of physical education per week, as well as a program independent of physical activity, 3-5 times per week, lasting 40-60 minutes, practicing a sport recreational.
- The experimental group will participate in individualized programs using resources from: aerobics, ballroom dancing, swimming, jogging, run as independent activity and sports programs, recreation, which include: "Program Run for Health", "Relax I'm dancing, "" Week in the University Sport for All "

- Improved fitness by cycling "," Preventing obesity by swimming "," Fitness for a beautiful body, "" Weekend Trips ".
- The monitoring group, consisting of 120 subjects will be limited to one lesson per week, 2 hours in physical education course.
- Both the control group and the experimental one will work in the physical education curriculum after a joint schedule

Samples and tests applied were:

a) *Testing morphological indices:*

We conducted the following anthropometric measurements: height; body weight; Chest (rest, inspiration and forced exhalation); abdominal area; hip area; thigh perimeter; BMI body mass index; Lorentz index; Adiposity index.

b) *Testing of functional capacity* (Ruffier test exploration exercise capacity)

c) *Tests to assess the level of development of motor skills evaluation fitness by "SYSTEM Hettinger"* (Sbenghe, T., 2005), which tests the device mioartrokinetic and includes: testing joint mobility, testing the balance and muscle strength testing, (the ten samples of the system Hettinger.)

d) Stress level assessment was done by a sociological survey questionnaire based on "*self-assessment test stress*" Williamson Cohen "(Derevenco, P., 1992)

e) The assessment of social integration was achieved through a survey questionnaire based "*Know thyself*" (Pavelescu V., 1982)

f) *investigation on call routed sought to obtain information about the motivation for a recreational sport.*

Chapter 11 refers to "*Design and implementation of training programs and strategies*"

The program applied the experimental group was developed after an evaluation in the preliminary study.

Implementation of programs for the psycho-pedagogical experiment was done in:

- Physical education class on sports;
- Self-employment program;
- Sports and recreational activities;

The contingency plan is step formative experiment was conducted after a project teaching done by student participation in programs Federation of Sport for All (Week "Sport for all the university" "Run for Health" "Day walking") and the project "*Sport health and recreation*", leading to the formation of sports skills and life skills; what is learned in sport to be transferred to other contexts, not related to sports. The program runs for 12 weeks, once a week; student is the job of the coach, leading parts of the lesson, demonstrating correct, yes methodic. Participation in these sports programs help our students in qualifying as an entertainer or sportsman in recreational sports instructor, certified by the issuing of Sport for All Federation. . These leisure activities include: "Relax dancing", "improved fitness through cycling," "Weekend Trips". These programs that unfold in Bucharest University encourages students to incorporate physical activity into their daily lives, so the formation of a balanced lifestyle, which is not any exercise.

Strategies used in this program refers to methods, means and forms of organization in preparation for students.

Exercise programs executed independently:

- 12 programs aerobics;
- 12 swimming programs;

- 12 programs ballroom dancing;
- 12 programs running;

Chapter 12 refers to "*Effects of the sports and recreational programs on improving the health of students of the University of Bucharest*". Are presented:

- Results of final testing parameters somatic
- The results of the final testing of functional parameters
- The results of the final testing of motor parameters
- The results "call routed"

In **Chapters 13** and **14** are presented "*Processing, analysis and interpretation of experimental research results*"

Following statistical and mathematical processing of the results of the two groups of students found that:

a) to assess somatic indices

- Both groups subjected to observation achieved notable improvements from the application software; however the experimental group there is significant improvement in all indicators used compared with the control group,

- somatic measurements have shown a decrease in weight, abdominal girth improvement, which proves the effectiveness of the application software, business and business that we used the experimental group.

- An improvement in the terms "index of adiposity" who performed the experimental group. (The average is equal to 23.2%). Subjects of this group manage to place within the class of subjects with optimal adiposity (15-25%);

- experimental group achieved greater improvements for "elasticity chest." Media group experiment is higher by 2.36 cm (49.6%). The effect size (1.52) shows a large difference between the averages of the two groups. Independent t test with $p < 0.001 < 0.05$ and $df = 204$ in this case indicates a statistically significant difference between the two groups.

