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Original article

FACTORS INFLUENCING OBJECTIVE AND SUBJECTIVE MOTOR ACTIVITIES INCLUDED IN THE BUDGET SHARE OF FREE TIME STUDENTS OF THE UNIVERSITY OF BUCHAREST

DUMITRESCU REMUS[1]

Abstract

Aim. Keeping in mind the geographycal location of the faculties and the objectiv and subjectiv factors that could influence the physical and sports activities, in the present study we wanted to establish the free-time budget of students on University of Bucharest with the main favourite past-time activities.

Methods. Questionaire method, mathematic-statistics method, graphical representation method.

The two batches included in the research are as follows: 25 from the Faculty of Physics and 32 from the other 17th faculties of University of Bucharest.

Results. Social factors could influence in a way the motivation needed for free-time physical activities, in addition to comodity and education.

Conclusions. After processing the data, reveals that students interviewed during free time practice sport in general in group and individual. Poor involvement of local governments and offers modest and scattered as location creates a reason for young people to not practice sports activities.

Key words: time budget, students, social factors

Introduction

Our work is part of a much larger study, which has involved students, regardless of their gender, of the University of Bucharest.

The rigid manner of time compartmentalization creates the time budget notion. Like any other budget, it implies a limited resource, that needs to be carefully managed. (Bota, 2006)

For an individual to benefit from a positive healthy state, not being diagnosed as clinically ill is insufficient, all health components must be found at a positive pole. In this sense there is the possibility to objectively evaluate the tendency to reach the state of wellbeing. (Aducovschi, 2012)

Many factors can considerably influence the lifestyle, including: motivation, previous knowledge and capabilities, the home environment, the teachers' expectancies, mass-media, the level of professionalism and personality of the teaching staff (Hassan Mirzajani et al., 2014).

Yukseloglu & Karaguven (2013) studied the academic motivation wanting to identify the factors and efficiency on a group of students. Results showed that the group had a higher efficiency regarding the academic motivation based on their common specializations and demographic characteristics. Moreover, Haron et al., (2012), studied the motivation and effect on intelectual understanding and performance of the students.

Students spend a great deal of time at home, and their behavior and actions are influenced rather highly by their parents. Parents education level play an important role in educating the youth successfully. Krug's (1989) and Forsyth & McMillan JH's (1991) obtained results have showed that the academic factors are also efficient in the motivation and academic orientation of students.

Hypothesis.

1.With the busy schedule students from the University of Bucharest have to manage, I assumed they still have some free time, but it's arbitrarily limited by education and social conjuncture;

2. Within their free time activities there are both physical activities and sedentary ones.

Objectives.Determining the leisure time our students from the two campuses have;-

- Identifying the main recreational activities preferred and the extent to which. physical activities are among them.

Methods

The University of Bucharest Ethics Committee and the participants, gave their consent to the Department of physical education and sport, to make this study.

Research stages

1. *Questionnaire creation;*
2. *Applying the questionnaire;*
3. *Data editing;*
4. *Paper redacting.*

The experiment took place in 2012-2013 university year, in the study participating two

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representative batches of students from University of Bucharest:

- one batch consisting of 25 students in their first and second year, from the Physics Faculty from Magurele town, that participate at physical education and sports in Magurele sports base

- one batch consisting of 32 students in their first and second year, from the 17 other faculties of UB, which participate at physical education and sports in Bucharest sports base.

The motivation for this study was based on the find out that students no longer express the desire to practice physical exercises during the physical education class. Even if there are 23 disciplines in the educational offer, the participating students are increasingly fewer. The curriculum during the week is highly solicitant and from our discussions with the students it showed that they lack the time.

Questionnaire regarding the University of Bucharest students free time budget and the time they allow for physical activities.
Table no. 1

Nr	Item
1	How much free time do you have?
2	What type of activities you prefer?
3	Do you practice sports in your free time?
4	How freaquently during the week do you practice sports in your free time?
5	What sports do you prefer?
6	In what environment do you like to practice sports?
7	If you do not practice sports, please motivate your choice.
8	In the vicinity of the location of your current activities are there any specially designed spaces in order to entertain free time sports activities?
9	What motivates you to participate in free time sports activities?
10	What motivates you to not participate in free time sports activities?

