



THE 16<sup>TH</sup> EDITION OF THE INTERNATIONAL CONFERENCE  
EUROPEAN INTEGRATION  
REALITIES AND PERSPECTIVES

## The Value of Outdoor Physical Therapy Exercises

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**Abstract:** There was never in our history so much need of motion, exercises and physical therapy, taking in fact that we live in an era of social and political renewal, technical and scientific revolution and the jobs that we have are very exhausting. Even if it seems paradoxical that lately there were made the best sport records, the health of many people is being affected because of the lack of motion, that on the other side, beside malnutrition brings the obesity which is another danger. It may be that the human of our days feels more than ever the need to practice physical therapy exercises organized so it can compensate the negative influence of sedentariness, overuse and overeating. Due to pandemic situation that we are living this paper reveal that the outdoor physical therapy exercises are more important than never. The lack of oxygen caused by the facial mask which is used almost all day by people and the sedentariness can be recovered better doing outdoor physical therapy exercises. The purpose of this paper is to show the importance of outdoor physical therapy exercises in day to day life and to present why practicing outdoor exercises is much better rather going to a fitness studio.

**Keywords:** Sport; Motion; Sedentariness; Health

### 1. Introduction

Due the pandemic situation we all suffered because we could not go outside, we were obligated to work from home and this involved a lot of health issues. We started to have malnutrition, we overate, sedentariness intervened and these factors brought by default obesity, anxiety, spine pain and also breath difficulties.

This paper reveals that carried out systematically, physical activity contributes regularly and direct on improving the structures and functions of different organs and systems of the human organism. Health is a qualitative condition of life, in which every compound (physical, psychological and social) needs to find her positive pole.

Even before our era scientists as Platon (497-397 BCE) said that “a robust body can lose its vigor through laziness, and a body no matter how weak, can become strong through constant exercises” (Bănciulescu, Corneșan).

Today, more and more people become aware of the benefits of physical therapy and exercises, especially made outdoor, because the fresh air and the nature are much more helpful than practicing sport in a gym studio. The lack of oxygen caused also by the mask that we are wearing daily so many hours per day determinate the fact that the outdoor sports have more benefits. The outdoor physical therapy exercises are considered nowadays like a natural medicine which is accessible and agreeable.

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One of the fundamental reasons for practicing sport, evaluated and identified by specialists, is to build a healthy lifestyle through practicing physical exercises. As stated by the experts, a healthy lifestyle represents an effective system that occurs during evolution especially during maturation, being essential the genetic legacy and the habitat norms and values in which individuals live (Sopa et al., 2016).

This experimental research suggested that performing physical therapy exercises in nature may have additional benefits in comparison with a period of physical therapy exercises in an indoor environment. Further, as already reported, exposure to nature could increase people's health and prosperity, by developing revival from stress and brainly lethargy.

This systematic review has the objective to show different types of physical therapy exercises proposed in green urban spaces. Further, this review focuses on different outdoor trainings to understand their impact on the population's health. Finally, we wanted to clarify whether the existence of outdoor gyms in green urban spaces can encourage the attendance in physical therapy exercises by adults.

## **2. Material and Methods**

### **2.1. Search Strategy**

The subjects have been chosen after a series of criteria that defines the need and the value of outdoor physical therapy exercises like: the job, the work environment, the time that is spend outside, health and physical issues and age.

The main method used for this research was the questionnaire of motivational factors for practicing outdoor physical therapy exercises regarding their physical health, state of mind, social skills and necessities. For the study questionnaire of the factors that determined subject to practice outdoor physical therapy exercises I applied the references Cârstea, G. [23] and Ionescu, C. [24] and also exhaustive research. The questionnaire for the subjects had 6 items that pursued the study topic and had as objective to discover the motivational factors that determine the subjects to practice outdoor physical therapy exercises. The questionnaire was organized by giving the opportunity of electing the grade of accordance with the affirmations, to choose between versions of answers and also to tick several answer options on some items if it suited them.

### **2.2. Eligibility Criteria**

In the experimental research were included people with ages between 18 and 80.