- Lorentz I. Looking at the final test weight is higher than the ideal weight by an average of 0.97 kg (1.7%), the difference was not statistically significant, $p = 0.2678$ materiality > 0.05

- That record shows that values teaching project has experienced instructional greater efficiency than traditional design

b) to assess functional indices:

- In both groups final results are better than the original ones recorded at the beginning of the experiment; Ruffier test average index is equal to 9.53 indicating its effort to group average of 12.25 experiment that the control group, exercise capacity satisfactory. Media group experiment is lower by 2.72 (22.2%).

- independent t test with $p < 0.001 < 0.05$ and $df = 238$ in this case indicates a statistically significant difference between the two groups on the average index Ruffier test. It supports research hypothesis.

- Self systematic pulse (every lesson) was an objective criterion for evaluating the effects of diligence.

c) to assess the level of fitness

- The average total fitness score is equal to 92.37 and 79.31 experiment group at the controls. Media group experiment is higher by 16.5%. This shows a very good fitness level while the control group average indicates a good fitness level. The effect size (2.09) shows a large difference between the averages of both groups.

- the proposed programs were a good means to improve joint mobility, balance and muscle strength;

- Significant increases in the experimental group obtained confirms the hypothesis formulated at the beginning of the experiment.

d) to assess the level of stress

- In initial testing, subjects of both groups had higher levels of stress, and after application of the intervention program, the experimental group, found in final testing, a greater decrease in score (E = 25.30, girl C 36.37), demonstrating the appropriateness of this type of prophylactic intervention.

- Both at the level of the subjects of the experimental group and the control group, was an improvement in their levels of stress and strain relief at important risk factors.

- The practice of sports and recreational activities, the experimental group, significant decreases in score ($p < 0.001$) in the final testing

e) to assess the level of social integration

Clearly the experimental group performed a social integration far more significant than the control group. This is noticed especially in environments of points obtained in the variants „ responses, the average overall results of the Notes and social integration $E = C = 8.37$ to 7.25 , where $p < 0.001$

- Effectively mostly experimental group subjects performed a meritorious social integration.

In **Chapter 15** we shall discuss the "*Experimental research findings*"

After applying the intervention plan of experimental research the following conclusions:

Conclusions on "Testing somatic indices"

-The measurements made at the final testing showed a decrease in weight, body mass index and index of adiposity, abdominal girth improvement, and an increase in elasticity Torat, which proves the effectiveness of the application software, business and business I used it with experimental group

-Strategies Instructional applied (especially those who have applied for cardio respiratory functions) produced favorable effects on somatic and complex system of indicators on health.

Conclusions on "Testing functional capacity"

- We consider that it developed programs and subject to experimentation, through specific exercises that focused on improving fitness, were effective. Experimental group students were able to significantly improve their physical condition, improvement is observed through the final testing results.

-The practice of sports and recreational activities, along with an individualized program 3-5 times per week for independent activity, led to the development of aerobic capacity higher values. It can be appreciated therefore that if the spirit of research that was conducted was confirmed.

-Physical exercise as a means of strengthening physical health also leads to improvement in functional capacity and increase professional efficiency.

Conclusions on assessing the level of fitness

Experiment made the following conclusions:

-The chosen means, serial number, number of repetitions, pauses between repetitions and between sets or work each week, five times or three times a week minimum, are very effective, results from the study are relevant.

-All Physical fitness characteristics are interrelated with the level of health, physical shape and can improve any person, even if it has no athletic ability.

-The experimental data investigation conducted can be starting points for the development of other research on improving fitness.

-Some simple ways to regularly assess the health of the body can be, for this age, an effective means of tracking the level of health and their driving capabilities.