Research methods

Questionnaire inquiry: The author wrote this 10 items questionnaire, the answers being closed, single or multiple;

Mathematical statistics method: The program used for editing the statistics was SPSS v.17.

Results

Q1. *Free time*

For the question "how much free time do you have on average per day?", 31% of the individuals from Bucharest answered with 3 to 4 hours per day, followed by "between 1 and 2 hours per day" and "more than 4 hours per day" with the same percentage or 25%. More so, 19% of the individuals said they have no free time.

At the Physics Faculty (Magurele campus) it was revealed that 33% of the students answered with "1-2 available hours per day", followed by "3-4 hours per day" with a percentage of 27%, "more than 4 hours" with 23% and 17% of the students said that they have no free time.

In total, both answers (a and b) from each batch totalizes a 56% for individuals from the Bucharest campus and 60% for those from Magurele campus, which allows us to draw the conclusion that the majority of responders have between 1 and 4 free time hours per day. (Fig. 1).

Table no. 2

Chi-Square Tests	Value
Pearson Chi-Square	**0.538**
df	**3**
P (Asymp. Sig. (2-sided))	**0.910**
Cramer's V	**0.09**

The significance threshold P = 0.910 > 0.05, for the Chi-Square value = 0.538 and df=3 show insignificantly statistical differences between the two groups regarding the answers for Q1. The φ coefficient =0.09 for the results proportion indicates a small association between the two groups. The answers share can be seen in the diagram from fig. no.1.

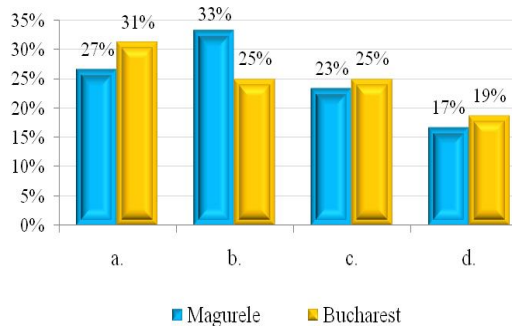

Fig. no. 1 – *Free time:* Q1 answering diagram

Q2. *Preference*

Regarding the "*what type of activities do you prefer?*" question, the total amount of answers is higher than the number on cases, because of the existence of multiple answering choices. (6 possible).

For individuals from Bucharest the answers can be classified into three categories, in accordance to the percentage distribution:

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1. Percentage speaking those who prefer "resting in nature" detached themselves with a 25% from the 21% who prefer "sports and physical activities";
2. Next is a group with three choices: 15% of them chose "reading", 12% prefer "other activities" and finally 11% of them opted for "TV/internet movies/internet activities";
3. In the third place are those who prefer "shows/movies/concerts" and going clubbing, both with the same value of 8%.

Options classified in top two, confirms as dominant the tendency toward movement in nature and sports.

For individuals from Magurele campus, the answers can be classified into three categories, in accordance to the percentage distribution:

1. One group with three options: 22% of them prefer "shows/movies/concerts", 18% prefer "going clubbing" followed up closely by those who prefer resting in nature with a value of 17%;
2. The second category is represented by those who prefer "TV/internet movies/internet activities" with 14% and those who chose "reading" with 11%.
3. In third place, at a tie of 9% are those that chose "sports and physical activities" and "other activities" (Fig. 2).

Table no. 3

Chi-Square Tests	Val
Pearson Chi-Square	
df	
P (Asymp. Sig. (2-sided))	
Cramer's V	

There are significant statistical differences between the tw groups of students regarding their answers for Q2, th significance threshold being P = 0.049< 0.05, for a Chi-Squa value = 12.631 and df = 6. The phi coefficient of 0.30 shows a intense association above average between the two groups. Th answers share can be seen in the diagram from fig. no. 2.

