

# THE ROLE OF OUTDOOR EDUCATION ACTIVITIES IN DEFINING A HEALTHY LIFESTYLE

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**Abstract:** *The purpose of this research is the influence of outdoor education activities on young people's somatic and functional parameters. These activities represent a functional and action wise approach for developing the personality of youngsters. The main objective is opening a new young educational perspective by promoting a new and interactive educational tackling that is implementing certain projects of outdoor education activities. The target group consisted of 30 students (girls) from the Physical Education and Mountainous Sports Faculty from Braşov. For gathering certain data regarding the measured morphological and functional indicators we have used the following indicators: height, weight, body mass index, abdominal parameter, the Ruffier test, the cardiac frequency and the adipose tissue. The final conclusion is that the outdoor education activities have had a positive influence on the organism's systems and structures and implicitly on one's lifestyle, crediting better social life integration to what the subjects are concerned.*

**Key words:** *outdoor activities, healthy lifestyle.*

## 1. Introduction

Outdoor life, the desire to know new things within the environment, the need for adventure and mystery, all of these are just a few aspects of what outdoor education activities are really about.

Outdoor education activities represent a functional and action wise approach for developing the personality of youngsters, the main objective being opening a new young educational perspective by promoting a new and interactive

educational tackling that is implementing certain specific means and forms.

In comparison with the other means and forms of organizing free time, outdoor education activities present several particularities, in the sense that they unfold in the natural environment, on the road, on the field, in the woods, on the rivers, in the mountains and they do not require the creation of certain special conditions (gyms, swimming pools, sport tracks, etc.).

Outdoor education activities are determined by satisfying certain needs such as rest, recreation, fun, knowledge.

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This is possible because an adequate and unpolluted natural frame is available that can trigger the young people's interest in generating and stimulating the main motivation of spending free time as efficient as possible (Minciu, R. 2000).

Outdoor activities are activities in which youngsters act on the developing of their own personality through different characteristic means and methods, the main objective being, as mentioned before, their personality. The fundamental purpose for which one practices these activities is optimizing the developing process of both the physic and the psyche (Chirita, G., 1994).

Regularly practicing different forms of outdoor education is something that contributes to the improvement of biological characteristics, to the forming of character and moral profile, cultivating the respect for the values of society and giving youngsters the opportunity to complete their theoretical knowledge by informal education. On one hand, man has always felt the need to expand his horizon, resting and recreating himself actively and efficiently, on the other hand.

Practicing different forms of outdoor education activities creates the possibility of combining active rest with the practice of outdoor physical exercises through attractive means, contributing to the fathom of the multiple aspects to what studying personality is concerned. Analyzing and explaining a man's personality can lead to establishing his characteristic psychic traits regarding his needs and interests, his temperamental aptitudes and character as well as to establishing the degree of stability in his manifestation, activity and conduct (Zapan, Ghe., 1984).

Personality is a product representing the social agent's conscious answer to the

reality (the society) in which he lives. Personality is "self-built" in the process of work of active traits through learning and educating social norms and values as well as in the process of historical and social practice, in which one modifies the social values and relationships, creating new norms, relationships and human conducts (Herivan, M., 1976).

Personality includes three main components, the latter being conditioned by three categories of fundamental factors: heredity, environment and education. The role that each factor plays in the man's ontogenetic development has numerous theoretical and practical implications; they create or not a main positive attitude towards the man's education and influence the development of personality as a result of a complex interaction between heredity, environment and education (Chirita, G., 1977). Today, outdoor education activities, no matter the forms in which they are done, have become a product of modern contemporaneous civilization with profound pedagogical responses, a fairly complex mass phenomenon that is practiced in all the different forms and ways. From the functional point of view, it embraces a multitude of sides for its unfolding possibilities are special and various, having the ability to value as many distinct self-knowing methods as possible, offering the opportunity to establish mutual connections between people. Outdoor education activities capitalize in their absolute own way pedagogical principles and methods, cultivate the richest self feelings, feelings towards fellow creatures and the environment (Allport, W. Gordon, 1991). Outdoor education activities contribute to the comforting organization of free time, being in the same time a way of educating,

knowing, unwinding and maintaining health.

Modern conceptions identify outdoor education activities with the quality of life that must be understood through the degree of respecting people, natural resources, general endowment, existing spiritual patrimony and self respect. All the components of life's quality are integrated in a pedagogical, ecological and social global system (Epuran, M., 2001). A defining trait is the quality of pedagogical methods and means specific to outdoor education activities and the way they are used, specific to the degree of organization and appliance to what the environment in which they develop are concerned and specific to the functional and complex character of the special centers. These activities also make the object of an ample multidisciplinary and scientific research in which specialists from different areas of activity are involved (Bota, A., 2006).