Conclusions on assessing the level of stress

There are interviews conducted with trainees throughout the investigation and inquiry in the following conclusions:

- The practice of sport recreational improves many aspects of life: health, self-confidence, social life, sports, entertainment, being an effective means to improve mood and stress prevention.

- Relaxation techniques can be helpful in coping with stress: breath control, meditation, autogenous treatment, soothing view images, listen to music to relax.

- This work, with profound formative implications must be understood as a solution achieved through its contents, strengthening health, youth recreation and relaxation.

Conclusions on social integration test

- Sports and recreational activity has numerous formative effects, such as team spirit, cooperation, need to become sociable, civilized behavior, fair play, etc.

- Group work involves communication between individuals through movement: such as: cooperation for organizing activities, helping partners, respecting the rules (rules) receiving or accepting responsibilities, evaluating partner, the strengths and weaknesses of the opponent team spirit, sacrifice for team etc. It is obvious that within the group to install a series of affective relationships and especially learn a series of psycho-motor behavior with great resonance in professional and social life.

Conclusions on "The call directed"

- The importance of the relationship between exercise and health maintenance is known by trainees surveyed, highlighting the main reasons why the young are moving: to maintain body weight within normal limits downloading mental regaining fitness, improving social relationships and increasing self-confidence.

- The most important psychological effects felt after practicing recreational sports are: increasing self-control, relaxation, reduction of anxiety and depression.

The conclusions of the experiment are closely related assumptions or presumptions practical inspected.

General conclusions

- Recreational sports and activities tailored to the needs of students, may have a significant interest and motivate them to practice sports in their free time, but also to achieve the educational goals of a society changing.

- Diversification of sports will cause a positive attitude and an increased interest in practicing some form of exercise.

- Creating a potential biological growth will lead to an optimal state of health, permanently maintained through systematic and continuous physical effort.

- Sports and recreational activities are a direct stimulus, almost exclusively in the development of somatosensory and motor function, as a prerequisite for achieving optimal health status.

- Requests adequate in terms of quantity and quality, both in lessons and in workouts leisure, lead to positive changes significant such as muscle toning, increased stroke volume and breathing, decreased heart rate at rest and effort, attitude correct body, improving fitness.
- In terms of improving health, long-term action is needed, including increased time required for sports and recreational activities for students.
- In academia, sport recreational, in their various aspects, largely ensures the realization of the socialization process.
- Participation in sports mass actions would increase the motivation for practicing physical activities and thus would increase the perceived quality of life by creating a state of well-being and social performance.
- Education for fitness is a formative part of physical education, which we want to implement and which induce a wellbeing and a better quality of life.
- Knowledge of the fitness level of students will make it possible reorganizaarea means each sporting discipline so students are judged on your interest in physical education lessons and progress and less on performance.
- In conclusion recreational sport has an important contribution to increase body resistance to physical and intellectual effort at detente and relaxation, constituting an important part of rest to which prints an active character. Exercise practiced by young people in their spare time is a great source of advantages biological, psychosocial and economic streams of solutions for improving health.

Novelty items on thesis topics

The thesis introduces several new features that are worth mentioning:

-By Investigation conducted was done a full scan on the health of students of the University of Bucharest. The results obtained were informative and guidance in terms of design and implementation of effective strategies to optimize health.

Research Impact tests constitute an original approach taken by the "Sport for Health and Recreation", proposed and realized, as well as the means used.

-Other novelty items have represented first applied to students' Test Hettinger "composed of ten samples as a way to measure motor function, and" Self-Assessment Test Stress "Cohen Williamson".

Research Impact tests bring issues of originality regarding implementation of a strategy, reflected in student involvement and ownership of the sport; student is the job of the coach, leading parts of the lesson, demonstrating correct, yes methodic.

-realization A methodical guide for students, which will include exercises structures to optimize health, which will be attached guide and a CD.

Dissemination of results

The research results were made public by participating in various scientific sessions, conferences and congresses and by publishing articles in prestigious journals, ISI or BDI.

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