

## Analysis and implementation of health promotion through exercise in specialized higher education

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### Abstract

Maintaining population health through exercise is a major responsibility of physical education teachers. Promoting regular exercising and transmitting basic sports culture elements are an important objective: they must be taught since early childhood and throughout the entire life – as lifelong education – for improving the quality of life. *The purpose* of this study is to contribute to changing people's mindset and to raising awareness on the benefits brought by exercising; the ultimate goal is to make exercising a lifestyle. *The issue* of the study is that we can contribute to changing people's attitude and mindset on exercising regularly, insofar as we present its benefits. *The methods* used for this study comprised meetings; more precisely, exchanges of educational experience between university teachers and weekend schools, where students took part. During these meetings, we discussed issues related to people's perception of practicing sports activities for maintaining their health and we proposed new strategies to make people exercise. *Findings.* Following the meetings, we determined new research directions and methods for assessing people's attitude toward practicing sports activities and methods to promote and raise awareness on the benefits of practicing sports activities.

**Keywords:** training, education, exercising, quality of life, lifelong education.

### Rezumat

Menținerea sănătății populației prin activități sportive, reprezintă un aspect de importanță majoră de care se fac răspunzători profesorii de educație fizică. Promovarea practicării regulate a exercițiilor fizice cât și transmiterea elementelor de cultură sportivă elementară constituie un obiectiv care trebuie realizat în cadrul formativ de la cea mai fragedă vârstă și continuând pe tot parcursul vieții sub forma educației permanente pentru îmbunătățirea calității vieții. *Scopul* studiului este de a contribui la schimbarea mentalității populației prin mijloacele care determină conștientizarea beneficiilor obținute în urma practicării exercițiilor fizice. *Problematica* studiului constă în faptul că putem contribui la schimbarea atitudinii și mentalității populației în ceea ce privește practicarea cu regularitate a exercițiilor fizice, în măsura în care se cunosc beneficiile practicării acestora. *Metodele* utilizate în cadrul studiului s-au constituit în întâlniri sub forma schimburilor de experiență educaționale ale cadrelor didactice universitare și sub formă de week-end-school în cazul studenților care au luat parte la studiu. În cadrul acestor întâlniri s-au dezbătut probleme legate de percepția populației privind practicarea activităților fizice sportive pentru menținerea stării de sănătate cât și propunerea de noi strategii pentru determinarea acestora să practice activități fizice. *Rezultate.* În urma întâlnirilor s-au stabilit noi direcții de cercetare, metode pentru evaluarea atitudinii populației față de practicarea activităților fizice sportive și metode de promovare și conștientizare a beneficiilor practicării activităților fizice sportive.

**Cuvinte cheie:** formare, educație, exercițiul fizic, calitatea vieții, educație permanentă.

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## Introduction

A healthy population is one of the main objectives of school physical education and of practicing sports activities; health is “trained” within a formative framework and outside it, since early childhood and throughout one’s entire life. According to P. Fiedler (1), school physical education has a major contribution to attaining objectives with high social importance; it addresses, first of all, to children and young people, who are perfect for positive physical and mental influence. The goal is to attain the following objectives: forming knowledge, skills and abilities for exercising; training the habit of introducing exercise in daily life and of adapting it to one’s own needs, thus becoming lifelong education; modelling the personality; developing socialization skills (1).

We have chosen this issue because of the alarming situation of population health, determined mainly by degenerative diseases and obesity; statistics place Romania third in the world from this perspective. We mention that obesity is the main cause of chronic diseases, such as type 2 diabetes, cardiovascular diseases, high blood pressure, strokes and certain types of cancer. Obesity is the main factor for the decrease in life expectancy and quality of life. A great part of this pathology – produced by excess weight – can be mitigated or it can even disappear if people lose weight.

After analyzing this aspect, the main causes leading to the degeneration of population health are as follows:

- lack or reduction of students’ interest for practicing sports activities during physical education classes;
- sedentariness, resulted from not knowing how to actually exercise or the benefits of practicing sports activities.