The society changes of the 21<sup>st</sup> century, to what many aspects of life are concerned, from the technologic communication to the demographic dynamics, outline all the more conspicuous tendencies of movement, but as well as the lack of it in the ordinary schedule of youngsters. The automatization, mechanization and easiness of communication and circulation have lead to the decrease of physical effort. Lifestyle, framed in the lifestyle of a macro society, reflects the group's and individual's organization way, taking into account the accepted and assumed norms and values that are manifested through decisions and voluntary actions (Bota, A., 2006). Naturally, lifestyle has a great connection to other things besides health and disease, but, as stated beforehand, today, more than ever, health and disease are being viewed in the overall context of what the individual is and does.

Comfort in day to day life as a result of increased lifestyle is accompanied by the increase of sedentary lifestyle, alienated behaviors and large exposure to symbolic violence to what mass-media is concerned. Lifestyle has a distinct and special print on health. The individual's development is mainly influenced by those social conditions to which one manifests an active activity, the environment influences on psychological development being done in the activity process, within the system of social relations that are established between individuals (Demeter, A., 1974).

The educational factor has an important role in forming a healthy way of spending free time as efficiently as possible. Its methods and means can diminish the alienated behaviors.

Presently, "outdoor education" has become a fundamental and solid activity, disposing of a proper research methodology. Knowing youngsters based on the appreciation of drive within an outdoor education activity must incorporate the individual characteristics that outline the dynamics development of their personality. Being aware of the youngster's level of possibilities and their distance to the established objective, we can also become aware of the level of accomplishment to that the objectives of outdoor education activities are concerned, appreciating the inclinations, interests, aptitudes, motivations and aspirations in practicing these activities. The finality of the latter fairly contributes to the optimization of spending free time as efficiently as possible (Herivan, M., 1976).

## **2. Material and methods**

*The purpose* of this research is the influence of outdoor education activities

on the young people's somatic and functional parameters.

*Hypothesis* – an active participation to the outdoor education activities, in the young people's free time, shall have a positive influence on the somatic and functional parameters.

The target group comprises students (girls) from the Physical Education and Mountainous Sports Faculty from Braşov. The projected volume of the sample is 30 students with ages between 19-21 years old.

The method of the pedagogical experiment consisted of utilizing certain tests that have followed the evaluation of somatic and functional parameters.

For gathering the data regarding the measured somatic and functional indicators, we have used the following indicators: height, weight, body mass index, abdominal perimeter, the Ruffier test, cardiac frequency and adipose tissue.

In elaborating the intervention plan concerning the influence of morphological and functional parameters, with a certain impact on lifestyle, we have bared in mind the gender and age characteristics as well as the theories of behavioral shifts, theories that have made the basis of interventions on the perceiving lifestyle by systematically practicing the outdoor education activities.

### **3. The intervention's form of organization**

The practical aspects within the discipline form of "Free time activities" (14 hours of practical applications in

"Aventura Park" from Braşov, done in the first semester.

The specific forms and means of "outdoor education" have been included in the intervention program and have been:

- Knowing to tie a knot, assurance, the assuring method in the rope garden, presenting the elements of the rope garden;
- Rope climbing and descending from the artificial climbing wall;
- Activities in the rope garden: parallel joists, gigantic ladder, "climbing wall";
- Zip line;
- Field orientation with precise tasks;
- Aladdin's carpet;
- Transporting certain objects on a difficult trail in the woods.

Following the studies, one has noticed that the adaptive effects, highlighted by improving the subjects' physical conditions, have installed themselves in 6-8 weeks of training, if one worked 1 session a week, that is 90 minutes of work.

### **4. The results of the research**

To what evaluating the height was concerned, 6 had very small height, 11 had small height, 8 had medium height and 5 had a tall height.

Thus, 6 subjects were under statural that is 20%, 11 subjects were also under statural, 8 subjects were normal statural that is 26, 6% and the number of hyper statural subjects was of 27, 7%.

Table 1

*The average values of the experiment's somatic and functional indicators (initial testing and final testing; 30 subjects)*

Parameters	Experiment Group		
	I. T.	F. T.	DIFFERENCE
Height	164,30	164,30	0
Weight	78,3	73,9	4,4
Body mass index	26,99	24,76	2,23
Abdominal perimeter	89,5	84,6	4,90
The Ruffier test	11,8	9,7	2,1
Cardiac frequency	84,5	73,2	11,3
Adipose tissue	27,8	22,1	5,7