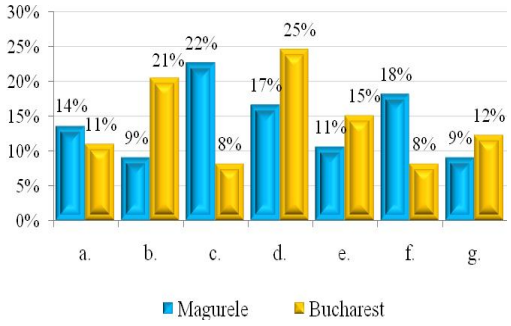

Fig. 2 – *Preference:* Q2 answering diagram

Q3. *Free time sport*

For the "*do you practice sports in your free time?*" question, a considerable 78% of students from Bucharest campus answered "Yes", while only 22% of them said "No".

53% of the representatives from Magurele campus had an affirmative answers, in comparison to 47% who admitted to not practice any sports activities (Fig. 3).

This indicates that in spite of their rather limited free time budget, most students acknowledge the necessity of practicing physical exercises in order to maintain a healthy lifestyle.

Table no. 4

Chi-Square Tests	Valu
Pearson Chi-Square	
df	
P (Asymp. Sig. (2-sided))	
Phi	

There are significant differences between the two groups regarding the answers given to Q3, the significance threshold being P = 0.039< 0.05, for a Chi-Square value = 4.249 and df = 1. The φ coefficient of 0.26 for the results proportion indicates an average intensity association between the two groups. The answers share is showed in the diagram from fig. no. 3.

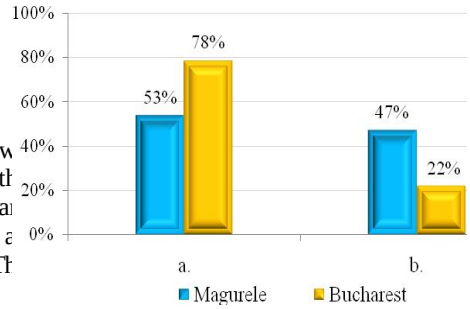

Fig. 3 – *Free time sport:* Q3 answering diagram

Q4. *Frequency*

Answers for the question "*how many times during the week do you practice sports in your free time*" for those from the Bucharest campus, were as follows: 25% said "occasionally", 21% answered "three times", an equal value of 19% said either "twice" or "more than three times" and 16% of them said "once".

Regarding Magurele campus, 26% of the subjects said they practice sports activities "frequently", an equal value of 20% said "once" and "three times a week", the identical values of 17% of those who practice sports "twice a week" and "more than three times a week" being gladdening (Fig. 4).

Table no. 5

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Chi-Square Tests	Value
Pearson Chi-Square	**0.285**
df	**4**
P (Asymp. Sig. (2-sided))	**0.991**
Cramer's V	**0.07**

The answers for Q4 from both groups are not significantly different, the significance threshold P=0.991>0.05, for a Chi-Square value =0.285 and df= 4. The results proportion using Cramer's V coefficient shows an association of little intensity between the two groups (φ =0.07). The answers share can be seen in the diagram from fig. no. 4.

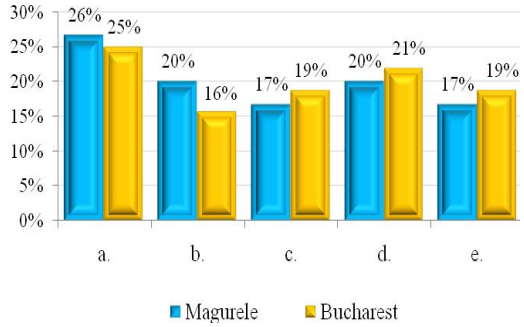

Fig. 4 – *Frequency:* Q4 aswering diagram

Q5. *Sports*

For "*what sports do you prefer?*" question, the most frequent answers for individual from Bucharest campus were "jogging" with 18%, followed by "team games" and "others" with 17% both, 12% said "gymnastics/fitness/bodybuilding", 11% opted for "swimming", 9% for "winter sports – ice skating/snowboarding/skiing" and an equal value of 8% opted for "skateboarding/roller skating/cycling" and "tennis".