Childrens and teenagers were not included in this study because their physical needs are different than the ones for the adults. The environment where the experiment occurred was in a urban green space near Donau. This place was chosen due the fact that the grass helps to have more energy and the water gives calm for the mind.

The subjects included in the experiment came on the outdoor physical therapy courses with their personal fitness mattress because some of the exercises that have been made needed the position lying down as the Figure 1 shows.



**Figure 1. Exhaustive Research**

In the study have been included 100 subjects which made the outdoor physical therapy exercises on a period of 60 days, 4 days a week, each session having 60 minutes.

All the subjects completed the experiment and they still continued the outdoor physical therapy exercises because they had very good psychological well-being even after the first 3 courses.

### 2.3. Participants Characteristics

Table no. 1 shows the characteristics of the participants. All of the participants are Romanian from the cities Galați (68) and Brăila (32) from which 55 female and 45 mens as the Figure no. 1 shows.

### 2.4. Purpose

The purpose of the study was to show the influence of outdoor physical therapy exercises over the exercises practiced in the fitness studios and also to reflect the positive effects of recreational outdoor exercises.

**Table 1. Characteristics of the Participants**

Age	Gender		Office Job	Field Job	Remote Job
	F	M			
18-25	12	8	16	3	1
26-30	11	9	14	3	3
31-40	16	13	19	9	1
41-50	8	7	15	0	0
51-60	4	5	9	0	0
61-70	3	2	2	0	3 (retired)
71-80	1	1	0	0	2 (retired)

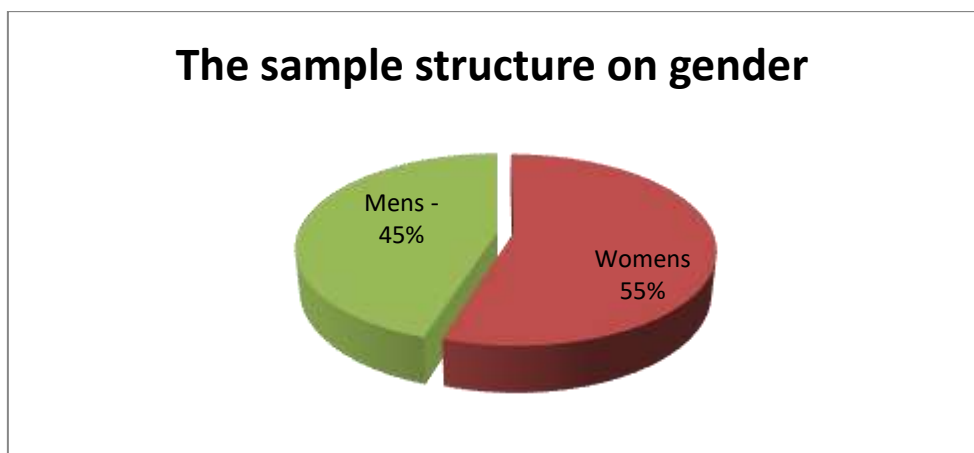


Figure 1. The Sample Structure on Gender

### 3. Results of the Research

The first stride in the study was to settle the reasons and the needs of the subjects and it was used a set of questions. After analyzing the results there was made the outdoor physical therapy exercises program for the subjects according to their necessitations. I used the following samples to show the results from the questionnaire. The numbers from the samples represents the number of answer divided on each questions separetly, by gender (from the total number of females and from the total number of males) and also by the total amount of subjects.

