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## THE REASONING OF PRACTICING LEISURE SPORTS ACTIVITIES FOR THE LEVEL OF PHYSICAL HEALTH IN THE ROMANIAN ADULT POPULATION

BĂDICU GEORGIAN<sup>1</sup>, BALINT LORAND<sup>2</sup>

### Abstract

**Aim.** The lifestyle chosen by a person has an important impact on his health condition. Health can be maintained, respectively improved through practicing leisure sports activities, graded on an intermediate and long-term basis, as a concrete expression of perpetuating the self-education behaviour. This stimulus, represented by the physical exercise, if applied constantly, contributes significantly to the improvement of physical health and helps, beyond doubt, minimizing the risk of conditions such as somato-functional and mental disorders, linked to the modern lifestyle.

The objectives of our study are directed towards the observation of a pool of adult individuals, in relation to their way of conceiving and scheduling their different leisure activities, as well as to the importance given to the physical exercise, importance that we have correlated with the level of self-health perception.

**Method.** We have used a certified questionnaire for identifying the level of physical health, on a number of 500 individuals, with ages ranging from 25 to 49 years old. The questionnaire contains items focused on discovering the level of awareness for the impact of performing different physical exercises, as well as the impact of not exercising, on the wellbeing experienced by the individuals.

**Results.** On the basis of statistical mathematical analysis of the gathered responses, we have pointed out the level of correlation between the physical health condition and the presence or absence of the leisure sports activities in the lifestyle of the studied individuals.

**Conclusions.** The data of the study demonstrate the fact that the persons practicing leisure sports activities, have in most of the cases – regardless of the sex, age, studies – a high value of physical health, whereas the persons who do not exercise, think they have an average or low physical health

**Key-words:** adults, physical health, lifestyle, leisure sports activities.

### Introduction

The lifestyle chosen by a person has an important impact on his health condition, through the risk behaviours (alcohol, tobacco, drugs etc.), diet features, practicing, leisure activities and stress limitation, prevention behaviours against various diseases. (Precupețu, 2008, p. 45).

Phillips (2006, p. 89) believes a society can distinguish itself from another one in terms of quality of life, if the people from that society live longer and healthier and have more fulfilled lives than in another society.

The health sector, from the quality of life perspective, refers to both the health condition and the health care services (access, use, features etc.).

The main component of the quality of life – health, can be maintained and improved through practicing sports activities, where the basic means is represented by the physical exercise. The latter, performed on a long-term basis, improves physical and mental health, contributing to the development of one's personality, to diminishing the risk of physical and mental disorders associated to the modern lifestyle.

Worthy of note is the fact that the making of the modern man consists of his development from a physical, mental, social, intellectual, ethical and

aesthetical point of view, in relation to society demands, depending on his abilities, leading to a higher living standard and socio-human development.

One of the oldest forms of human personality shaping is the physical education, which brings significant contributions to the development of the human being, by finding a balance between the physical and mental side, sports and intellect, sensibility and emotions. (Colibaba-Evuleț, Niculescu M., Cojanu, 2008, p. 35).

Sports, likewise, viewed from a broader perspective: sports for all or sports for health, represents a state policy in the most developed countries in terms of economy, because it is one of the factors influencing the health condition and the population development.

If free time is spent wisely, it becomes an opportunity to shape a human personality, to educate one self on a regular basis. These leisure activities must be organized along with colleagues, friends, family, both as non-competitive actions (walks, trips, dynamic games, swimming etc.), and as competitions. It is essential for these sports activities to be included in each individual's life, on a daily basis.

The lack of physical activity leads to excessive

<sup>1</sup> University Transilvania from Brașov, Faculty of Physical Education and Sports Mountains, ROMANIA

E-mail address: badicu\_georgian@yahoo.com

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weight, obesity and chronic diseases, which have a negative impact on the quality of life, endanger human lives and weaken the economy and the health budget.

Physical activity, performed on a regular basis, can be viewed as an essential component of lifestyle.

Nowadays, more and more people become aware of the benefits of exercising. In this regards, the propaganda brings the modern man to act in this direction and, in this way, we can see more and more often people running, playing tennis, basketball, football, badminton, riding the bicycle, rollerskating or swimming.