In this context, we present several outcomes of statistics, which pinpoint to the gravity of current health situation in various geographic areas and in Romania. One of the most alarming current issues is the presence of obesity and degenerative diseases from early childhood to adulthood, consequence of wrong diet and lack of practicing sports activities. Hence, according to a WHO report at global level, there are over a billion overweight adults, out of whom 300 million people are obese. There are differences between Asia, Africa, America, and Europe. Therefore, in China, Japan, and some countries in Africa, the percentage of overweight persons is under 5%, while in certain urban areas of Samoa, it exceeds 75%. In the US, 30% of the adults are obese, which means

around 60 million persons; in Europe, the UK holds the obesity record, with 23%, compared to Germany with 12% and Italy with 8%. Obesity has reached alarming proportions among children, too: there are 22 million obese children under five years old. Child obesity has also escalated in the European Union, where 14 million children are overweight and statistics show that figures increase by 400,000 each year.

In Romania, we list the data provided according to certified national institutions. Therefore, the Centre for Calculation and Health Statistics within the Ministry of Public Health reports that 30% of the Romanian population is obese, 20% is overweight, the number of overweight children has increased by 18% in the last ten years, and people aged between 15 and 64 are most affected by weight issues. The Endocrinology Society reports that 40% of the children are overweight, 60% of the adults are overweight, while 30% are obese, and 27% of the men and 29% of the women are obese. A study of Eurostat (EU Statistical Office) reports that obesity concerns 7.7% of male population and 9.5% of female population. A study conducted by Abbot Laboratories has concluded that obesity is a risk factor in 75% of contemporary diseases; one Romanian of three is overweight – one of four is obese; in Romania, there are over 3.5 million obese persons. Only 10% of the last go for medical examination and only 1% of them are part of a national program of education against obesity. (2)

Moreover, a study conducted in a Romanian hospital specialized in metabolic diseases underlines alarming data on Romanians’ health. From the previous study conducted by World Health Organization, Romanians have evolved negatively concerning obesity. Therefore, in 2008, 51% of the Romanian population were overweight and obese; current statistics confirm the wide dissemination of obesity in over half of the country’s population: 34% of the population is overweight, 14% first-degree obese, 3% second-degree obese, while 3% morbidly obese. Only 44% can say they have a normal weight, while 3% are underweight. Gender differences are as follows: over 56% of Romanian men are overweight and obese, while 48% of women suffer from it. Statistics report that 18% of young people between 15 and 24 are overweight. However, the most advanced types of obesity are encountered in the category 45-64 years old (25.2%). Repartition on country regions shows that around 21% of the obese population live in Ardeal and Banat, followed by 17.2% in the rest of the

country. The study was conducted in March 2013, on a representative sample of 1,608 persons, men and women, aged over 15. Results are representative at national level for the Romanian population over 15, with a margin of error of  $\pm 2.4\%$ . (3)

In Romania, the number of obese children in primary school doubled in the last eight years, as shown by a report of the Public Health Institute. The long-term evolution of excess weight in children is unfavourable; 80% of them become obese teenagers and then adults. In the lack of effective measures to control the situation, physicians warn us that we will have less healthy young people, with lower life expectancy than their parents. A recent report of World Health Organization places obesity among the first five factors increasing disease risk and mortality rate, alongside malnutrition, unprotected sex, alcoholism, improper hygiene and high blood pressure. (4)

Statistics report the alarming situation of population health both nationally and globally, which determines serious consequences on life expectancy, quality of life and professional efficiency in various fields.