Item 1. The Causes that Determined the Subjects to Practice Outdoor Physical Therapy Exercises

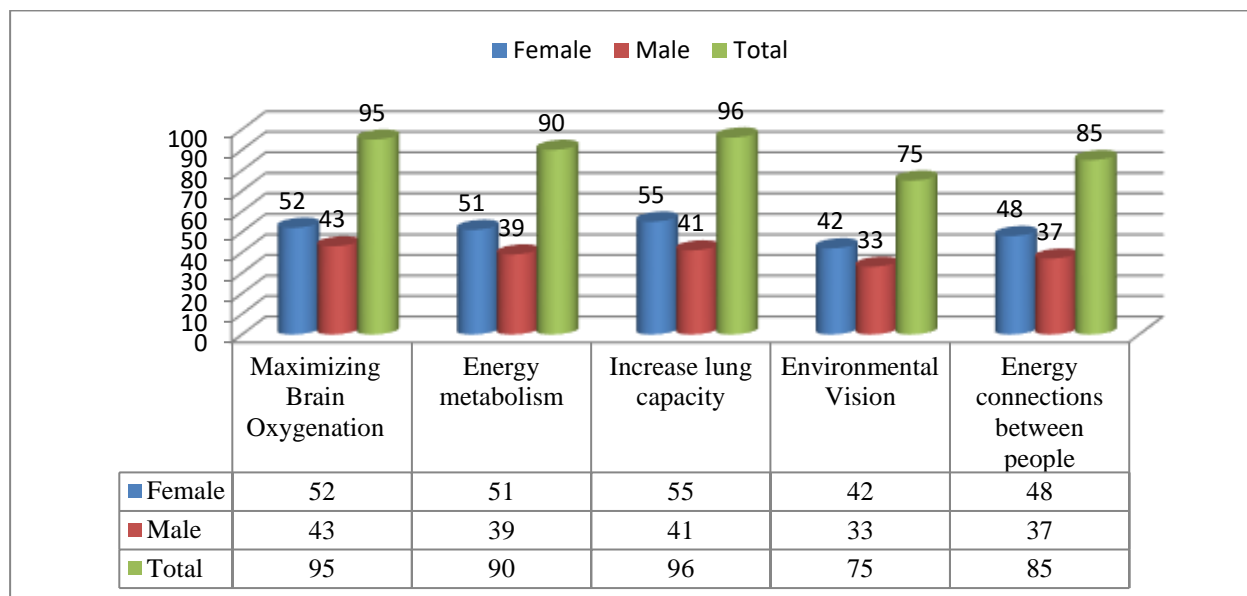
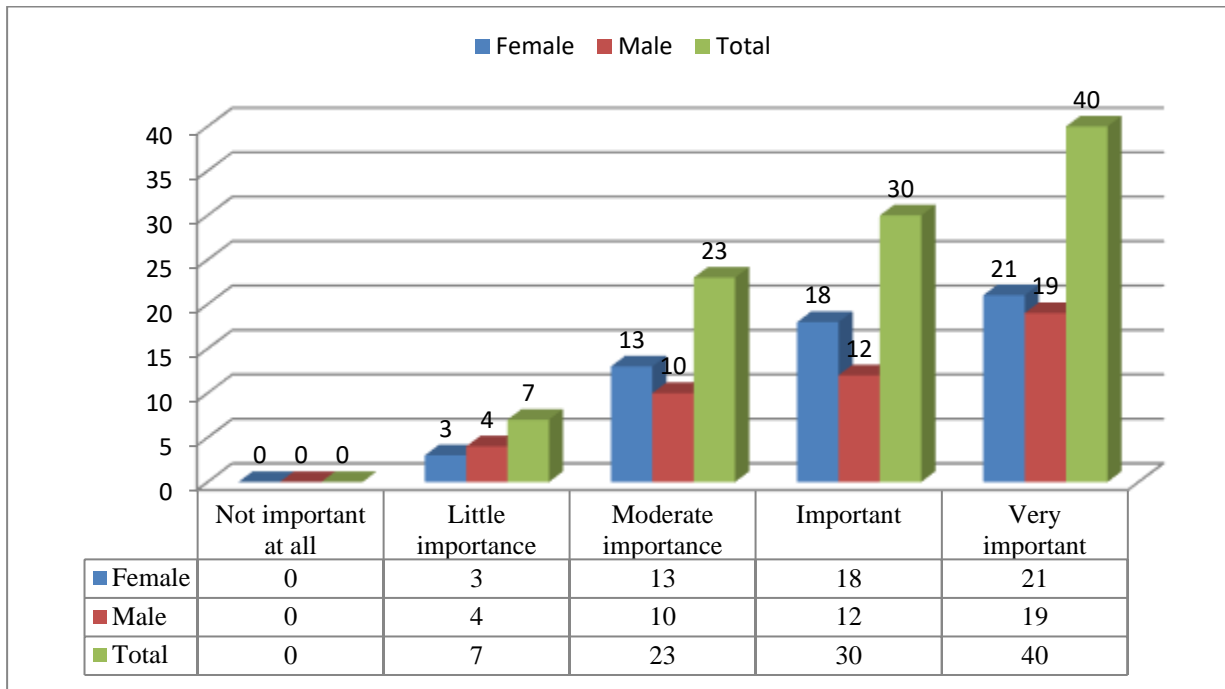