It has been proven that dynamic people have more fulfilled lives, are stronger, have a better immunity and have a better physical condition; they are much more confident, less depressed, and very often, even at an old age, they are very energetic and bonny and eager about new projects (Fahey, Nolan, Whelan, 2003, p. 32).

The health problems encountered increasingly often have raised many questions and brought people to acknowledge the importance of practicing. In this way they gradually rediscovered the joys and benefits of an active and healthy life. As Precupețu highlights (2006, p. 56), practicing refreshes the body, maintain a good physical and mental tonus, makes us more confident and creates a warm and friendly environment for those who have the same interests.

### Methods

In our study the method that we used is based on probability, random layered pooling.

The experimental group participants, depending on their age, gender and education, are presented as follows: from the total of 500 inquired participants 221 have university education, 143 have graduated high school and 136 have mid-level studies. In terms of participants gender, 228 (45,6%) are males and 272 (54,4%) females. In regards to age, the broadest pool is represented by participants between 40 – 44 years old, with a number of 175 persons (35%), followed by participants between 30 and 34 years old, with a number of 120 participants (24%); 75 persons between 45 and 49 years old (15%) and lastly a number of 65 participants equally divided in two age categories 25 – 29 years old (13%), respectively 35 – 39 years old (13%).

The questionnaire focused on physical health was comprised of 20 questions, with interpretation values of the results between 1 and 60 points. This questionnaire achieved an Alpha validity coefficient of 0.967, demonstrating an excellent level of fidelity.

After collecting and processing all the data from this questionnaire, we engaged in creating a series of connections between physical health and practicing /not practicing leisure sports activities in one's life, for each age/gender category, respectively 25 – 29 years old, 30 – 34 years old, 35 – 39 years old, 40 – 44 years old and 45 – 49 years old.

### Results

From the total of 500 participants, the pool of those who practice leisure sports activities, consisted of 318 participants of both genders, the feminine participants being of majority (53,1%). In regards to participants who don't practice leisure sports activities, the female participants are still in majority (182 participants), with 55,5%.

In terms of age, most persons who practice leisure sports activities, are aged between 40 and 44 (39,3%), followed by those aged between 30 and 34 (25,2%). In smaller percentages, there are the participants aged between 45 and 49 (13,2%), those aged between 35 and 39 (11,3%) and the ones aged between 25 and 29 (11%). The group pf persons who do not practice sports activities is somewhat homogenous. Most of the inquired persons are aged between 40 and 44 (27,5%), followed by those aged between 30 and 34 (22%), the persons aged between 45 and 49 (18,1%), between 25 and 29 (16,5%) and those between 35 and 39 years old (15,9%)

In terms of education, almost half of the participants (49,7%) who practice leisure sports activities have mid-level studies, whereas 44,7% have university studies and only 5,7%, primary studies. In terms of participants who don't practice leisure sports activities, prevailing are the adults who graduated from high-school (71,4%), followed by university graduates (23,6%) and those who graduated from elementary school (4,9%).

By analyzing the pool of adults who practice leisure sports activities, depending on their health condition, it can be seen that the average score is 57,23 points. The results depart from the average, plus or minus, with 4,22 points.

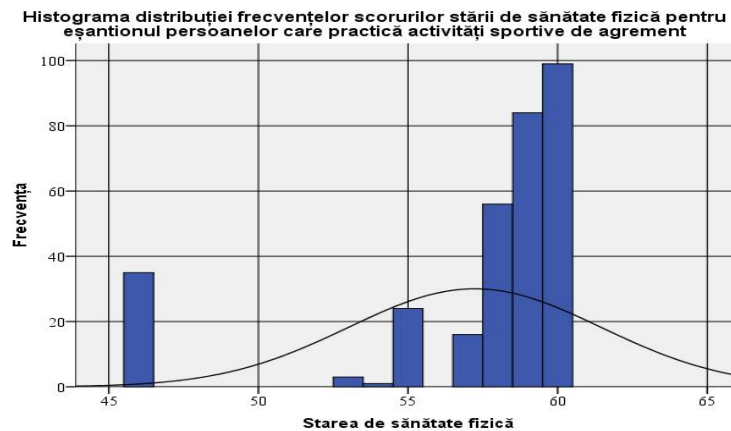
The modular value indicates that the 60 points score was the most frequent in our participants.