It is also worth reminding that education plays an important role in this sense, especially school physical education; together with other elements of education (intellectual, moral, technological, religious, aesthetic, etc), it contributes to general education. The harmonious development of the physical activity targets the younger generation and maintaining optimal physical qualities and after binding activity with continued schooling at any level. (5)

The role played by school physical education within general education has determined specialists to engage actively in finding the most efficient strategies for this discipline to attain its objectives. According to M.B. Scarlat (2003, p. 5), the instructive-educative process is complex, hard to identify and apply as a whole because, when it comes to the "student product", physical education is not the only factor. There are also the other school matters and different educational factors such as family, extra-school activities, social factors and the social groups to which the student belongs and, not least, the means of information: Internet, press, television etc. (6)

In this sense, the future trainers must have diversified and complex "baggage of knowledge", adjustable to the social needs of the population. Therefore, G. Masari (2013, p. 481) underlines that the knowledge-based professional development of the teaching staff has become an essential condition nowadays, meant to support the teaching act (7). We posit that,

presently, an intervention is required from specialists, to find the most efficient strategies for future trainers, who must find the most effective solutions to make people exercise. These solutions should be adapted to physical and functional possibilities, to age, gender and existing diseases. Hence, the offer proposed by specialists in the field and by future trainers must be diversified and easily adaptable.

**The purpose** of this study is to contribute to changing people's mindset and to raising awareness on the benefits brought by exercising; the ultimate goal is to make exercising a lifestyle.

### **Hypothesis**

Based on the aforementioned aspects, we believe that flexible and creative specialists are required, able to apply the most efficient health promotion methods and strategies, by disseminating the benefits of practicing sports activities.

### **Methods used in the study for health promotion through exercise**

For finding new strategies to determine the population to practice physical activities, we proposed a form (method) of theoretical research and insight addressed to university trainers (teaching staff) and to future trainers (students).

Our method was addressed to both university teachers and students, as it comprised educational exchange of experiences, unfolded as *weekend schools*.

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To carry out and implement this project, we had the support of two institutions – "Alexandru Ioan Cuza" University Iași, Faculty of Physical Education and Sport, State University of Physical Education and Sport, Chișinău, Republic of Moldova, for one year (2011-2012).

We chose this form of analysis and debate – *weekend school* – because this was a proper period for teachers and students to travel from one university to another, because they did not have academic activities to attend.

*Weekend schools* had the following objectives:

- analyzing the current situation on practicing sports activities by local community population;
- determining the underlying causes of population's lack of involvement in practicing sports activities;
- looking for solutions to make people aware of the benefits of practicing sports activities for their health;
- analyzing and implementing new strategies to promote sports physical activities.

In the first part of the meetings, we presented the outcomes of the analysis conducted by specialists in the field alongside students of the two universities, concerning to what extent the population practices sports activities in the two regions comprised in the study – Iași, Romania and Chișinău, Republic of Moldova.

***Analysis and implementation of methods: working methodology***

Throughout the project, we had 10 *educational exchanges of experience* addressed to the teaching staff and 10 *weekend schools* for students of the two partner universities. These actions were organized within the two universities: “Alexandru Ioan Cuza” University Iași, Faculty of Physical Education and Sport and State University of Physical Education and Sport, Chișinău, Republic of Moldova.

*Educational exchanges of experience* between the teaching staff members of the two universities led to analyzing and determining future action plans to attain the objective proposed: raising awareness on the benefits of practicing sports activities. For the educational exchanges of experience between the teaching staff members, we proposed 10 members of “Alexandru Ioan Cuza” University Iași, Faculty of Physical Education and 10 from State University of Physical Education and Sport, Chișinău, Republic of Moldova.

*Weekend schools* focused on training and application; we used and valorised the knowledge acquired during the years of study, while the teachers had the role of supervising and orienting students toward finding solutions and elaborating strategies for health promotion through exercise and for determining people to exercise.

For weekend schools, we proposed 30 students from “Alexandru Ioan Cuza” University Iași, Faculty of Physical Education and 30 students from State University of Physical Education and Sport, Chișinău, Republic of Moldova.

After the exchanges of experience and the teamwork, we discovered specific actions to promote sports physical activities and the benefits of practicing them, as well as concrete actions for students and teachers to undertake; they initiated sports programs for and with the cross-border population.

The exchanges of experience between university teachers were meant to guide the students toward promoting physical activities and exercising.