Figure 2. The Causes that Determined the Subjects to Practice Outdoor Physical Therapy Exercises Sample

At the first item I wanted to show what were the causes that determined the subjects to practice outdoor physical therapy exercises. The results can be seen in Figure no. 2 where with the blue color we can observe the females respondents, with the red color the males respondents and with the green color the total number of subjects that elect from precise motives

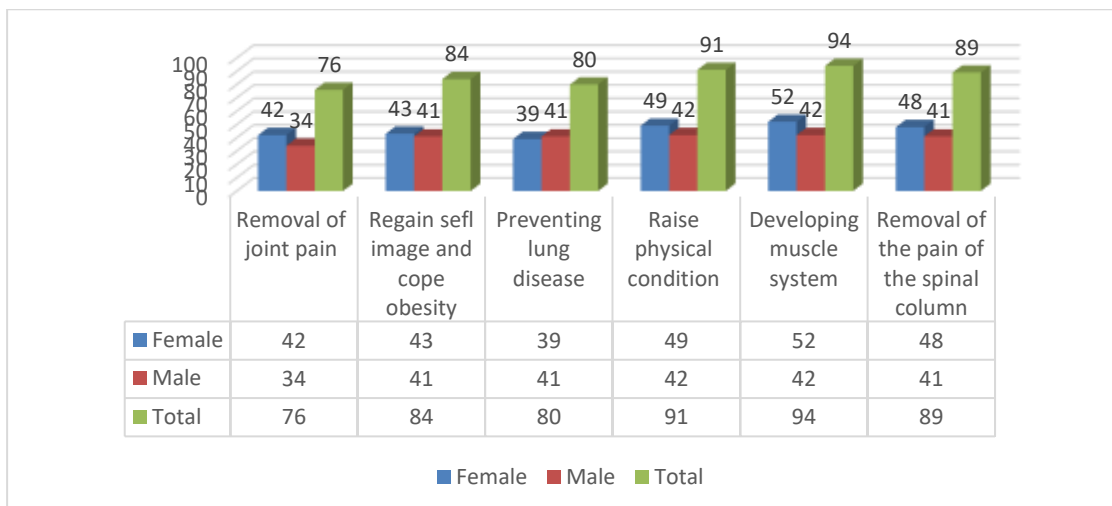
Item 2. How important are outdoor physical therapy exercises in improving and maintaining the health



**Figure 3. The Importance of Outdoor Physical Therapy Exercises in Improving and Maintaining the Health Sample**

At this second item illustrated with the sample from Figure no. 3 I wanted to show how important is for the subjects to practice outdoor activities for improving and maintaining their health. I used a five grade scale answer with the next possible answers: not important at all, little importance, moderate importance, important, very important.

Item 3. The motivational health factors for outdoor physical therapy exercises



**Figure 4. The Motivational Health Factors for Outdoor Physical Therapy Exercises Sample**

In the third item I wanted to show the motivational health factors that determined the subjects to practice outdoor physical therapy exercises. I used 6 questions for this item and the subjects were able to tick all the factors if all of them were motivating. The options that I gave the subjects on this item

were: removal of joint pain, regain self image and cope obesity, preventing lung disease, raise physical condition, developing muscle system, removal of the spinal column.

Item 4. How important are outdoor physical therapy exercises in social lifestyle?