The excess kurtosis is 2.680, which shows a slightly leptokurtic distribution, sharper than a normal distribution, with values focused on the average. The asymmetry coefficient (-2,680), indicates a right-directed distribution, with several values from the left extreme. (Table 1, Fig.1).

**Table 1.** Descriptive statistics in regards to physical health for the pool of persons who practice leisure sports activities

N	Valid responses	318
	No response	0
Average		57,23
Media		59,00
Mode (modal value)		60
Standard deviation		4,223
Skewness asymmetry coefficient		-2,001
Kurtosis coefficient		2,680
Minimum		46
Maximum		60

a. Practicing leisure sports activities = yes



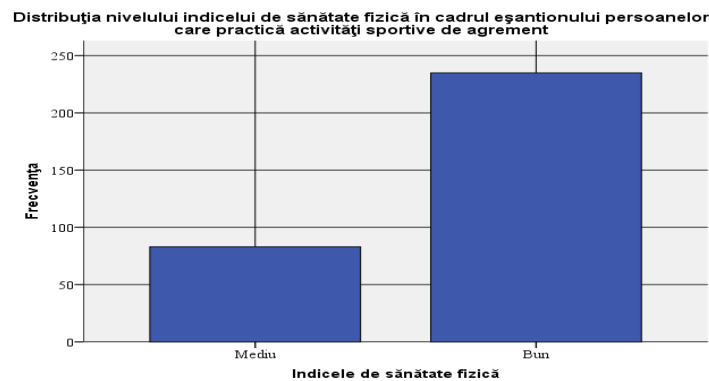
**Fig. 1.** Frequency distribution of physical health scores in adults who practice leisure sports activities

Most people who practice leisure sports activities (73,9%), have a good level of physical health and only 26,1%, have an average level of physical health. (Table 2, Fig. 2).

**Tabel 2.** Distribution of the physical health index level for persons who practice leisure sports activities<sup>a</sup>

		Frequency	Percentage	Percentage of the valid responses	Cumulated percentage
Valid responses	Average	83	26,1	26,1	26,1
	Good	235	73,9	73,9	100,0
	Total	318	100,0	100,0	

b. Practicing leisure sports activities = yes



**Fig. 2.** Distribution of the physical health index level for the adults who practice leisure sports activities

The average score obtained by persons who don't practice leisure sports activities, in terms of physical health, is 28.20 points, the most common value being 27 points.

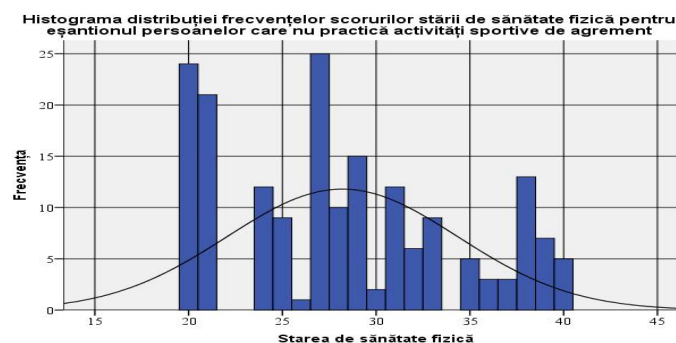
By analyzing the distribution of values in terms of score, we can notice these values depart from average, plus or minus, with 6,15 points.

The asymmetry coefficient (0,327) shows us a left-directed distribution, with several values from the right extreme. The kurtosis coefficient (Kurtosis=-0,949) indicates a platykurtic distribution, broader than a normal distribution, having more values deviated from the average. (Tab. 3, Fig. 3).