Even if there is a high diversity of sports that can be practiced in the Bucharest campus, "jogging" was the option with the highest value, of 18%, thus indicating the fact that the possibilities for spending one's free time has took another form.

At the Physics Faculty (Magurele campus), students options are also diverse, but, unfortunately, the modest material foundation does not allow students to truly obtain those wishes.

The first four preferences are: "gymnastics/fitness/bodybuilding" and "others" with an equal value of 15%, followed closely by preferences such as "team games" and "swimming" with the same value of 14%.

The inferior percentage speaking echelon is represented by "jogging" and "tennis" with the same value of 12%, then with rather modest values we identify "skateboarding/roller skating/cycling" with 10% and "winter sports – ice skating/snowboarding/skiing" with 8% (Fig. 5).

Table no. 6

Chi-Square Tests	Value
Pearson Chi-Square	**2.345**
df	**7**
P (Asymp. Sig. (2-sided))	**0.938**
Cramer's V	**0.14**

For question 5, the answers between the two groups of students are statistically speaking of significant difference, the significance threshold P = 0.938> 0.05, for a Chi-Square value = 2.345 and df =7. Cramer's V coefficient for the results proportion, shows an association of little intensity between the two groups (φ =0.14). The answers share is depicted in the diagram from fig. no. 5.

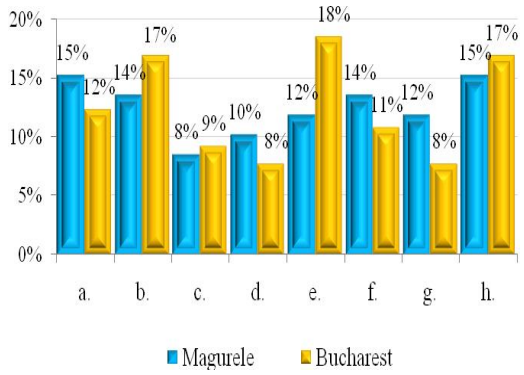

Fig. 5 – *Sports:* Q5 answering diagram

Q6. *Where/With whom?*

For the question "*in what environment do you do sports?*" we found that the study subjects from Bucharest answered in proportion of 43% with "with a group of friends", followed by 38% of them that prefer "individually" and 19% of them that opted for sports activities "in an organized manner at the gym or sports club".

50% of the students from Magurele campus chose activities "in an organized manner at the gym or sports club", 27% of them said "with a group of friends" and 24% would rather practice sports "individually" (Fig. 6).

Table no. 7

Chi-Square Tests	Value
Pearson Chi-Square	**6.752**
df	**2**
P (Asymp. Sig. (2-sided))	**0.034**
Cramer's V	**0.33**

The significance threshold P = 0.034< 0.05, for a Chi-Square value = 6.752 and df=2, show

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significant statistical differences between the two groups regarding the answers given to Q6. Cramer's V coefficient indicates an association of average to high intensity between the two groups (φ =0.33). The answers share is depicted in the diagram from fig.no.6.

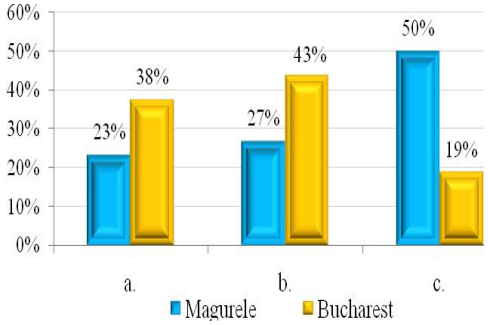

Fig. 6 – *Where/With whom:* Q6 answering diagram

Q7. *Why not?*

The most frequent answer from Bucharest students for "*why do you not practice sports in your free time?*" question, was "I do not have enough time" in a value of 25%, followed by 22% of them who said "out of commodity", 19% with "others", 18% with "I do not have where/with whom" and 16% said they are "not interested".