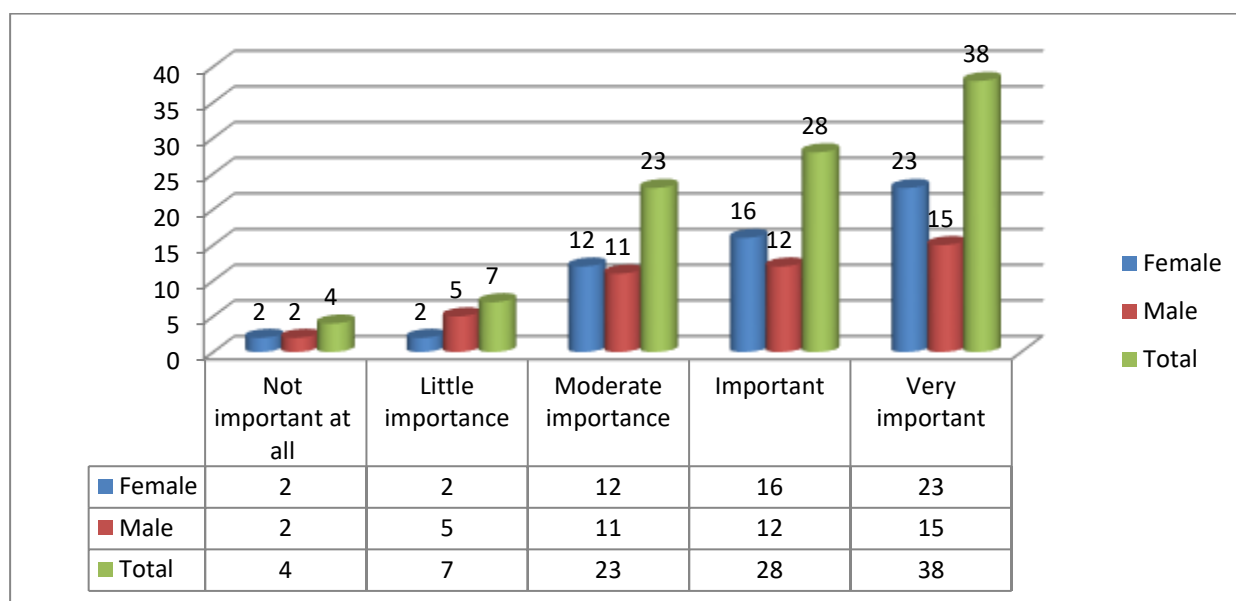


Figure 5. The Importance of Practicing Outdoor Physical Therapy Exercises in Social Lifestyle Sample

Regarding the fourth item I wanted to show in the Figure no. 5 the importance of practicing outdoor physical therapy exercises in social lifestyle. The options that the subjects had were: not important at all, little importance, moderate importance, important, very important. I had three categories: female answers with blue color, male answers with red color and the total number of subjects for every choice given with green color.

Item 5. The motivational social factors influenced by outdoor physical therapy exercises