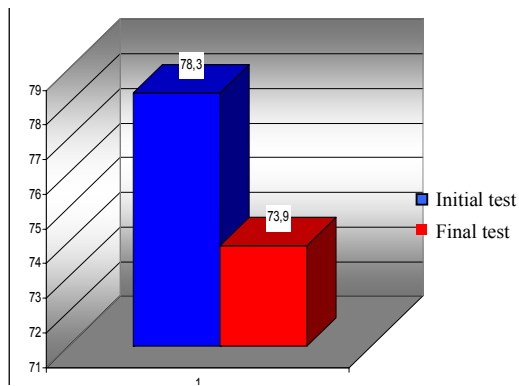


Fig. 1. Comparative data of the weight somatic evolution

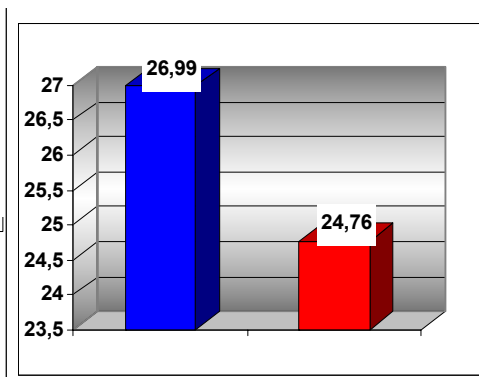


Fig. 2. Evolution of the body mass index

The results of the comparative mathematical and statistical data within the effectuated measurements to the initial and final testings (regarding the subjects' weight), unfolded in the beginning of the outdoor education implementation for improving the somatic and functional parameters, allowed us to mention the selection efficacy of performance forms within the outdoor education activities and action methodology for positively influencing the values of weight. We noticed that from figure 1 weight has come down from 78,3 to 73,9. In our opinion, for an enhanced influence on the weight index dynamics, a long term formative influence is necessary.

*Body mass index* (BMI) represents measuring the body mass based on height. BMI offers very precise indicators regarding how healthy is one particular height, even though one is not familiar with the percentage of body fat. The results of the comparative mathematical and statistical data within the effectuated measurements to the initial and final testings (regarding body mass index) unfolded in the beginning of the outdoor education implementation for improving the somatic and functional parameters, allowed us to mention the selection efficacy of performance forms within the outdoor education activities and action methodology with possible influences on the body mass index from 26, 99 to the initial testing to 24, 76 to the final testing.

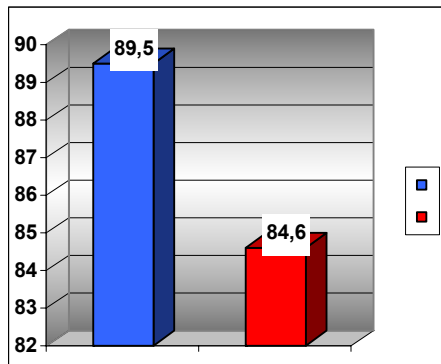


Fig. 3. Value evolution of the abdominal perimeter

The activities effectuated by the experiment group have determined the melting of the adipose tissue from the abdominal perimeter which has led to its partial replacement with the muscular tissue (by muscular hypertrophy). Thus, one can notice that from figure 3, the value dynamics of the abdominal parameter decreased from 89, 5 to the initial testing to 84, 6 to the final testing, the difference being of 4, 90.

*Evaluating the adaptive capacity to effort: Ruffier test.* Physical effort consists of a functional oversteering that produces the modification of the organism's homeostasis, with the purpose of covering the metabolic needs of the new muscularity in the physical activity. The alterations point to the respiratory and cardiovascular systems allowing the outline of certain modifications, disorders in their function unrevealing during repose. Ruffier test represents an evaluation test of physical capacity (fitness); it is a triage test which is applied to beginners, with no risks whatsoever. Depending on the obtained values one gives improvement indications

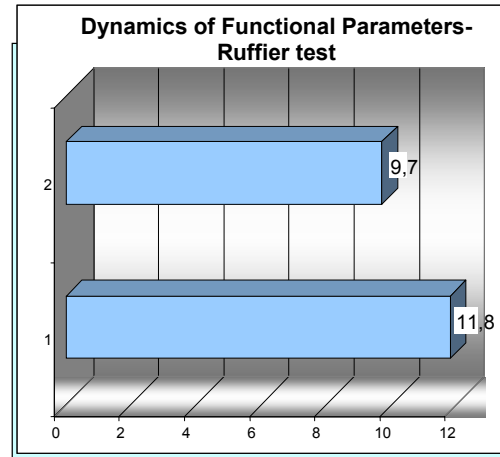


Fig. 4. Value evolution of the Ruffier parameter

to what physical condition is concerned by systematically practicing physical exercises.

The activities done by the experiment group have determined an improvement in the cardiovascular capacity through a better effort adaptation. Hence, we can notice from figure 4 the value dynamics of the Ruffier test which has improved as follows: to the initial testing, the average value of the group was of 11, 8 and after effectuating the proposed and implemented program of physical education and sport, one has obtained, to the final testing, a better indicator, of 9, 7, the difference being 2, 1.