Magurele students answered in equal proportions of 23% with "I do not have enough time" and "I do not have where/with whom", followed by 20% of them with "not interested", and 17% equally for both answers "out of commodity" and "others" (Fig. 7).

Table no. 8

Chi-Square Tests	Value
Pearson Chi-Square	**0.595**
df	**4**
P (Asymp. Sig. (2-sided))	**0.964**
Cramer's V	**0.10**

Answers given to Q7 from both groups are not significantly different, the significance threshold being P = 0.964> 0.05, for Chi-Square = 0.595 and df=4. The resulting proportions (φ =0.10) indicates an association of little intensity between the answers given by the analyzed groups. The answers share can be seen in the diagram from fig. no. 7.

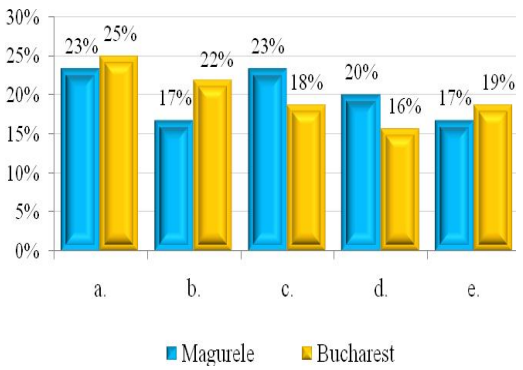

Fig. 7 – *Why not?:* Q7 ans5wering diagram

Q8. *Opportunities*

The answers to the question "*Do you have in the vicinity of your current location specially designed areas (others than those from the University's Sports and Physical Education program) in order to entertain sports activities in your free time?*" were eloquent regarding the local administration's lack of preoccupation for designing specific areas dedicated for spending free time, for this particular social segment.

Students from Bucharest campus had different answers than those from Magurele campus, meaning 69% of them said "Yes" thus identifying such areas, while 39% of the responders did not acknowledge such areas (Fig. 8).

57% of the students from the Physics Faculty, from Magurele campus, motivate that they did not acknowledge any specially designed areas, while 43% of them have identified specific areas designed for sports.

Table no. 9

Chi-Square Tests	Value
Pearson Chi-Square	**4.069**
df	**1**
P (Asymp. Sig. (2-sided))	**0.044**
Phi	**0.26**

Between the two groups of students there is a significant difference regarding the answers given to Q8, the significance threshold P= 0.044< 0.05, for a Chi-Square value = 4.069 and df =1. The resulting proportions of Phi indicates an average intensity association between the two groups (φ=0.26). The answers share is draw in the diagram from fig. no. 8.

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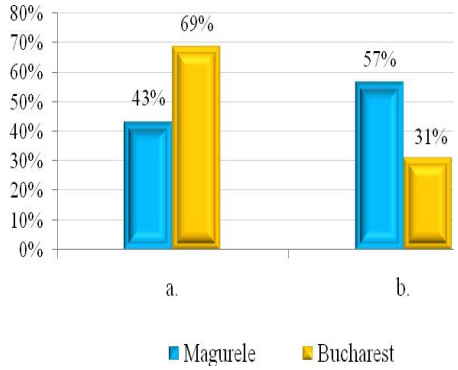

Fig. 8 – *Opportunities:* Q8 answering diagram

Q9. *"Pro" sport motives*

The answers were divided as follows: 25% from the students from Bucharest are motivated by "the education given by the family", 21% considered that they are stimulated by "the great variety of offers", 19% of them, in equal values said they benefit from "a satisfactory material basis of demand" and also from "the short time it takes to get to the areas designed for sports" and 16% of them think that "the local administrations have done their job by arranging and modernizing some sports bases".