**Tabel 3.** Descriptive statistics in regards to physical health for the pool of persons who don't practice leisure sports activities <sup>a</sup>

N	Valid responses	182
	No responses	0
Average		28,20
Median		27,00
Mode (modal value)		27
Standard deviation		6,156
Skewness asymmetry coefficient		,327
Kurtosis coefficient		-,949
Minimum		20
Maximum		40

a. Practicing leisure sports activities = no



**Fig. 3.** Frequency distribution of physical health scores in adults who don't practice leisure sports activities

In regard to persons who don't practice leisure sports activities, just over half (50,5%) have a low

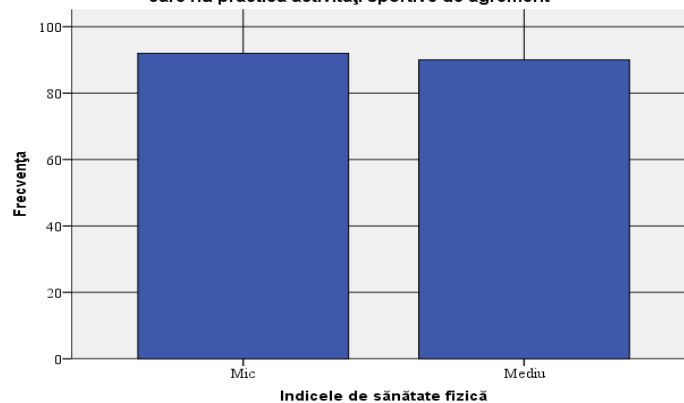
index of physical health, whereas the other half have an average index of physical health. (Tab. 4, Fig. 4).

**Tabel 4.** Distribution of the physical health index level for the persons who don't practice leisure sports activities<sup>a</sup>

		Frequency	Percentage	Percentage of the valid response	Cumulated percentage
Valid responses	Low	92	50,5	50,5	50,5
	Average	90	49,5	49,5	100,0
	Total	182	100,0	100,0	

Practicing leisure sports activities = no

Distribuția nivelului indicelui de sănătate fizică în cadrul eșantionului persoanelor care nu practică activități sportive de agrement



**Fig. 4.** Distribution of the physical health index level for the persons who don't practice leisure sports activities

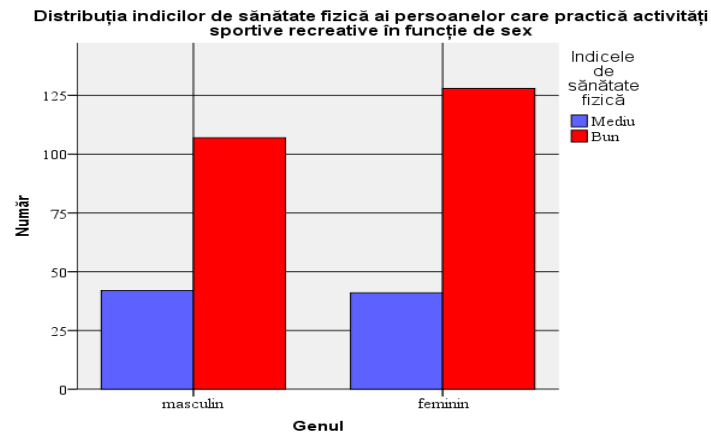
Within the pool of persons who practice sports activities, 75,7% of the women have a good index of

physical health, whereas, from the men, 71,8% have a good index of physical health. (Tab. 5, Fig. 5)

**Tabel 5.** Distribution of the physical health index level for the persons who practice leisure sports activities depending on gender<sup>a</sup>

			Physical health index		Total
			average	good	
Gender	male	Number	42	107	149
		% from gender	28,2%	71,8%	100,0%
	female	Number	41	128	169
		% from gender	24,3%	75,7%	100,0%
Total	Number		83	235	318
	% from gender		26,1%	73,9%	100,0%

b. a. Practicing leisure sports activities = yes



**Fig. 5.** Distribution of the physical health index level for the adults who practice leisure sports activities depending on gender