Cardiac frequency represents the number of contractions done by the myocardium in a period of time. The measurement is done palpably to the carotid vena, while being orthostatic:

- Normal values: between 60-100 heartbeats/minute;
- Arrhythmias: < 60 heartbeats/minute;
- Tachycardia: > 100 heartbeats/minute.

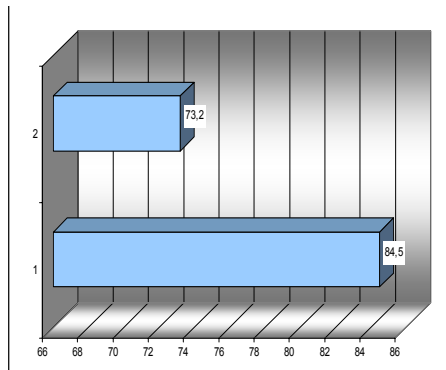


Fig. 5. *Values of cardiac frequency*

Through a sustained and rhythmical program of physical exercises, one improves the activity of the cardiovascular apparatus, highlighted by decreasing the cardiac frequency during repose, a major element of prophylaxis in cardiovascular diseases.

Improving the oxygen level to the cortical level, the positive effect of improving the physical aspect and reducing the anxiety by sublimating negative energies through movement have determined the alteration, in a positive way, of the subjects' psychic.

The effectuated activities of the experiment group have determined the decrease of cardiac frequency. Thus we can notice that from figure 5, the value dynamics of the cardiac frequency has decreased from 84,5 to the initial testing to 73,2 to the final testing, the difference being of 11,3.

The decrease in weight and the reduction of the adipose tissue have led to obtaining certain "elegant" postures with positive effects on the physical state and the psychic. The decrease of the adipose tissue to the abdominal level and the increase of the abdominal muscular tonus have had favorable effects on biomechanics to what the dynamics of the lumbar spine, the latter being considered prophylaxis elements.

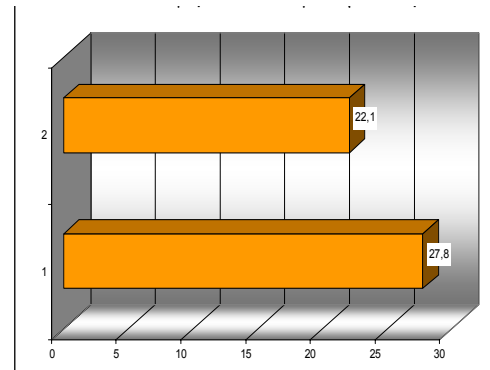


Fig. 6. *Values of adipose tissue*

The effectuated activities of the experiment group have determined the decrease of the abdominal tissue. Thus we can notice from figure 6 that the dynamics of the adipose tissue has decreased from 27,8 to the initial testing to 22,1 to the final testing, the difference being of 5,7.

## 5. Conclusions and discussions

This analysis of the functional indicators gives us the right to state that the differences that have come across can be part of the implementation approach of the outdoor education activities.

The literature and research analyses have allowed us to outline the fact that, within the last decades, the young population has known a certified tendency of diminishing the organism's functional and physical parameters. Amongst the major causes one can state the reduction of motile activity, as well as the enhancement of the psychological effort, to what the contemporaneous man is concerned.

Summarizing the effectuated study, in highlighting the benefits of free time activities for an optimal physical condition, one can conclude that physical activity has a beneficial role on the organism and lifestyle both from the physical point of view and the outdoor perceived influenced point of view. Losing weight and reducing the adipose tissue has led to obtaining an "elegant"

posture, with positive effects on the physical state and the psychic.

The outdoor education forms have determined the melting of the adipose tissue from the entire body, not only from a particular region, and have partially replaced it with muscular tissue (by muscular hypertrophy), no matter the type of effectuated exercise. The decrease of the adipose tissue to the abdominal level and the increase of the abdominal muscular tonus have had favorable effects on biomechanics to what the dynamics of the lumbar spine is concerned, being considered as prophylaxis elements of lumbar. Through a well selected program and through an efficient selection of outdoor education forms one has improved the activity of the cardiovascular apparatus, highlighting the decrease of the cardiac frequency during repose, a major element of prophylaxis in cardiovascular diseases.

One has also obtained the improvement of the brain's oxygen process which had the effect of reducing anxiety by movement and which has also determined the positively alteration of the subjects' psychological states of mind.

*The final conclusion is that outdoor education activities have a positive impact on the organism's systems and apparatuses and implicitly on the individual's lifestyle, influencing his better integration in the social life.*

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