In exchange, 26% of the students from Magurele campus, attach importance to "the education given by the family", equal value of 20% was given to both "a satisfactory material basis of demand" and "local administrations are concerned about the arrangements and modernization of sports bases, and a value of 17% was equally given to "a great variety of offers" and "the short time it takes to get to the areas designed for sports" (Fig. 9).

Table no. 10

Chi-Square Tests	Value
Pearson Chi-Square	**0.451**
df	**4**
P (Asymp. Sig. (2-sided))	**0.978**
Cramer's V	**0.09**

For Q9 the answers received from the students from both groups are not noteworthy different, the significance threshold P = 0.978 > 0.05, for a Chi-Square value = 0.451 and df =4. The resulting proportions of Cramer's V coefficient show an association of little intensity between the two groups (φ=0.09). The answers share is presented in the diagram from fig. no. 9.

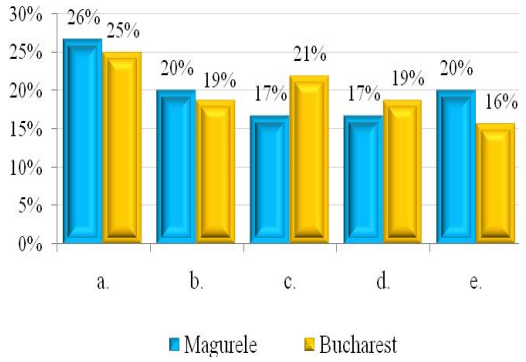

Fig. 9 – *"Pro" sport motive:* Q9 answering diagram

Q10. *Disadvantages*

Those who do not wish to partake in any free time sports motivate this option differently:

In Bucharest campus a value of 22% was obtained for three different indicators "the lack of a mentor to get advises from regarding a disciplined lifestyle", "the lack of a richer offer range" and "the lack of time in order to get to the designed sports areas", this was closely followed by 19% that said "the local administrations lack of concern for arranging and modernizing a sports base" and "unsatisfactory material basis for demands" with a value of 16%.

26% of the individuals from Magurele campus mentioned "the lack of time in order to get to the designed sports areas", in equal values 20% opted for "the lack of a mentor to help discipline my lifestyle" and also "unsatisfactory material basis for demands". Equal values of 17% were given to "the lack of a richer offer range" and "the local administrations lack of concern for arranging and modernizing a sports base" (Fig. 10).

Table no. 11

Chi-Square Tests	Value
Pearson Chi-Square	**0.595**
df	**4**
P (Asymp. Sig. (2-sided))	**0.964**
Cramer's V	**0.10**

Between the two groups of students there are no noteworthy differences regarding the answers given to Q10, the significance threshold P = 0.964> 0.05, for a Chi-Square value = 0.595 and df =4. The resulting proportions (φ =0.10) indicate an association of little intensity between the two groups. The answers share can be observed in the diagram from fig. no. 10.

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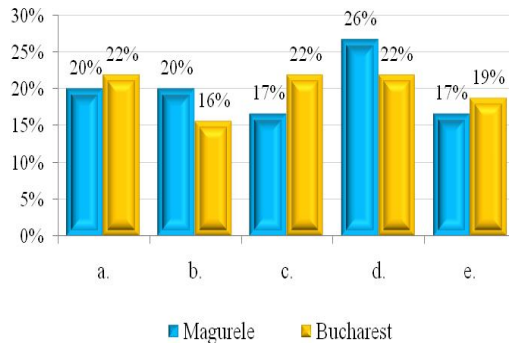

Fig. 10 – *Disadvantages:* Q10 answering diagram

Discussion

The aim of the study was to determine the amount of free time students from the University of Bucharest dedicate to their favorite stress relieving activities, selected with the help of a questionnaire.