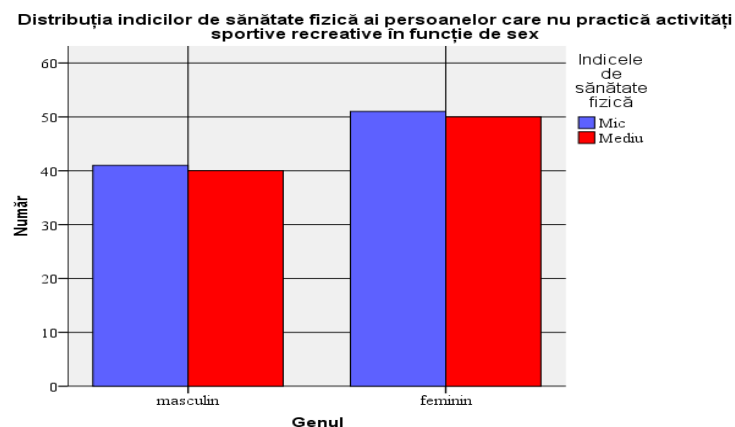
From the pool of persons who don't practice sports activities, just less than half of the men (49,4%) and of the women (49,5%) have an average index of

physical health, the rest of the persons having a low index of physical health. (Tab. 6, Fig. 6).

**Tabel 6.** Distribution of the physical health index level for the persons who don't practice leisure sports activities depending on gender <sup>a</sup>

			Physical health index		Total
			Low	Average	
Gender	male	Number	41	40	81
		% from gender	50,6%	49,4%	100,0%
	female	Number	51	50	101
		% from gender	50,5%	49,5%	100,0%
Total	Number		92	90	182
	% from gender		50,5%	49,5%	100,0%

a. Practicing leisure sports activities = no



**Fig. 6.** Distribution of the physical health index level for the adults who don't practice leisure sports activities depending on gender

In terms of age groups, the persons who practice leisure sports activities, aged between 25 and 29, have on a very high scale (85,7%) a good index of physical health. In the other age groups, the percentage

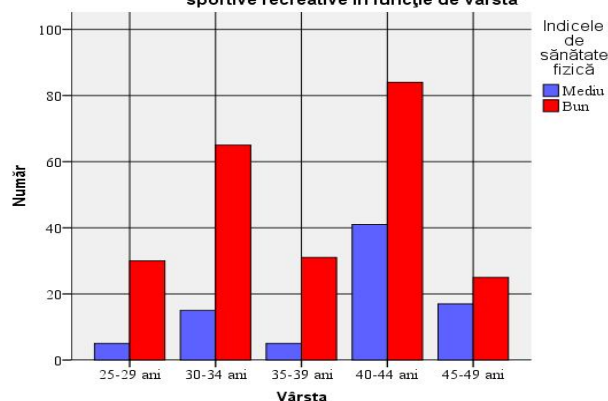
of the persons with a good index of physical health is also high, but this percentage decreases as the persons are aging. (Tab. 7, Fig. 7).

**Tabel 7.** Distribution of the physical health index level for the persons who practice leisure sports activities depending on age<sup>a</sup>

			Physical health index		Total
			Average	Good	
Age	25-29	Number	5	30	35
	years old	% from Age	14,3%	85,7%	100,0%
	30-34	Number	15	65	80
	years old	% from Age	18,8%	81,2%	100,0%
	35-39	Number	5	31	36
	years old	% from Age	13,9%	86,1%	100,0%
	40-44	Number	41	84	125
	years old	% from Age	32,8%	67,2%	100,0%
	45-49	Number	17	25	42
	years old	% from Age	40,5%	59,5%	100,0%
Total		Number	83	235	318
		% from Age	26,1%	73,9%	100,0%

a. Practicing leisure sports activities = yes

Distribuția indicilor de sănătate fizică ai persoanelor care practică activități sportive recreative în funcție de vârstă



**Fig. 7.** Distribution of the physical health index level for the adults who practice leisure sports activities depending on age

For people who don't practice leisure sports activities, we notice a higher percentage of those with an average index of physical health in young people,

however, as they are aging, the percentage of those with a low index of physical health is increasing. (Tab. 8, Fig. 8).