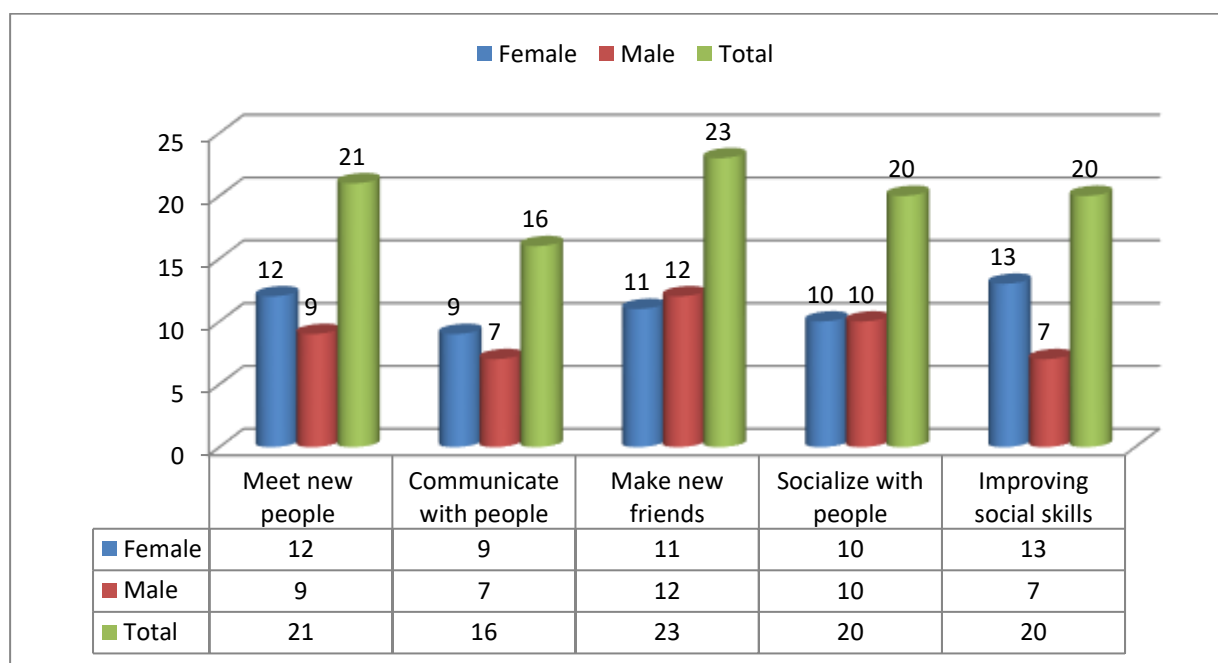
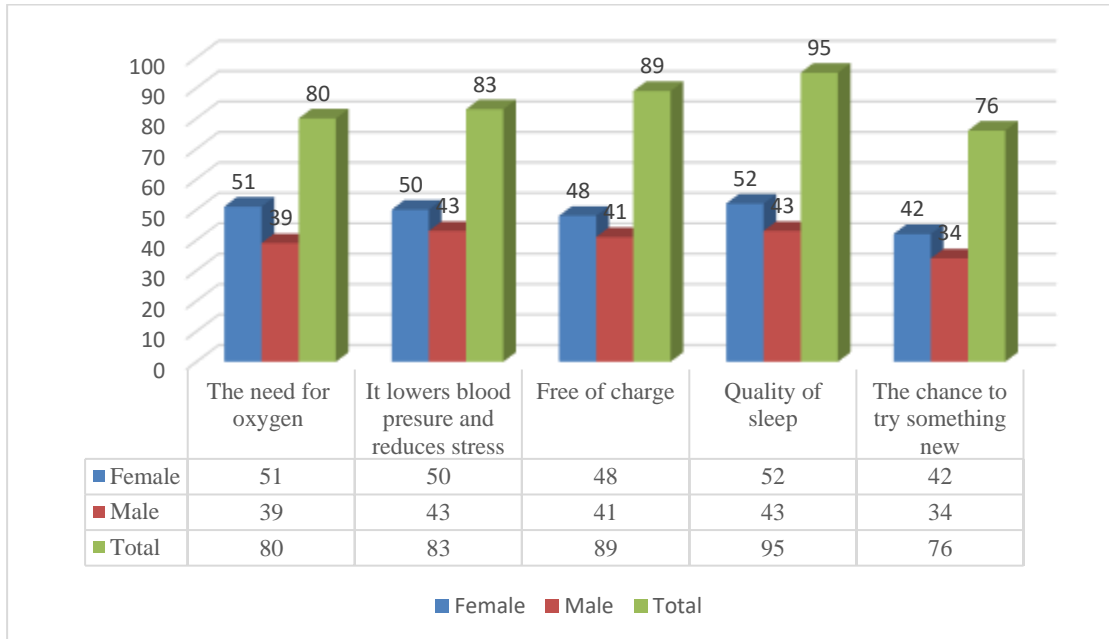


Figure 6. The Motivational Social Factors that Influenced Practicing Outdoor Physical Therapy Exercises Sample

In the figure no. 6 are represented the answers from the fifth item in regards of the motivational social factors that influenced the subjects to practice outdoor physical therapy exercises. The possible answers that the subjects had were: meet new people, communicate with people, make new friends, socialize with people, improving social skills.