***Content of activities and outcomes***

Within these meetings, we analyzed and debated various topics, in order to elaborate new strategies for health promotion through exercise and for determining people to exercise; the future trainers actually contributed to the analysis and debate and they were involved directly in finding solutions.

The educational exchanges of teachers, which students also attended, included analyzing and debating the following topics: *Sports and ecological tourism – experience and perspectives, Methods of stimulating the local cross-border community toward practicing sports activities, Sport for all – between fashion and necessity, Determining the professional skills necessary for fitness instructors, Strategies for motivating the local community toward practicing sports activities in a healthy environment: role of models, Applicative sambo – efficiency of self-defence methods (self-defence style practiced in the Republic of Moldova), A healthy life – the key of successful people, Promoting sports games as leisure activity, Strategies for motivating people to exercise, Gymnastics – harmony between beauty and aesthetics.*

During the educational exchanges of experience, teachers from Iași and Chișinău presented papers, and then debates began, which also included students.

These meetings comprised 58 university teachers: 23 from Romania and 35 from the Republic of Moldova.

The themes debated during weekend schools, which teachers also attended, were as follows: *Leisure tourism: practical and applicative, Role and importance of leisure sports activities in obesity prevention, Attractive forms of exercising outdoors, Ecotourism in Romania and the Republic of Moldova – conceptual differences and practical forms, Perspectives for promoting exercise for improving the quality of life in the cross-border region.*

During the weekend schools, students from Iași and Chișinău presented papers, and then debates began,

supported and monitored by the teachers. This activity comprised 78 students: 59 students from “Alexandru Ioan Cuza” University Iași, Faculty of Physical Education and 27 students from State University of Physical Education and Sport, Chișinău, Republic of Moldova.

All these actions led to promotion methods and action means, meant to inform the local population and to determine people to take part in the sports actions proposed and undertaken by students and teachers of the two institutions.

It is worth mentioning that additional actions and activities took place throughout the project, which contributed to the promotion of exercising within the local community of the two countries (Romania and the Republic of Moldova).

### Conclusions

We posit that getting the students involved in analyzing and establishing promotion strategies based on their knowledge is an effective method, to be applied in the future teaching activity.

Lack of exercise and nutrition issues – present in most population members – lead to obesity and secondary diseases.

There is a genuine crisis concerning the promotion of practicing sports activities in the local community; even worse, people are not aware of the benefits of exercising correctly.

A category often left aside are the elderly, who do not have the possibility of exercising or of finding out the benefits of practicing sports activities and the correct manner of executing them.

The physical education teacher plays an important role in education because he has to raise awareness and try to make a lifestyle out of sports physical activities; the ultimate goal is to prevent degenerative diseases and to encourage self-education on improving the quality of life through exercise.

The role of family in understanding and supporting the sports phenomenon is very important; there has to be an efficient collaboration between school and family, and parents must see the importance of practicing sports activities for the prevention of deficiencies or degenerative diseases and for a well-balanced body development.

Persons with higher instruction level were found to be more preoccupied by their health, including by practicing sports activities on a regular basis.

After the meetings, we determined new research directions and methods for assessing people's

attitude toward exercise and raise awareness of the benefits of practicing sports activities.

A change in the mindset on practicing sports activities for great health and better quality of life, implicitly, is a long-term process. It must involve the entire educational system, alongside the family, the environment, the media, etc.

### Recommendations

- Raising awareness on the benefits of practicing sports activities by cumulating students' theoretical knowledge and their practical engagement during the physical education class;
- Implementing the concept of sports physical activities among students and the entire population, for permanent health, rather than for immediate results; exercising should become a lifestyle, not only a temporary hobby;
- Physical education class should focus on training, by respecting and acknowledging the pedagogical principles, which involve a correct approach of exercises and an adequate dosage;
- Changing the objectives of physical education curriculum, by diversifying the means for attaining the main objectives of school physical education – maintaining and consolidating health and a well-balanced body development. The current structure is rather rigid; therefore, teachers find it difficult to follow a certain course of action during the physical education class.

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