After processing the data with the help of CHI SQUARE TEST, by comparing the two groups of subjects, we noticed substantial differences ($p<0.05$) of the following indicators: favorite activities (Q2), if they practice or not any kind of physical activity (Q3), they preferred space of doing it (Q6) and new opportunities for practicing sports (Q8).

This study substantiates the conclusions drawn by Bocu , in his research in 2011, which anticipates and completes the IMPALA project, meaning that he makes an assessment of the current closed and opened spaces necessary, taking as reference the Romanian norm in the construction of green spaces per person, depending on the socio-professional factors.

The same author, Bocu (2012), continues his research regarding the planning and building outdoor and indoor teaching spaces, needed by the population for doing physical activities.

Studies aimed at similar topics we can find through works published by Wolf (2010), who contributes to the development of global standards in trainings for health promotion.

Conclusions

The questioned subjects have between 1 and 4 hours a day of free time, 81% of the students from the campus in Bucharest and 83% from Magurele campus. 19% answered that they don't have any free time from the Bucharest campus, and 17% from the students in Magurele campus lack leisure time. Thus we can say that the first hypothesis is confirmed.

The most loved leisure time activity of students from Bucharest campus is "relaxing in nature" with a value of 25%, in comparison to those from Magurele campus, where 22% of them prefer „shows/movies/concerts".

These rather sedentary activities, "relaxing in nature" for students in Bucharest campus and "shows/movies/concerts" for those in Magurele campus, confirms our second hypothesis.

A significant value of 78% (Bucharest campus) and of 53% (Magurele campus) of those questioned said they practice sports activities in their free time, which indicates that despite the rather limited free time budget, the majority of students are aware of the necessity of physical exercises in order to have a healthier life.

Those who practice sports in their free time only occasionally form the majority in both university campuses (78% from Bucharest – 53% from Magurele). In second, with a value of 22% are those from Bucharest campus that manage to practice sports "three times a week", while 20% of students from Magurele campus only practice sports "once a week".

A great deal of students from Magurele campus (50%) prefer to practice sports "in an organized manner at the gym or sports club", while 43% of the students from Bucharest prefer the choice "with a group of friends". Magurele campus being an isolated community (10 km from Bucharest), answers given here are in a higher percentage, indicating a higher level of organization.

The study revealed that there is a lack of attractive offers regarding physical activities in the University of Bucharest, the poor involvement of the local administration being one of the main reasons for this. Supporting private and institutional intiatives on the matter could be a solution.

Taking into account two batches from different campuses, we found out that each area has its own problems and thus in both cases students have difficult situations, being at a disadvantage. Students from Bucharest campus have much more offers but the time it takes them to reach those designed areas, often makes them quit. For the students from Magurele campus, the situation is different, meaning there is a sports base nearby but it is poorly equipped, and in return, the local administration will not create anything for leisure time activities for this social segment.

From processing the data we concluded that the students from the campus in Bucharest prefer ''spending time in nature'', which tells us that the green space available for outdoor activities is quite limited. Meanwhile, the students from Magurele campus prefer watching shows/movies/concerts. Their answers alert us on two aspects: provincial isolation and lack of cultural and artistic buildings.

The subjects from both experimental groups say that they are eager to practice physical activities in their free time. The difference between them is that the students from the campus in Bucharest prefer doing them with ''groups of friends", while those

from Magurele campus in an "organized manner / sport club".

The lack of involvement of the local administrations in improving Magurele campus, also the modest offers regarding outdoor activities and the fact that they aren't nearby the campus, were reported by the students as being another reason to not do any physical activities in their free time. The students from the Bucharest campus admitted that they have a lot of designed places for such activities.

Suggestions

- For both Universities it is of the utmost necessity to improve the sports bases, to invest into the construction of gymnasiums, sporting grounds, swimming pools, running tracks for rollerblades and bicycles, etc.
- The local administrations should develop some projects in order to lay out designed areas for leisure activities.
- Physical education teachers should benefit from the help of the University of Bucharest, in order to organize many other specially designed event to stimulate the students wish to partake in leisure time activities.

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