Item 6. The physical and psychological factors that made the subjects choose the outdoor physical therapy exercises over practicing indoor physical therapy exercises



**Figure 7. The Physical and Psychological Factors that Made the Subjects Choose the Outdoor Physical Therapy Exercises over Practicing Indoor Physical Therapy Exercises Sample**

In the sixth item represented in the sample from figure no. 7 we can observe the physical and psychological factors that influenced the subjects to choose practicing outdoor physical therapy exercises over practicing them indoor. The possible answers that the subjects had have been: the need for oxygen, it lowers blood pressure and reduces stress, free of charge, quality of sleep, the chance to try something new. As on the item 6 subjects were able to tick all the factors if all of them were motivating.

**4. Discussions**

The questionnaire that I suggested planed to show the motives that determined the subjects for choosing practicing outdoor physical therapy exercises over practicing them indoor. Between the motivational factors suggested were: causes for practicing outdoor physical therapy exercises, health motives, social motives, physical and psychological motives.

In the first item, regarding the causes that determined the subjects to practice outdoor physical therapy exercises sample, all the subjects answered, most of them answering an all five motives that were offered as possible answer. On the first cause answered 95% from the total number of subjects, and as gender 94.5% from the total amount of females and 95.5% from the total amount of males. The second cause was chosen also in a big percentange 90% from the total amount of subjects, 92,7% from the total number of females and 86.6% from the total number of males. The third cause on this item was chosen by 96% of the total number of subjects, females 100% and from the total amount of males, 91,1%. On

the fourth cause answered 75% from the total amount of subjects, 76,3% from the total number of womens and 73,3% from the total amount of males. The fifth cause in this item was chosen by 85% from the total number of subjects, 87,2% from the total amount of womens and 82,2% from the total amount of males.

At the second item regarding the importance of outdoor physical therapy exercises in improving and maintaining the health sample, none of the subjects considered that this not important at all, 7 subjects representing 7% from the total number of subjects give little importance, 23 subjects representing 23% from the total amount of subjects considered moderate importance, 30 subjects representing 30% from the total number of subjects considered important and 40 subjects, representing 40% from the total amount of subjects considered very important the practice of outdoor physical therapy exercises in improving and maintaining the health. Regarding the gender answers we can observe that the females give much more importance than the males.

The third item showed in the motivational health factors for outdoor physical therapy exercises sample were given six possible answers for the subjects and they could choose one or more options if there were suitable for them. On the first factors answered 76 subjects representing 76% from the total amount of subjects, and as by gender, 42 females representing 76,3% from the total number of females and 34 males representing 75% from the total amount of males considered that removal of joint pain is a motivational factor. On the second health motive regarding regain self image and cope obesity answered 84% from the total number of subjects, 43 females representing 78,1% from the total amount of females, and 41 males representing 91,1% from the total amount of males. Preventing lung disease is a motivational factor that was chosen by 80 subjects represented by 80% from the total number of subjects, as by gender: 39 females represented by 70.9% from the total amount of females and 41 males represented by 91,1% from the total number of males. The fourth motivational factor regarding raising physical condition was chosen by 91 subjects represented by 91% from the total amount of subjects, the females being more interested in this factor. Developing the muscle system is a motivational factor that was chosen by 94 subjects, represented by 94% from the total number of subjects from which 52 females represented by 94,5% from the total amount of females and 42 males represented by 93,3% from the total number of males. On the sixth motivational factor offered as a possible answer in this item regarding removal of the pain of the spinal column, answered 89 subjects represented by 89% from the total amount of subjects and from them the females were more interested in this motivational factor then the males.