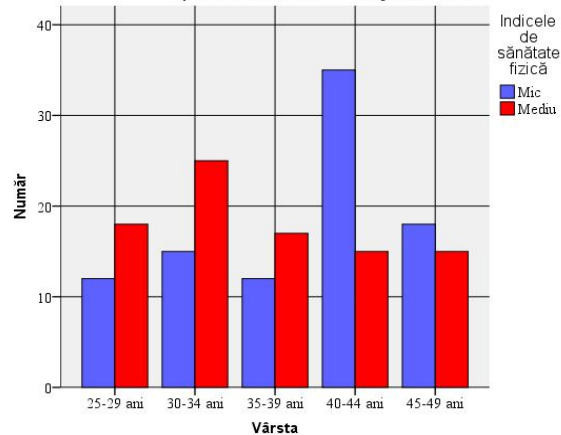
**Tabel 8.** Distribution of the physical health index level for the persons who don't practice leisure sports activities depending on age<sup>a</sup>

			Physical health index		Total
			Low	Average	
Age	25-29	Number	12	18	30
	years old	% from Age	40,0%	60,0%	100,0%
	30-34	Number	15	25	40
	years old	% from Age	37,5%	62,5%	100,0%
	35-39	Number	12	17	29
	years old	% from Age	41,4%	58,6%	100,0%
	40-44	Number	35	15	50
	years old	% from Age	70,0%	30,0%	100,0%
	45-49	Number	18	15	33
	years old	% from Age	54,5%	45,5%	100,0%

Total	Number	92	90	182
	% from Age	50,5%	49,5%	100,0%

a. Practicing leisure sports activities = no

Distribuția indicilor de sănătate fizică ai persoanelor care nu practică activități sportive recreative în funcție de vârstă



**Fig. 8.** Distribution of the physical health index level for the adults who don't practice leisure sports activities depending on age

Depending on education, there are a few differences in terms of percentage of persons with a good index of physical health. Therefore, the percentage of persons who have university studies is

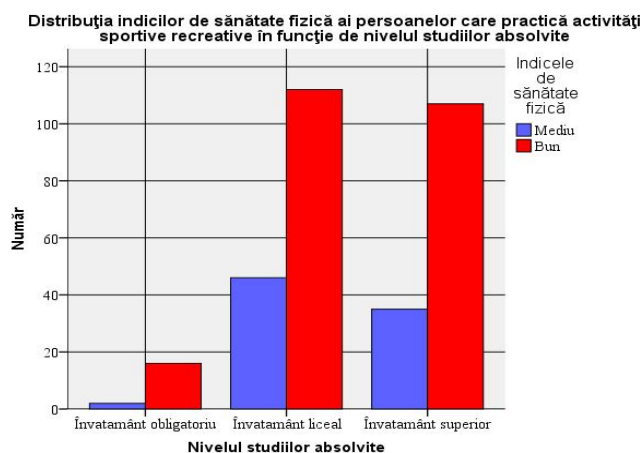
75,4%, the percentage of people who graduated from high-school is 70,9%, and those who graduated from elementary school are in percentage of 88,9%. (Tab. 9, Fig. 9).

**Table 9.** Distribution of the physical health index level for the persons who practice leisure sports activities depending on education <sup>a</sup>

			Physical health index		Total
			Average	Good	
Study level	Elementary school	Number	2	16	18
		% from study level	11,1%	88,9%	100,0%
	High school	Number	46	112	158
		% from study level	29,1%	70,9%	100,0%
	Tertiary education	Number	35	107	142
		% from study level	24,6%	75,4%	100,0%
Total		Number	83	235	318
		% from study level	26,1%	73,9%	100,0%

a. Practicing leisure sports activities = yes





**Fig. 9.** Distribution of the physical health index level for the adults who practice leisure sports activities depending on education