On the fourth item illustrated in figure no. 5 regarding the importance of outdoor physical therapy exercises sample answered all the subjects included in this research: 4 subjects representing 4% from the total amount of subjects considered this not important at all, little importance gave 7 subjects representing 7% from the total number of subjects, 23 subjects representing 23% from the total amount of subjects thinks that are moderate important the outdoor physical therapy exercises in social lifestyle, 28 subjects representing 28% from the total number of subjects considered this item important and 38 subjects representing 38% from the total amount of subjects considered it very important. As by the gender we could notice that for the females was more important than for the males the outdoor physical therapy exercises in social lifestyle.

In the case from the fifth item represented in the sample from the figure no. 6 regarding the motivational social factors that influenced the outdoor physical therapy exercises practice answered all the subjects included in the study. The idem had 5 possible answers. The first one, meet new people, was chosen by 21 subjects representing 21% from the total amount of subjects, from which 12 females representing 21,8% from the total number of females and 9 males representing 20% from the total amount of males.



The second possible answer was communicate with people and it was chosen by 16 subjects representing 16% from the total number of subjects, 9 of them being females representing 16,3% from the total amount of females and 7 of them males representing 15,5% from the total number of males. The answer make new friend was chosen by 23 subjects representing 23% from the total amount of subjects from which 11 females representing 20% from the total number of females and 12 males representing 26.6% from the total amount of males. On the fourth option, socialize with people answered 20 subjects representing 20% from the total number of subjects, 10 females representing 18,1% from the total amount of females and 10 males representing 22.2% from the total number of males. For improving social skills 20 subjects representing 20% from the total amount of subjects, choose to practice outdoor physical therapy exercises, 13 being females representing 23,6% from the total number of females and 7 males representing 15,5% from the total amount of males.

The sixth item represented in the sample from figure no. 7 showed physical and psychological factors that made the subjects to choose practicing outdoor physical therapy exercises over practicing indoor physical therapy exercises. In this item were given five possible answers for the subjects and they could choose one or more options if there were suitable for them. The first option was the of oxygen and it was chosen by 80 subjects representing 80% from the total number of subjects from which 51 are females representing 92,7% from the total amount of females and 39 males representing 86,6% males. On the second option answered 83 subjects representing 83% from the total amount of subjects, 50 being females representing 90,9% from the total number of females and 43 males representing 95,5% from the total amount of males. The factor of being free of charge in practicing outdoor physical therapy exercises was chosen by 89 subjects representing 89% from the total amount of subjects from which 48 females representing 87,2% from the total number of females and 41 males representing 91,1% from the total amount of males. Being in need for a better sleep, the factor quality of sleep was chosen by 95 subjects representing 95% from the total number of subjects, 52 being females representing 94,5% from the total amount of females and 43 being males representing 95,5% from the total number of males. The option of having the chance to try something new was chosen by 76 subjects representing 76% from the total amount of subjects, 42 females representing 76,3% from the total amount of females and 34 males representing 75,5% from the total number of males.

## 5. Conclusion

This study was realised on discovering why more and more people prefer practicing outdoor physical therapy exercises over practicing them indoor. This research showed us that there are not only the health factors that convinced the subjects to practice outdoor physical therapy exercises but also motivational social factors, physical and psychological motivational factors.

From the study results we can deduce that the majority of the subjects know the benefits of practicing outdoor physical therapy exercises and endorse their effects.

Beside the major health factors that the subjects are aware of we can notice that the social factors are very important for the subjects in choosing the outdoor practice of physical therapy exercises over practicing the indoor. Communicating, socializing and making new friend helps the people to have a better social lifestyle.

This research helps us to realize that practicing outdoor physical therapy exercises brings us more benefits than going to the gym and making more activities indoor in matter of health, social, physical and psychological life as for example removing joint and spinal column pain, lowers the blood pressure

and reducing stress, a better quality of sleep, maximizing the brain oxygenation, increasing lung capacity, having a better environmental vision and others.

Likewise in other evaluated research, practicing outdoor physical therapy exercises effects from a psychological perspective, gets higher scales of self-esteem and lowers the scales of anxiety, which have both together associated with increasing attention span and being more active at their jobs. Several experts also demonstrated that people who are practicing outdoor physical therapy activities demonstrate greater attention during discussions than the ones that are practicing them indoor.

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