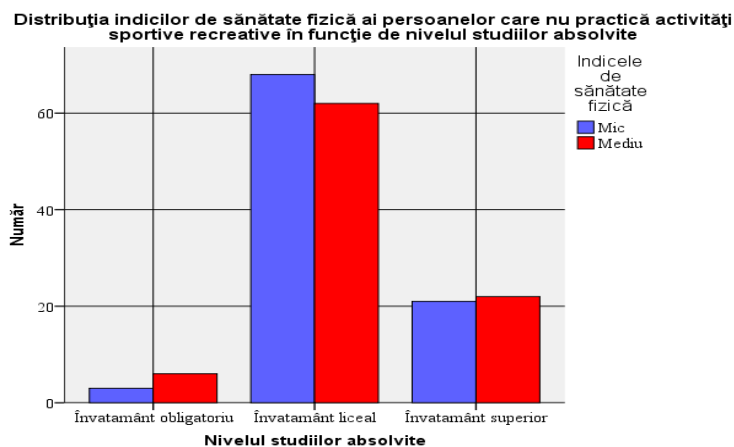
From the pool of persons who don't practice leisure sports activities, the university graduates have an average index of physical health on a scale of 51,2%, whereas the persons who graduated from high school with an average index of physical health are in percentage of 47,7%. From the persons who graduated

from elementary school, the percentage of those with an average index of physical health is 66,7%, but we must take into consideration the small percentage of participants with this level of education within our pool. (Tab. 10, Fig. 10).

**Tabel 10.** Distribution of the physical health index level for the persons who don't practice leisure sports activities depending on education<sup>a</sup>

			Physical health index		Total
			Low	Average	
	Elementary school	Number	3	6	9
		% from study level	33,3%	66,7%	100,0%
Study level	High school	Number	68	62	130
		% from study level	52,3%	47,7%	100,0%
	Tertiary education	Number	21	22	43
		% from study level	48,8%	51,2%	100,0%
Total		Number	92	90	182
		% from study level	50,5%	49,5%	100,0%

a. Practicing leisure sports activities = no



**Fig. 10.** Distribution of the physical health index level for the adults who don't practice leisure sports activities depending on education

## Discussions

1. The persons who practice leisure sports activities, have mostly a good index of physical health, whereas the persons who don't practice these activities have an average or low index of physical health. A study carried by the "National Heart, Lung, and Blood Institute and the American Heart Association" in 2009, states that, low participation in physical activity is due, in large part, erroneous perception of the population benefit exercise. The studies showed that, regular and moderate physical activity, make a substantial benefit to health. [*\*Statistica bolilor cardiovasculare la nivelul Europei- European Heart Network (EHN <http://www.ehnheart.org/>)*].
2. Within our pool of adult participants who practice sports activities, 75,7% of the women have a good index of physical health, whereas from the male participants, 71,8% have a good index of physical health .

## Conclusions

The data that we collected from this study highlights a level of correlation between physical health and the amount of sports activities performed by the adult participants within our pool.

The persons who practice leisure sports activities, have, in most cases – regardless of gender, age, studies – a good index of physical health, whereas the persons who don't exercise have an average or low index of physical health.

Physical health can be maintained, improved respectively, by taking other specific measures at the

## Acknowledgements

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3. Within the pool of participants who don't practice leisure sports activities, just less than half of the men (49,4%) and women (49,5%) have an average index of physical health, the rest of participants having a low index of physical health.
4. In terms of age groups, the persons who practice leisure sports activities, aged between 25 and 29, have in a very high percentage (85,7%) a good index of physical health. For the other age groups, the percentage of persons with a good index of physical health is also high, but in this case this percentage is decreasing as people are aging. In the same context of age subjects, a research conducted at the Institute K. G. Norwegian Jebsen University of Science and Technology, says that, physical activity is much more important than her age and thus, a person of 50 years and one of 20years can have the same level of physical health. (\*\*\*)

same time and by practicing leisure sports activities on a medium and long –term basis.

The stimulus represented by the physical exercise, if applied continually, leads to a significant improvement of health and contributes to the physical wellbeing of the individual.

Maintaining a good health is a serious problem nowadays, that each individual and the society overall should acknowledge, in order to cope with the daily needs, in view of an wellbeing stability.

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\*\*Statistica bolilor cardiovasculare la nivelul Europei- European Heart Network (EHN <http://www.ehnheart.org/>)

\*\*\*[http://adevarul.ro/news/societate/eurobarometru-60-romani-nu-fac-niciodata-sport-1\\_533068b40d133766a830b537/index.html](http://adevarul.ro/news/societate/eurobarometru-60-romani-nu-fac-niciodata-sport-1_533068b40d133766a830b537/index.html),